

# Agilent Preparative Cartridge Column Series Hardware Assembly Instructions

## Introduction

The Agilent preparative cartridge column series has been developed to provide convenient, cost-effective, and high throughput, liquid chromatographic preparative separations. The product line consists of a series of preparative cartridge columns with a 21.2mm inside diameter and a dedicated hardware kit sold separately (820400-901). End fittings included in the hardware kit can be used interchangeably on any of the cartridge variations offered, and adapt the cartridge columns to standard 1/16" LC fittings. Made from a chemically resistant form of stainless steel that resists galling, the end fittings are easily threaded onto the various columns and then tightened by hand. Inside the end fittings is a perfluoro-elastomer seal that enables the cartridge and end fittings to seal at pressures up to 5000 psi and at temperatures up to 80°C.

## Assembly

The standard configuration requires an Agilent preparative cartridge column and two end fittings. An alternate configuration utilizes one standard end fitting and one guard column end fitting (available in a guard column hardware kit, P/N 820444-901) to enable the use of an integral guard column (See reverse side of this sheet). All end fittings contain a perfluoro-elastomer gasket that seals with hand tightening. The standard end fittings are identical and can be threaded onto either end of the cartridge. Before each assembly, inspect the end fittings and either end of the cartridge column for debris. Clean the cartridge and or end fittings before assembly. Thread both end fittings on the cartridge column then tighten both end fittings simultaneously by holding one fitting in each hand. Disassembly is the reverse of assembly. If necessary, use wrenches to aid in removal of the end fittings from the cartridge column, but do not use wrenches during assembly.

Replacement seals can be ordered using part number 820385-901, Seal Replacement Kit, 21.2mm, Cartridge. The seals are sold individually, one per kit.

## Seal Replacement Instructions

### Seal Removal

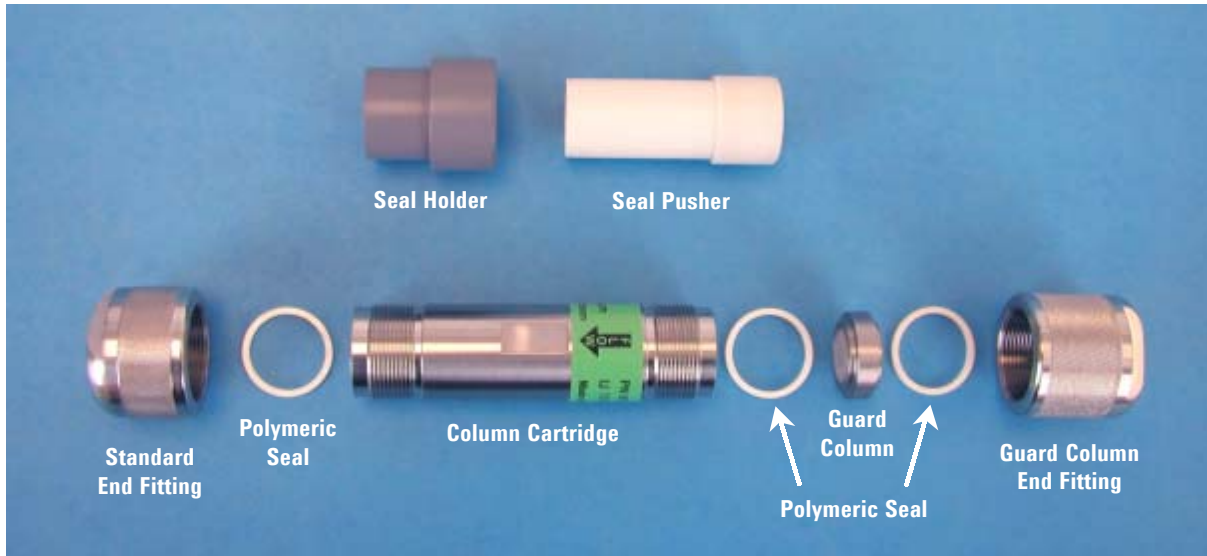
Remove the old seals from each end fitting assembly by picking the seal with a sharp tool, such as a pair of pointed tweezers or a pin. Be careful not to scratch the sealing surfaces of the end fitting when removing the seal.

### Seal Installation

Seals are most conveniently installed using the Seal Insertion Tool available only as a part of the Guard Column Hardware Kit (part number 820444-901). Follow steps 1 and 5 on the reverse side of this sheet to install the seal using this

tool. If the tool is not available, install the new seal by placing one edge of the seal into the retaining groove of the end fitting, then, using the eraser end of a pencil or other blunt object, gently press the seal into the groove. Start from the area where the seal is already started into the groove and work around from either direction until the whole seal is inserted into the groove. Make sure the seal is not twisted, but is lying flat in the groove. If the seal becomes twisted, remove the seal and start over. Clean any debris left over after replacing the seal before use.

# Integral Prep Guard Column Installation Guide



Ordering Information	
	Agilent Part Number
Integral Prep Guard Column Hardware Kit .....	820444-901
(Includes: Seal Holder, Seal Pusher, Guard Column End Fitting, and 1 Polymeric Seal)	
PrepHT Hardware Kit .....	820400-901
(Includes: 2 Standard End Fittings)	
Seal Replacement Kit .....	820385-901
(Includes 1 Polymeric Seal)	

