ZirChrom®

... For Peak Performance

The ZirChrom® guard column system is composed of a guard column holder and a guard column insert.
WARNING: DO NOT USE THE GUARD COLUMN SYSTEM AT TEMPERATURES OVER 70 DEGREES CELSIUS.

The guard column system includes the following components:

1) one guard column holder (includes one guard assembly, one tubing segment, two 1/16" nuts and two ferrules)
(ZirChrom part # 852-00 or 850-00)
2) one guard column insert (sold in packs of three)
(ZirChrom part # G20 or G40)

See reverse side for patent information, or to order additional guard column holders, inserts or replacement parts.

Guard insert installation instructions:

1) Unscrew portion A of the guard assembly from portion B (see **Figure 2**). 2) Seat the guard insert into portion B of the guard assembly. 3) Replace portion A of the guard assembly and turn clockwise until finger-tight. 4) Using two wrenches, tighten guard assembly until leak-tight (approximately 30 degrees).

Connecting guard assembly to column:

1) Assemble the tubing connector by placing one 1/16" nut and one ferrule on each end of the tubing segment (see **Figure 2**). 2) Insert one end of the assembled tubing connector into the inlet of your analytical column (see **Figure 3**). 3) Screw the male-end fitting, until finger-tight, into the inlet of your column while applying slight pressure to correctly seat the ferrule. 4) Further tighten the male end fitting with a wrench until it is leak-tight. 5) Insert the other end of the assembled tubing connector into the outlet of your guard assembly (see **Figure 3**). 6) Screw the male-end fitting, until finger-tight, into the outlet of your guard assembly while applying slight pressure to correctly seat the ferrule. 7) Further tighten the male end fitting with a wrench until it is leak-tight. 8) Place the inlet fitting from your HPLC injector into the inlet of the guard assembly and rotate until finger-tight. 9) Place the outlet fitting to your analytical column and rotate until finger-tight. Your final assembly is now complete (see **Figure 3**).

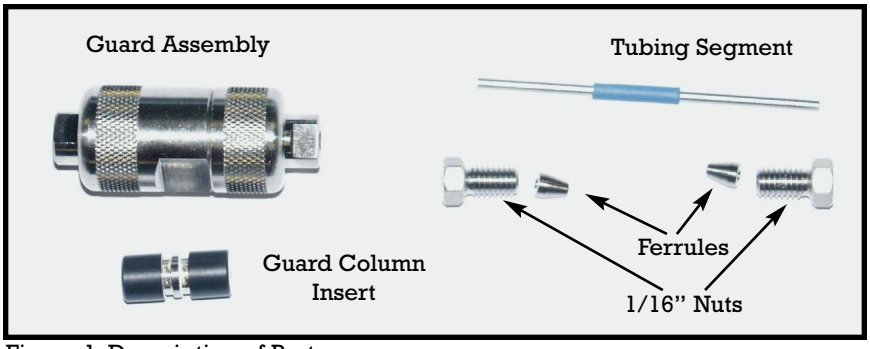

Figure 1: Description of Parts

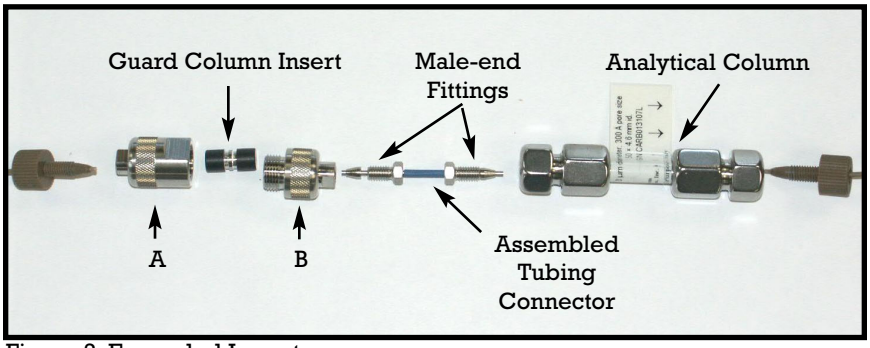

Figure 2: Expanded Layout

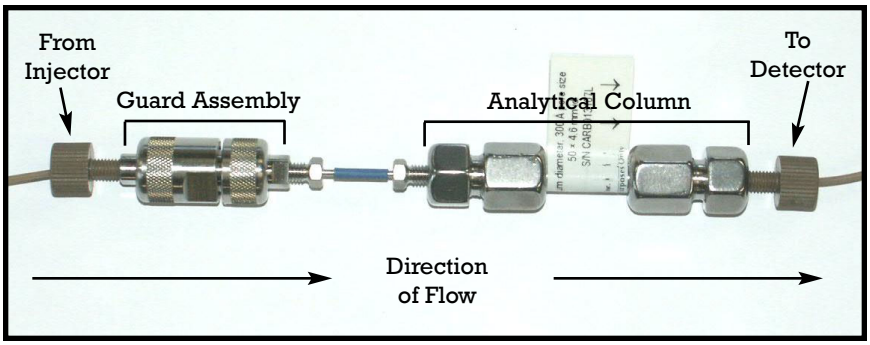

Figure 3: Final Assembly