

Installation Instructions for MF-4161 UniJet™ Injection Valve

(MF-9515, revised 5/96)

The BAS UniJet Injection Valve is a hybrid Rheodyne-style injector which combines the low dead volume of the Rheodyne 8125 with a PEEK¹ stator backplate.

By using an insulating plastic stator, the valve provides electrical isolation between earth grounding (from the pump) and various EC detector potentials.

The plastic stator thus permits the UniJet column to be directly connected between the injector and the amperometric detector. This absence of traditional column end fittings and connecting tubing provides the lowest dispersion of any microbore LC system design.

Inventory

Quantity	Description
1	Low dispersion valve with PEEK stator and internal contact closure switch
1	5 µL loop
2	Mounting screws
2	Hex wrenches
1	Needle port cleaner
1	Pressure adjusting nut
1	Needle with female luer hub
2	PEEK tubing for ports 5 + 6
1	Package of PEEK fittings (4)

Installation

1. For BAS-4XX systems: determine the location and orientation of the predrilled injection valve mounting holes. See Figure 1. Remove the knob on the valve.
 - (a) If your system resembles Figure 1A, remove any column heater and install the valve so that port 3 is aimed to the right rear corner. Do not make any connections, but proceed to step 3.
 - (b) If your system resembles Figure 1B, install the valve so that ports 2 and 3 are on top. Do not make any connections, but proceed to step 3.
2. For BAS 200 and 200A systems, install the valve so that ports 2 and 3 are on top. For BAS 200B systems, install the valve so that port 3 is on top.
3. You must remove all metal nuts and ferrules on lines which were previously connected to standard injection valves. The tubing should be recut to a square, burr-free finish or replaced.

Note: under no circumstances should you use metallic nuts or ferrules in this injection valve. Tightening connections with metal fittings will crack the stator!

¹PEEK - Polyetheretherketone Polymer

4. Using the Rhe-Flex bushings and ferrules supplied, reconnect the new or cut tubing from the pump (port 2) and sample overflow tubes (ports 5 + 6) to the valve. Also install the loop (ports 1 + 4). Tighten all connections slightly with the 1/4" wrench supplied.
5. For BAS-4XX systems, connect the UniJet column directly into port 3 with a Rhe-Flex bushing. Tighten slightly with a 1/4" wrench.
6. For BAS 200 and 200A systems, you will need to bring a 30 cm length of capillary tubing from port 3 of the valve to an MR-4407 union. The UniJet column is connected to this union. Use plastic fittings on the column and at the injection valve.
7. For BAS 200B systems, connect the UniJet column directly into port 3 with a Rhe-Flex bushing. Tighten slightly with a 1/4" wrench.

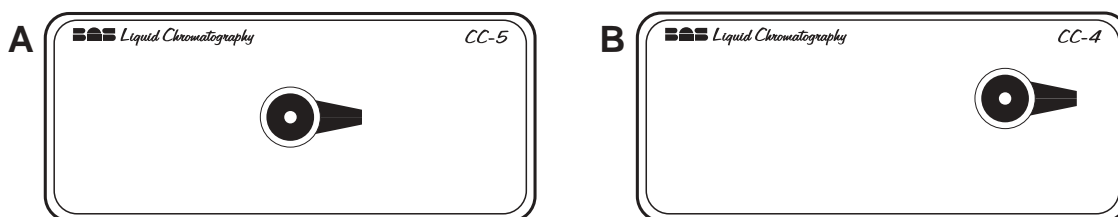


Figure 1
A: Preferred valve location for direction connection of injection valve, column, and detector. Available on CC-5 chassis after 8/91. These units use a new LCEC design which permits direct connection.

B: Valve location on CC-4 manufactured before 8/91.

Replacement Parts

P/N	Description
MF-4163	Stator for MF-4161
MF-4164	Stator face assembly
MF-4167	Rheodyne ferrules for MF-4161, pk. of 5
MF-4165	Fittings set (5 nuts, 5 ferrules) for MF-4161, standard size
MF-4166	Fittings set (5 nuts, 5 ferrules) for MF-4161, short size
MR-4016	30 cm long capillary tubing
MF-5040	Vespel seal
MF-5041	Tefzel seal

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