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 with split/splitless injection ports.
- For use with 1/16" OD micropacked columns.
- Sample pathways deactivated for ultimate inertness.

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

1. Remove the existing reducing nut from the injection port; it will not be required.
2. Remove the replacement inlet adaptor fitting from the adaptor kit (Figure 1). Place the supplied inlet seal (Figure 2) into the inlet adaptor fitting (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 inlet adaptor fitting onto the injector until it seats against the bottom of the injector. Using a ½" wrench, tighten the adaptor ~ 1/8th of a turn. Do not overtighten.
4. Straighten ~ 10 cm 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. Assemble the other components by sliding the nut and then the ferrule over the column. 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 positions the column end a few millimeters above the bottom of the inlet seal. The 1/16" nut should be tightened finger tight and then tighten an additional ¼ turn. 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). If you observe a leak, tighten the inlet adaptor fitting and/or the 1/16" nut by an additional 1/8 turn until it stops leaking.

Note: For FID adaptor, see next page.

Figure 1: Inlet Adaptor Fitting, Large Bore

Figure 2: Dual Vespel Ring Inlet Seal, Large Bore

Figure 3: 1/16" Nuts, Stainless Steel

Figure 4: 1/16" Ferrules, Vespel/ Graphite

Figure 5: Inlet Adaptor Fitting

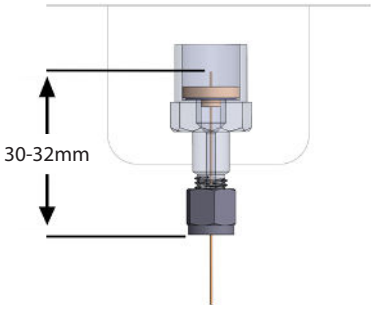

Figure 6: 4 mm Splitless Liner, Standard Deactivation

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 inlet adaptor fitting from the injection port; it will not be required.
2. Remove the replacement inlet adaptor fitting from the adaptor kit (Figure 1). Place the supplied inlet seal (Figure 2) into the inlet adaptor fitting (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 inlet adaptor fitting onto the injector until it seats against the bottom of the injector. Using a ½" wrench, tighten the adaptor ~ 1/8th 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 ~ 10 cm 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 10 cm 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 ¼ to ½ 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). If you observe a leak, tighten the inlet adaptor fitting and/or the 1/16" nut by an additional 1/8 turn until it stops leaking.

Note: For FID adaptor, see next page.

Figure 1: Inlet Adaptor Fitting, Large Bore

Figure 2: Dual Vespel Ring Inlet Seal, Large Bore

Figure 3: Siltek-Treated Metal Liner Installation Guide

Figure 4: 1/16" Nuts, Stainless Steel

Figure 5: 1/16" Ferrules, Vespel/Graphite

RESTEK
Pure Chromatography

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. Holding it vertically, with the screw end facing down, slide the supplied ¼" nut with the threads facing up onto the FID adaptor, followed by the supplied ¼" Vespel/graphite ferrule with the tapered end facing up (Figure 1). Insert the adaptor into the detector and finger-tighten, followed by an additional ~ ½ turn using a 9/16" wrench.
3. Straighten approximately ~ 7.5 cm 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 ~ ¼ turn using a 5/16" wrench.
5. Turn on the carrier gas and leak check with a Restek electronic leak detector (cat.# 28500). If you observe a leak, tighten the FID adaptor and/or the 1/16" nut by an additional 1/8 turn until it stops leaking.

Figure 1: FID Adaptor, Large Bore; ¼" Ferrule, Vespel/Graphite; ¼" 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.#
Replacement Parts		
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

Questions about this or any other Restek product?
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