#### BARNSTEAD THERMOLYNE

## **Automatic Collection System**

Operation Manual and Parts List Series 683

**Model #** B440704

### **Table of Contents**

#### IMPORTANT INFORMATION

This manual contains important operating and safety information. You must carefully read and understand the contents of this manual prior to the use of this equipment.

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## Safety Information

### Alert Signals



#### Warning

Warnings alert you to a possibility of personal injury.



#### Caution

Cautions alert you to a possibility of damage to the equipment.



#### Note

Notes alert you to pertinent facts and conditions.



#### **Hot Surface**

Hot surfaces alert you to a possibility of personal injury if you come in contact with a surface during use or for a period of time after use.

Your Barnstead Automatic Collection System has been designed with function, reliability, and safety in mind. It is your responsibility to install it in conformance with local electrical codes. For safe operation, please pay attention to the alert signals throughout the manual.

### Warning

#### To avoid electrical shock, always:

- Disconnect from the power supply prior to maintenance and servicing.
- Do not mount your MEGA-PURE® Automatic Collection System directly over equipment that requires electrical service. Routine maintenance of this unit may involve water spillage and subsequent electrical shock hazard if improperly located.

#### To avoid personal injury:

- 1. Refer servicing to qualified personnel.
- "Caution: Hot Surface Avoid Contact." The glass portions of the MEGA-PURE® Automatic Collection System can become dangerously hot while the ACS is being filled by your still.

#### To ensure safe mounting:

 Wall composition and construction, as well as fastener type, must be considered when mounting this unit. The mounting surface and fasteners selected must be capable of supporting a minimum of 150 lbs.; inadequate support and/or fasteners may result in damage to mounting surface and/or equipment. If you are unsure of mounting surface composition, condition and construction, or correct fasteners, consult your building maintenance group or contractor.

### Introduction



#### **Hot Surface**

"Caution: Hot Surface - Avoid Contact." The glass portions of the MEGA-PURE® Automatic Collection System can become dangerously hot while the ACS is being filled by your still. Your Automatic Collection System is a compact unit designed for use with Barnstead MEGA-PURE® Water Stills.

The Automatic Collection System is designed to store, maintain, and provide up to 12 gallons (45 liters) of glass-distilled water automatically. Delivery is by means of a convenient control knob and delivery spout located on the front panel.

The Automatic Collection System signals the Barnstead MEGA-PURE® Water Still to turn on when a minimum of 35 liters of distilled water remains, thus attempting to maintain an adequate supply automatically. The Automatic Collection System is designed to plug into your Barnstead MEGA-PURE® Water Still.

### Installation



#### Warning

Do not mount your MEGA-PURE® Automatic Collection System directly over equipment that requires electrical service. Routine maintenance of this unit may involve water spillage and subsequent electrical shock hazard if improperly located.

Wall composition and construction, as well as fastener type, must be considered when mounting this unit. The mounting surface and fasteners selected must be capable of supporting a minimum of 150 lbs.; inadequate support and/or fasteners may result in damage to mounting surface and/or equipment. If you are unsure of mounting surface composition, condition and construction, or correct fasteners, consult your building maintenance group or contractor.

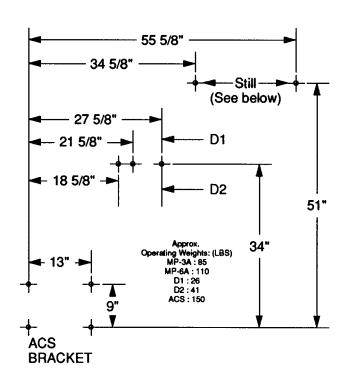
### Location of Unit

Choice of a mounting location for the Automatic Collection System is primarily a matter of convenience as long as the service requirements of the unit (given below) are met.

- The ACS may be bench or wall mounted on left side of any Barnstead MEGA-PURE® Water Still.
- 2. A vented atmospheric drain must be provided for emergency overflow.
- The size of the unit:

Base: 16 1/4" wide x 16 1/4" deep; Height 34"

### Mounting



#### INSTALLATION



#### Note

Wipe all ball and socket joints clean with a damp cloth before assembling glassware.

Vinyl tubing is recommended for drain connections.

When joining flexible vinyl tubing and glass, soften the tubing in hot water and wet the glass to facilitate assembly.

Use caution when handling the upper assembly.

Prior to the first use of the ACS, flush it out two or three times. Use only distilled water when flushing to avoid contaminating the unit.

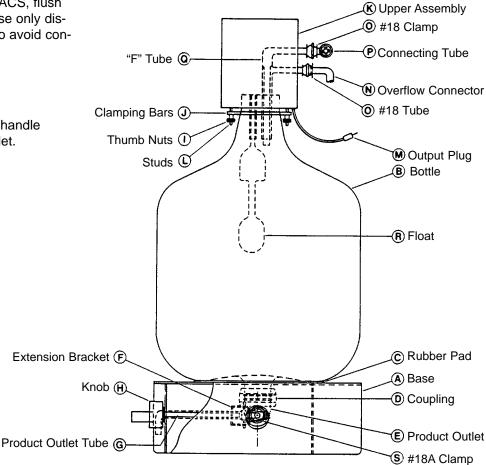


#### Caution

Do not use stopcock as a handle while installing product outlet.

### **Assembly Instructions**

- Position base on bench or wall mounting bracket in final operating position. Remove the three screws and front panel.
- 2. Place bottle on base centered on rubber pad.
- Connect coupling and product outlet to beaded connection on bottom of bottle by pressing on at slight angle.
- Place stopcock and extension bracket with tube open end pointed to right side of unit. Move stopcock to "off" position and tighten coupling with wide mouth pliers.



#### TITLE RIGHT

- Position product outlet tube and retain with # 18A clamp (screw lock). The outlet end of this tube is intended to pass through front panel behind guard.
- To install front panel, first move knob to "closed" position and insert square shaft into square hole in extension bracket. Guide panel over glass product outlet tube and re-install the (3) three screws.
- 7. Unpack top assembly and remove four (4) thumb nuts and two (2) clamping bars from upper assembly.
- 8. Wet bottle neck and top assembly sealing "O" rings, and guide glass float and venting tubes thru neck of bottle until "O" rings are seated. Panel and tubulations face to the rear.
- 9. Replace clamping bars over studs and install (4) four thumb nuts (snug but do not overtighten).
- Install level control output plug into appropriate jack receptacle in your Barnstead MEGA-PURE® Water Still.
- Install connecting tube from Barnstead MEGA-PURE® Water Still to water inlet connection on rear of upper assembly and retain with # 18 Clamp.
- 12. If wall space is at a premium, connect the Automatic Collection System to your Barnstead MEGA-PURE® Water Still with plastic tubing using the glass adapters available in the Flexible Tubing Adapter Kit. (See Accessory Parts List.)
- 13. Run vinyl tubing from overflow connector to a convenient drain.
- Install emergency overflow drain connector on rear of upper assembly and retain with # 18 clamp.

## **Parts List**



#### Warning

Disconnect from the power supply prior to maintenance and servicing.

Refer servicing to qualified personnel.

Key Number	<u>Title</u>	<u>Code</u>
В	Bottle	400628
D	1 1/2" Coupling	409169
E	Product Outlet & Shutoff	400626
G	Product Outlet Tube	400624
K	Level Control Cover Assembly	440699
M	ACS Jack and Cordset	927800
N	Over Flow Tube	413579
0	Thomas Clamp # 18	410139
P	Still Connecting Tube	400639
Q	"F" Tube	400344
R	Float	400345
-	Level Control Switch	400343
S	Thomas Clamp # 18A	410141
-	Product Outlet Connection	400471
Accessories		
-	Flexible Tubing Adapter Kit	440138
-	Wall Mounting Bracket	400634

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MEGA-PURE® is a trademark of Barnstead|Thermolyne.

# Ordering Procedures

Please refer to the Specification Plate for the complete model number, serial number, and series number when requesting service, replacement parts or in any correspondence concerning this unit.

All parts listed herein may be ordered from the Barnstead|Thermolyne dealer from whom you purchased this unit or can be obtained promptly from the factory. When service or replacement parts are needed we ask that you check first with your dealer. If the dealer cannot handle your request, then contact our Customer Service Department at 319-556-2241 or 800-553-0039.

Prior to returning any materials to Barnstead|Thermolyne Corp., please contact our Customer Service Department for a "Return Goods Authorization" number (RGA). Material Returned without an RGA number will be returned.

## One Year Limited Warranty

Barnstead|Thermolyne Corporation warrants that if a product manufactured by Barnstead|Thermolyne and sold by it within the continental United States or Canada proves to be defective in material or construction, it will provide you, without charge, for a period of ninety (90) days, the labor, and a period of one (1) year, the parts, necessary to remedy any such defect. Outside the continental United States and Canada, the warranty provides, for one (1) year, the parts necessary to remedy any such defect. The warranty period shall commence either six (6) months following the date the product is sold by Barnstead|Thermolyne or on the date it is purchased by the original retail consumer, whichever date occurs first.

All warranty inspections and repairs must be performed by and parts obtained from an authorized Barnstead|Thermolyne dealer or Barnstead|Thermolyne (at its own discretion). Heating elements, however, because of their susceptibility to overheating and contamination, must be returned to our factory, and if, upon inspection, it is concluded that failure is not due to excessive high temperature or contamination, warranty replacement will be provided by Barnstead|Thermolyne. The name of the authorized Barnstead|Thermolyne dealer nearest you may be obtained by calling 1-800-446-6060 (319-556-2241) or writing to:

#### Barnstead|Thermolyne

P.O. Box 797 2555 Kerper Boulevard Dubuque, IA 52004-0797 USA

FAX: (319) 589-0516 E-MAIL ADDRESS: mkt@barnstead.com

**Barnstead|Thermolyne's** sole obligation with respect to its product shall be to repair or (at its own discretion) replace the product. Under no circumstances shall it be liable for incidental or consequential damage.

THE WARRANTY STATED HEREIN IS THE SOLE WARRANTY APPLICABLE TO **Barnstead|Thermolyne** PRODUCTS. **Barnstead|Thermolyne** EXPRESSLY DISCLAIMS ANY AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR USE.

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