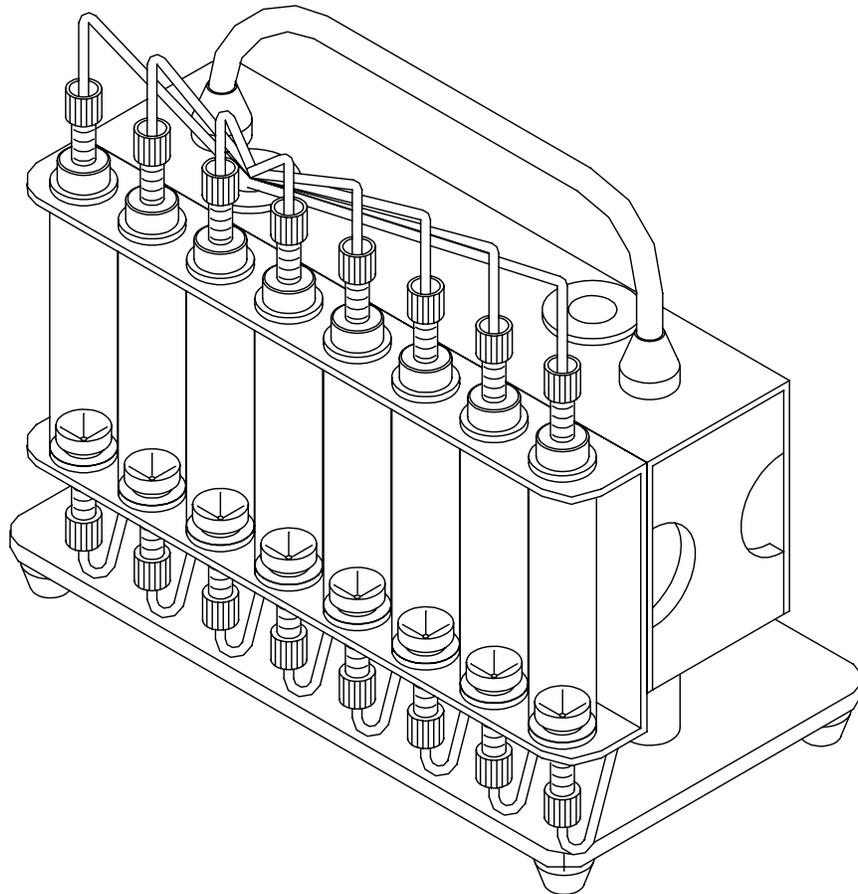


# Retrieval Reservoir

## Operation Manual

60-200-812

REV. A  
DATE: 2001-05



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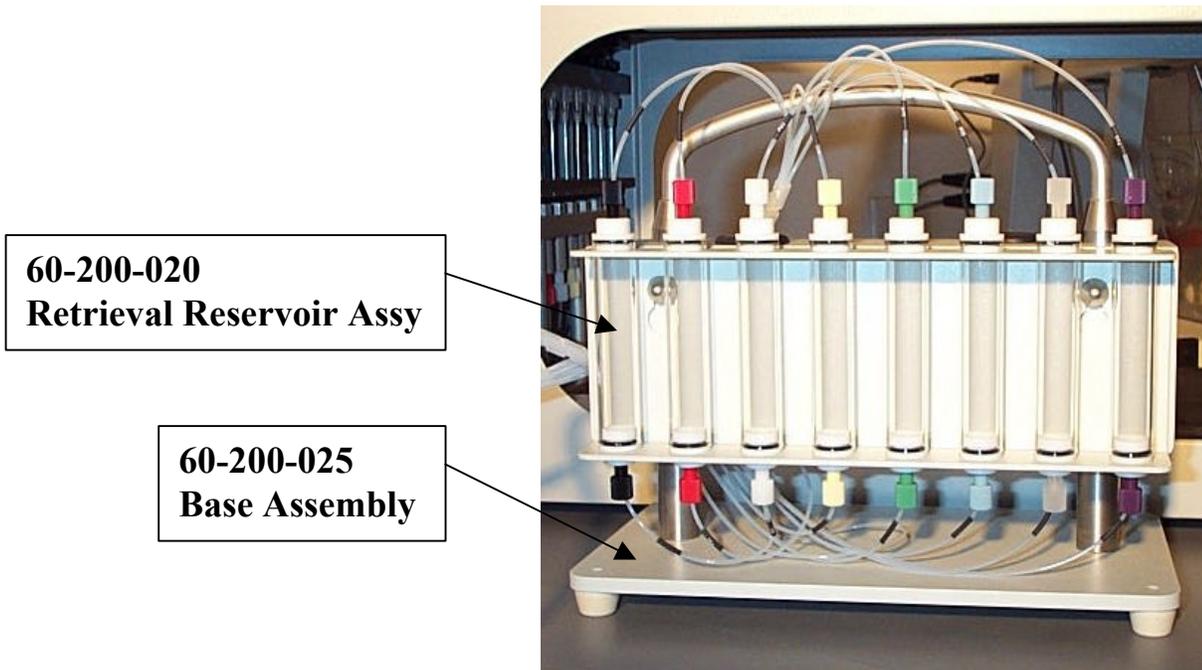
This product is covered under one or more of the following US Patents: 3,572,648 4,108,602 4,274,286 5,198,109 5,296,139 5,639,953 5,639,974 5,682,001 6,006,777 6,076,410 6,422,098 Des.377,152 Des.424,458 & Other Patents Pending.

### What it does:

The Retrieval Reservoir is an optional accessory to the AutoPlus Maximizer. This accessory enables the Maximizer to return sample and rinse volume back to vessel in Multiple bath applications. This method will accommodate two baths with media replace or three baths without media replace.

### Mechanical Description:

The Retrieval Reservoir Assembly (60-200-020) is a group of eight glass barrels with an attached input and output harness. The glass vessels are retained in a bracket which is designed to mount to the side of the Base Assembly (60-200-025). The Base Assembly can accommodate two Retrieval Reservoir Assemblies. The Retrieval Reservoir Assembly may be easily removed from the Base Assembly and disassembled for cleaning and maintenance. When the AutoPlus MultiFill is used with the AutoPlus Maximizer, the Retrieval Reservoir Assembly must not be positioned at a higher elevation than the transfer valves in the MultiFill. If the retrieval reservoir is located higher than the transfer valves, back flow will occur through the transfer valves.



### How it works:

1. Rinse volume (approximately 7.0 ml) is collected from the dissolution vessels and dispensed through the sample path and into the retrieval reservoir.
2. Sample volume is collected from the dissolution vessels, detected and or dispensed into the MultiFill Collection Rack.

- Sample and rinse volume plus an air purge (approximately 25 ml) is collected from the retrieval reservoir and dispensed back to the dissolution vessels.

### Unpacking:

One Retrieval Reservoir and one Base Assembly are shipped fully assembled in one box. The shipping box and packing materials should be saved if future reshipment is anticipated.

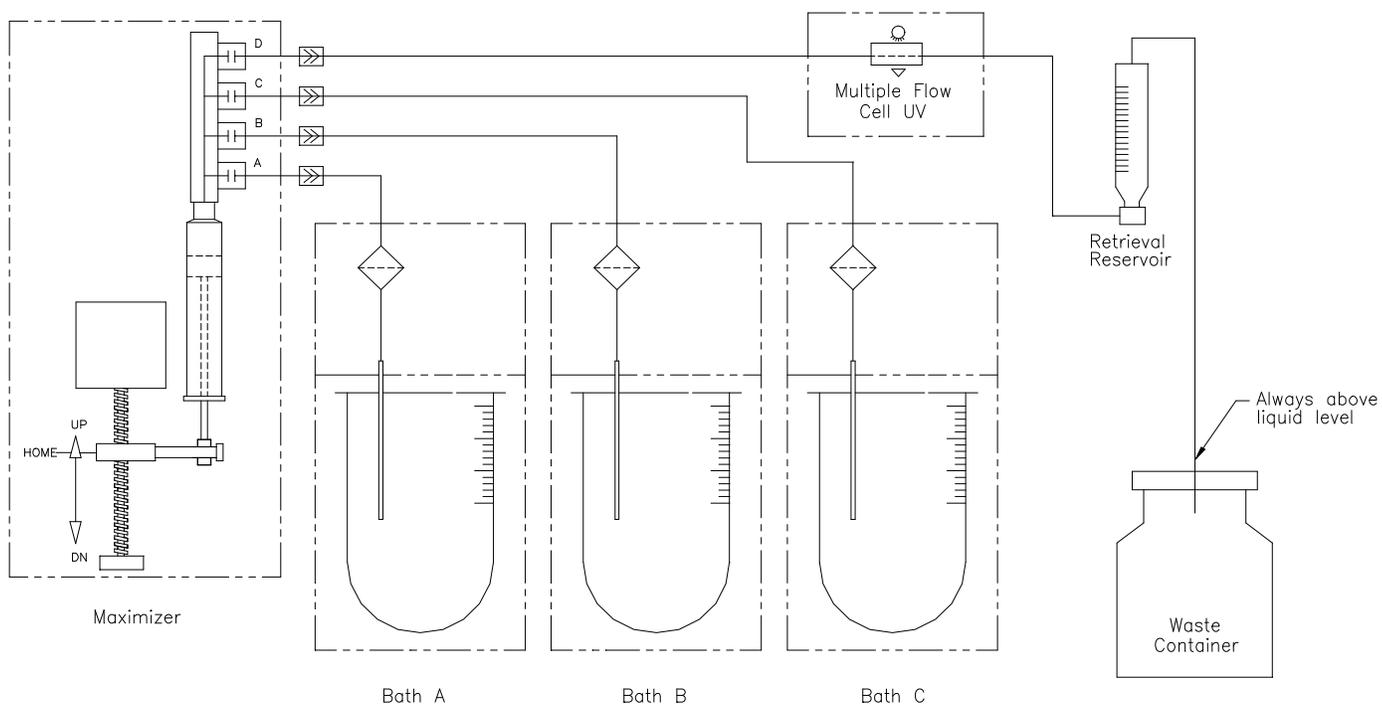
### NOTICE

Shortages or damage must be reported immediately to the freight carrier and to Hanson Research Corp. Please contact Hanson Research Customer Support at (818) 882-7266

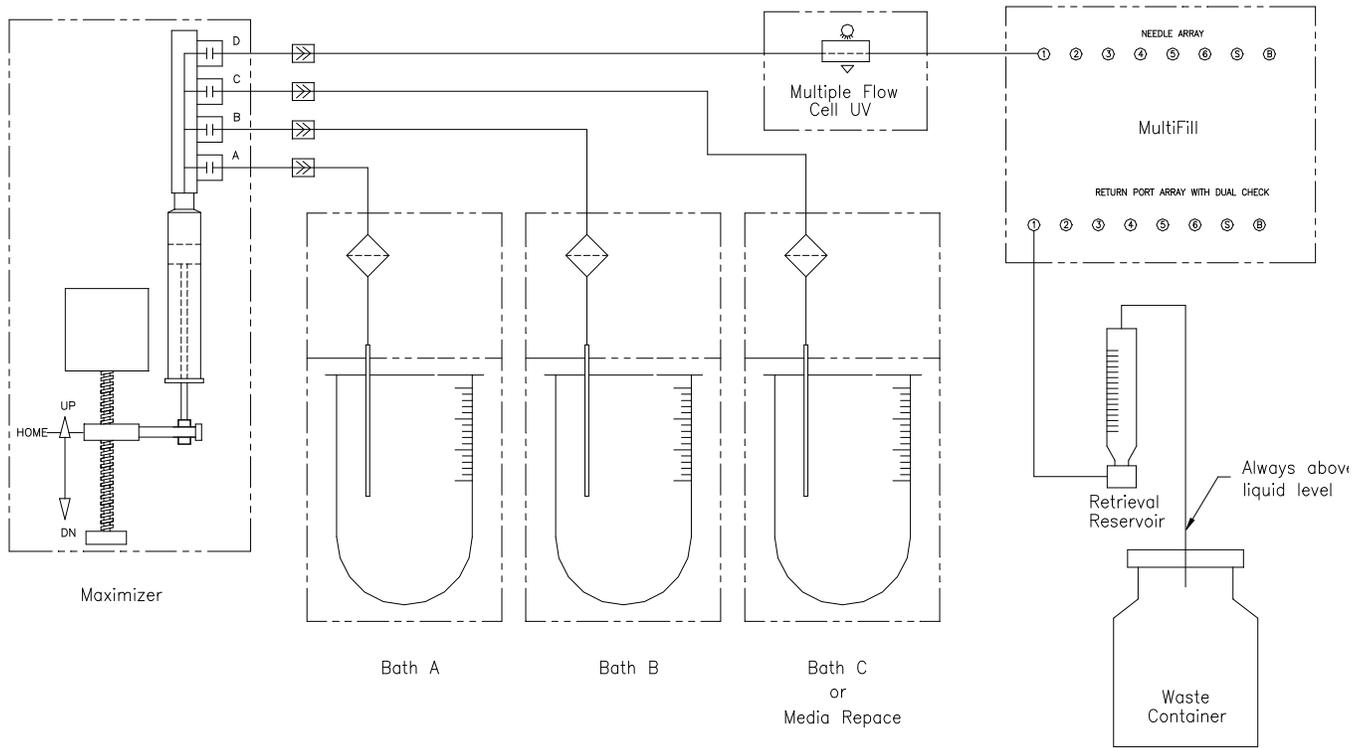
### Hook-up:

The Retrieval Reservoir Assembly is connected to the output harness from the Multiple Flow Cell Spectrophotometer (see Schematic 1) or when the AutoPlus MultiFill Collector is used, it is connected to the waste harness from the MultiFill (see Schematic 2). NOTE: All check valves must be removed from the MultiFill waste harness prior to connecting the Retrieval Reservoir input harness. The output harness from the Retrieval Reservoir Assembly is connected to a waste container.

**Schematic 1 (On line detection):**



## Schematic 2 (Collection):



### Maximizer Programming Procedure for Retrieval Method:

The Retrieval Method must be programmed using the scripting feature of the AutoPlus Maximizer. Insure that the advanced mode is activated (preferences, system configuration, mode “ADVANCED”).

Start by entering the required information in a protocol. Once this information has been entered, enter back into the protocol and press the “File” key. The script of this protocol will be displayed on the screen. Please review the operation manual on “Working With Scripts” in section 5 if you are not sure, or are unable to access the scripting function.

1. Change the volume of the media replace to equal the collection volume, if this feature is used.
2. Insert a “Transfer” script as the last step. Program the transfer to be double the rinse volume plus one syringe full, e.g. rinse 10mL, the transfer volume would be 25mL. The transfer script should be programmed like this:  
Transfer,  
Source -“D”

Target - "CURRENT"  
Volume - "25mL"  
Occurrence - "Always"

- The complete script should look like this when the protocol is printed,

1 Sample Rinse	7mL
2 Sample Collect	5mL
3 Replace Media	5mL
4 Transfer	25.0mL D->Cur

Note; remember to enter the volume you require to collect in the "Sample Collect" and the "Replace Media" positions.
- Run a complete cycle as a test run to insure the protocol has been correctly programmed.

### Programming Suggestions:

- The rinse volume should not be more than that necessary to minimize carryover (approx. 7 ml).
- The rinse volume should never be more than the 12 ml volume of the reservoir.
- The rinse volume should be minimized to reduce the total sample processing time.
- The retrieval volume must be greater than the rinse volume to insure complete retrieval and an air purge.

### Maintenance and Cleaning:

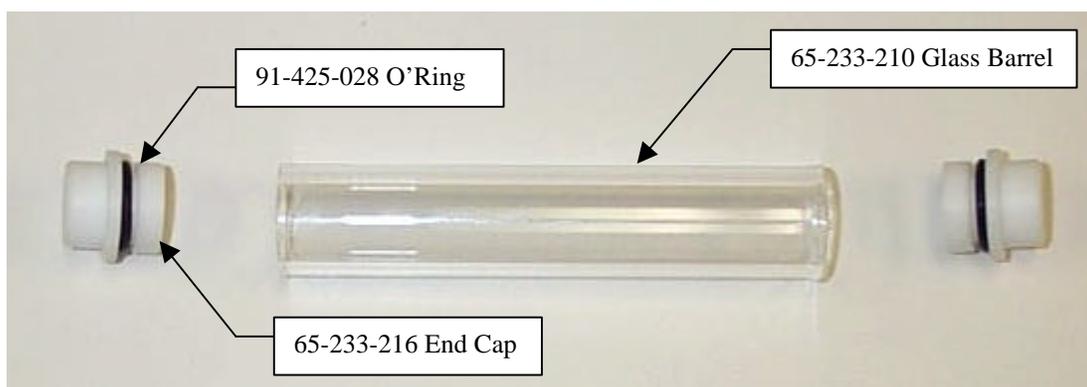
#### After each test:

The sample path should be washed at the end of each test. In most cases this may be automated with the end of test **wash** command and a scripted **Transfer** command to empty the retrieval reservoir. At end of test, the wash routine for a two bath system with media replace (see Schematic 2) could be programmed to do the following:

- Collect 15 ml DI water from source C and dispense into Bath A vessels.
- Collect 15 ml DI water from source C and dispense into Bath B vessels.
- Collect 30 ml DI water from source C and dispense into the retrieval reservoir (D).
- Collect 40 ml DI water plus air from source D and dispense to source C.

#### Every 3 months:

The retrieval reservoir should be disassembled and thoroughly cleaned. The o'rings at each end of the glass barrels should be examined and replaced as necessary (see fig below).



**System Requirements, Limitations and Restrictions:**

- AutoPlus Maximizer firmware version 1.02 or higher.
- Check valves must be removed from MultiFill output harness.
- Retrieval Reservoir Assembly may not be elevated above the MultiFill transfer valves.
- The over-flow harness from the retrieval reservoir must always terminate above liquid level.
- Not recommended for multiple drug applications.

**Ordering Information:**

Retrieval Reservoir Assembly -----	P/N 60-200-020
Bench Mount Base Assembly -----	P/N 60-200-025
Extra Harness Assembly -----	P/N 60-200-708
Glass Barrels -----	P/N 65-233-210
End Cap -----	P/N 65-233-216
O'Ring -----	P/N 91-425-028