

Restek Trident LC Column Protection System

cat.# 27470, 27471, 27472, 27473, 27474, 27475

The versatile and reliable Trident LC column protection system offers the choice of three levels of protection in one convenient system. Choose filter only, guard cartridge only, or both filter and guard cartridge. The Trident LC column protection system can be used with all HPLC columns with standard 10-32 ports* and has replaceable cap frit filters and an array of 10 mm guard cartridge options.

Level 1 — Trident Filter

(Each: 27470; 4-pack: 27471)

1. Open the Trident holder by unscrewing the two halves of the holder.
2. Install a cap frit filter on the filter end fitting by pressing firmly by hand and then reassemble the holder.
3. Use two ½" wrenches to tighten the holder approximately ¼-turn past finger-tight. Do not overtighten.
4. Install onto analytical column (see below).

Level 1: Filter Only

Protection against particulate matter



Level 2 — Trident Guard Cartridge Holder

(Each: 27472; 4-pack: 27473)

1. Open the Trident holder by unscrewing the two halves of the holder.
2. Insert a guard cartridge and then reassemble the holder. Note that the cartridge can be installed in either direction; it does not have a front or back end.
3. Use two ½" wrenches to tighten the holder approximately ¼-turn past finger-tight. Do not overtighten.
4. Install onto analytical column (see below).

Level 2: Guard Cartridge Only

Protection against irreversibly adsorbed compounds



Level 3 — Trident Filter and Guard Cartridge Holder

(Each: 27474; 4-pack: 27475)

1. Open the Trident holder by unscrewing the three parts of the holder.
2. Install a cap frit filter on the filter end fitting by pressing firmly by hand and then reassemble the two fittings.
3. Use two ½" wrenches to tighten the holder approximately ¼-turn past finger-tight. Do not overtighten.
4. Insert a guard cartridge into the cartridge and filter fitting and then reassemble. Note that the cartridge can be installed in either direction; it does not have a front or back end.
5. Use two ½" wrenches to tighten the fittings approximately ¼-turn past finger-tight. Do not overtighten.
6. Install onto analytical column (see below).

Level 3: Filter and Guard Cartridge

Protection against both particulate matter and irreversibly adsorbed compounds



For All Levels — Install the Assembled Trident Holder onto Your Analytical Column

1. Thread the assembled holder onto the analytical column, making sure to use a Trident PEEK ferrule. Using a ferrule other than a Trident PEEK ferrule may result in a poor connection.
2. Firmly hand tighten. Wrench tightening not required.

Installed onto Column



* Fittings on all LC columns have 10-32 threads; however, seat depth varies. An improper seat will yield a poor connection and may affect chromatography. While all Restek LC columns will provide a zero-dead-volume connection when used with a properly installed Trident LC column protection system, analysts should consult the manufacturer for non-Restek column connections. A detailed discussion about port configurations can be found at http://www.restek.com/Pages/faq_lc#top

Replacing Consumable Parts

To replace a cap frit filter, guard cartridge, or PEEK ferrule:

1. Unscrew the assembled Trident unit.
2. Remove the consumable part(s) using your fingers by pulling gently with a twisting motion. Avoid pulling straight because this can create suction.
3. Install the new part(s) and reassemble the unit following the instructions above for the appropriate Trident system (Level 1, Level 2, or Level 3).

Replacement Parts

Visit www.restek.com for a complete list of guard cartridges.

PEEK ferrules: 27476 (10-pack)

Replacement cap frit filters: 25022 (4 mm, 2.0 μ m, 5-pack); 25023 (4 mm, 0.5 μ m, 5-pack); 25057 (2 mm, 2.0 μ m, 5-pack); 25990 (2 mm, 0.5 μ m, 5-pack)

Questions about this or any other Restek product?
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