

into the barrel. Rotate the retainer cap clockwise until fully seated. If the Dispenser plunger appears to be stuck in the barrel, do not apply excessive force towards removal as plunger breakage may result. Place the entire unit in warm water and allow to soak for at least 10 minutes. Allow Dispenser to cool. Then apply a gentle twisting motion to the plunger. Generally, this will free the plunger permitting removal for complete cleaning. Excessive removal pressure may cause a slight withdrawal of the barrel from its mounting flange. The proper, fully bottomed position is indicated by the handle spacers (refer to Figure 1) being firmly in contact with the top of the barrel mounting flange. If displacement is noted, heat the flange in hot water and press downward on the upper portion of the handle until alignment is restored. Dispensers may be filled with distilled or deionized water for storage to minimize sticking of the plunger.

#### INQUIRY

When inquiry is made for parts or repair, please include the MANUFACTURING REFERENCE NUMBER located on the handle. (See Figure 1).

#### ACCESSORIES

CAT. #790 125cc HDPE Bottle w/3.65 tubing inlet and adapter

CAT. #822 8-port disposable manifolds (25/box)

#### REAGENT EXCLUSION LIST

This is not a complete listing - any reagent that is not compatible with Polypropylene or Viton\* should be avoided.

#### NOT TO BE USED

Amyl Chloride  
Benzyl Alcohol  
Boric Acid  
Bromine  
Bromobenzene  
Bromoform  
Butadene  
Butyric Acid  
Carbon Disulfide  
Chlorobenzene (Mono)  
Chlorosulfonic Acid  
Chloroform  
Chlorox  
Diethyl Benzene  
Diethyl Ether

Dipropylene Glycol  
Ether  
Ethyl Acetate  
Hydrofluoric (HF) Acid  
Methyl Isopropyl  
Ketone  
Nitrobenzene  
Oils: Cedarwood  
Cinnamon  
Oleum  
Perchloroethylene  
Tetrahydrofuran  
Thionyl Chloride  
Toluene  
Trichloroethane

**SHORT TERM USE  
ONLY ONE DAY  
MAXIMUM, then rinse  
with water.**

Trichloroethylene  
Vinylidene Chloride  
Dichlorobenzene  
Ethyl Benzene  
Ethyl Chloride, Liquid  
Ethylene Chloride  
Ethylene Oxide  
Flourine  
Isopropyl Benzene  
Methyl Chloride  
Nitric Acid, 50-70%  
Xylene

# StatMatic I

## 8-Channel Microplate Dispenser

### MODEL 982

#### Operating Instructions

#### SPECIFICATIONS

Dispensing Ranges - 0.8mL, 1.6mL, 2.0mL & 2.4mL (full-stroke)

Dispensing per manifold port - 100uL, 200uL, 250uL, 300uL

Not Autoclavable

Only glass, Polypropylene, Platinum/Iridium, Teflon® and Ceramic contact the reagents (excluding flexible Tygon® Remote Outlet). See the recommended reagent exclusion list.

#### INSPECTION

Carefully inspect your Dispenser for any shipping damage. Any defects or shortages should be reported to the supplier. Included with each Dispenser are the following accessories: (3) each calibration rings, (1) each 20mm and 24mm threaded adapters, (1) each flexible remote outlet tubing, (1) each long inlet tubing, and (1) each 8-port manifold.

#### DISPENSE VOLUME SETTING (Refer to Figure 1)

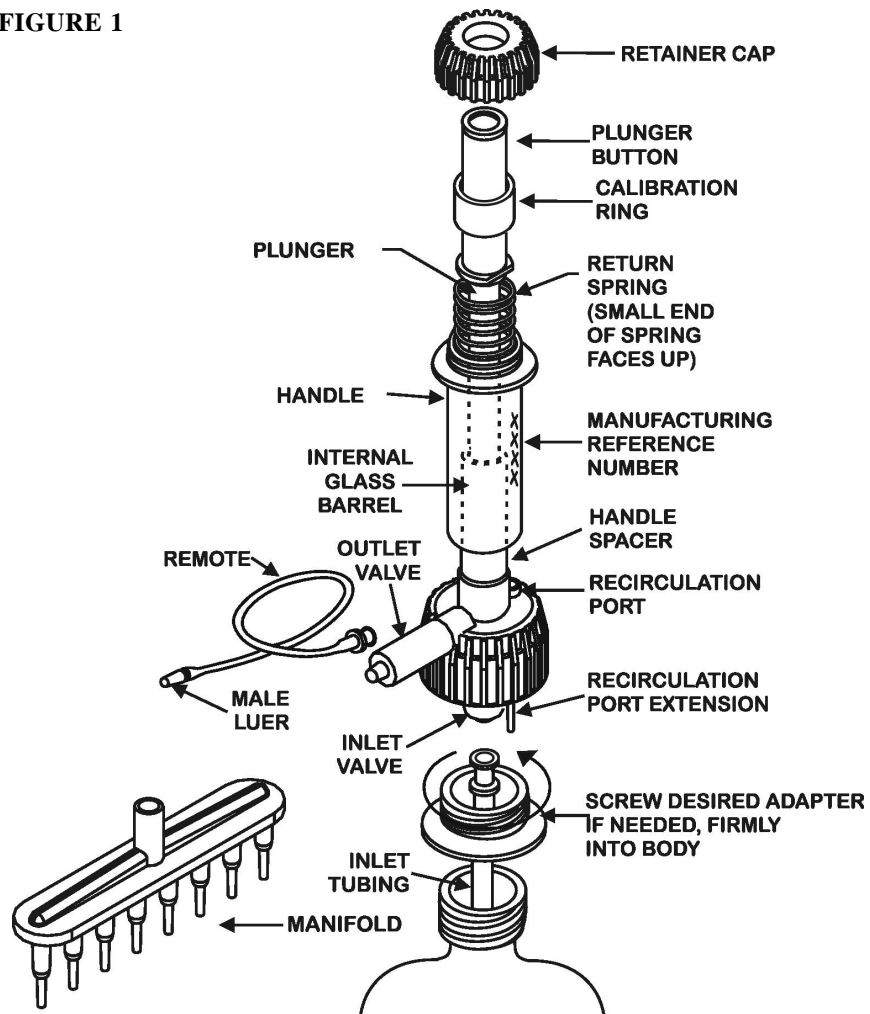
All Dispensers are shipped set at the maximum dispense volume. Other dispense volumes may be set by installing the proper CALIBRATION RING. Unscrew the RETAINER CAP from the HANDLE. The PLUNGER BUTTON ASSEMBLY contains a return spring and should be held firmly during unscrewing to prevent rapid separation and possible damage. Place the desired ring on the PLUNGER BUTTON and **carefully** guide the PLUNGER back into the opening in the GLASS BARREL. (**CAUTION:** Although the plungers are highly resistant to breakage, any severe bending or scratching may cause serious damage). Retighten the RETAINER CAP and install the appropriate round volume label in the PLUNGER BUTTON RECESS.

Teflon® Registered Trademark of Dupont



12555 Loma Rica Drive, Grass Valley, CA 95945 USA  
530-273-8888 800-WE PIPET (937-4738)  
FAX 530-273-2586

**FIGURE 1**



**SET UP**

The basic Dispenser is equipped to fit bottles with a 28mm threaded opening. Additionally, screw-in adapters allow quick conversion to 20mm- and 24mm-sized containers. After determining which of these adapters fit the desired reservoir bottle, firmly screw the chosen adapter into the Dispenser body as shown in Figure 1.

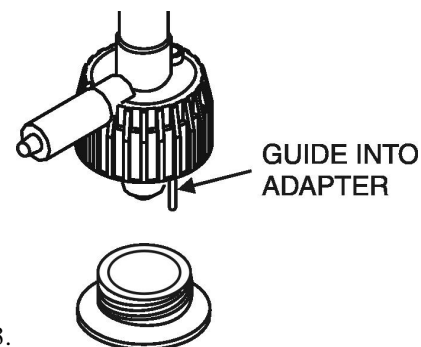
**IMPORTANT:** When installing an adapter, carefully guide the recirculation port extension through the center hole of the adapter to prevent possible pinching. (Refer to Figure 2).

**INLET TUBING**

Firmly attach the luer terminated Teflon® tubing to the inlet valve. Tubing length may be shortened by cutting with scissors or sharp blade. The preferred length

places the tubing within 1mm to 2mm from the bottom of the installed reservoir.

**FIGURE 2**



**OUTLET TUBING**

The flexible REMOTE tubing is attached to the outlet valve using its luer termination. The other end is attached to the 8-port manifold using the male luer termination.

**PRIMING**

With the remote tubing installed, place the outlet end firmly into the recirculation port. Install the desired reservoir and tilt the Dispenser backward 35° as shown in Figure 3. Press and release the plunger button until bubble-free reagent is present in the outlet tubing.

**OPERATION**

For the highest order of precision in dispensing, the plunger button should be operated with consistent strokes. Avoid allowing the button to “snap” back.

**CLEANING**

The Dispenser should be cleaned at regular intervals, particularly if protein based reagents are used. One method calls for a suitable solvent or acid to be pumped through the Dispenser until it is purged of any residues. A second method requires the plunger to be removed from the barrel, which permits more thorough cleansing. (**CAUTION:** The plunger assembly contains a return spring and should be held firmly during unscrewing to prevent rapid separation and possible damage). Rotate the retainer cap counter-clockwise and carefully extract the Teflon® plunger. (Refer to Figure 1). (**CAUTION:** Although the Teflon® plunger is highly resistant to breakage, any severe bending will cause serious damage). Do not scrape or use abrasives to clean the plunger. A soft cloth and warm water are recommended. The barrel can best be cleaned with a small tube brush, followed by a thorough rinsing with water. Replace the return spring and carefully re-engage the plunger

**FIGURE 3**

