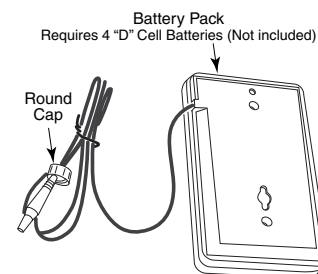
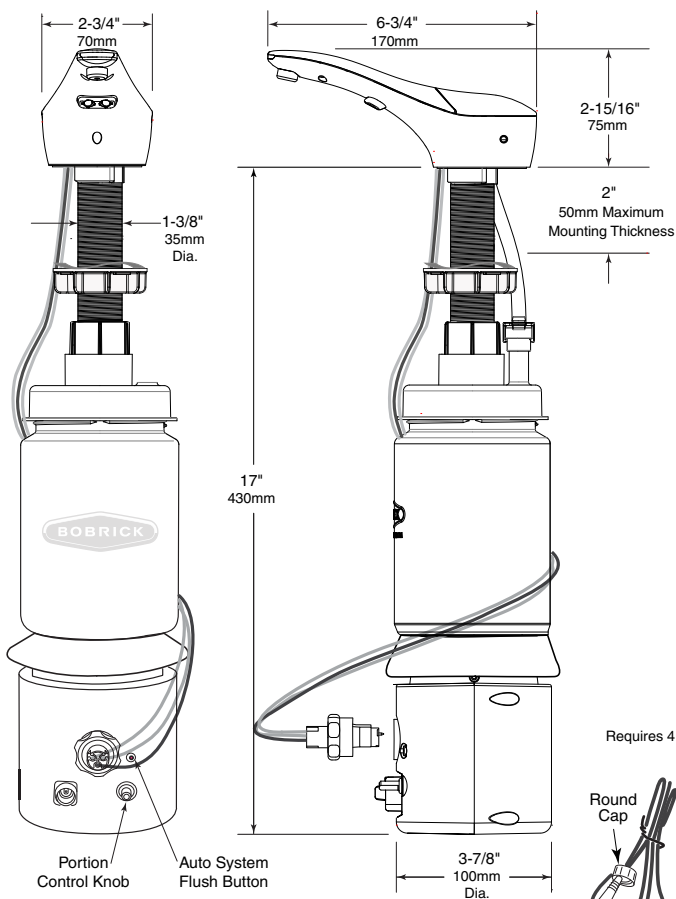




Patented



#### MATERIALS:

**Spout and Stem Assembly** — Above the counter, chrome plated ABS plastic spout. Unit equipped with a spring loaded 180° rotatable lid with concealed locking mechanism for top filling. Rotatable lid mechanism consists of metal components. Integrated to Spout are a grey plastic Dispense Tip and Activation Lens Housing. Stem connects to Bottle.

**Soap Bottle** — Translucent, shatter-resistant polyethylene. Capacity: 34-fl oz (1.0-L).

**Pump and Soap Delivery System** — A plastic Gear Pump submerged in the bottom of the Bottle, pumps the liquid soap through a vinyl tube to spout.

**Bottom Housing** — Water resistant, ABS plastic housing attached to the bottom of the Bottle, houses the PC Board, motor that drives the Gear Pump, and the Gear Pump Housing. It includes a Portion Control Knob, Flush Button to allow for system cleaning and maintenance, a connector for the Fiber Optic cables, and Power Port.

**Electronic Activation/Indication System** — Pair of plastic Fiber Optic cables connects the plastic Activation Lenses to an IR Sensor located on a PC Board in the Bottom Housing. A third plastic Fiber Optic cable connects an LED located on the PC Board to an acrylic Lens at the tip of the Spout; a solid green LED indicates dispense activity and a red blinking LED light indicates low battery life. All three cables are Integrated into one Fiber Optic Connector Tip for ease of installation.

**Battery Pack** — Water-resistant, plastic material holds 4 Alkaline “D” Cell Batteries (not included). ANSI-134A, IEC-LR20 Designation, which includes most standard battery manufacturer’s D-Batteries.

continued . . .

**Optional 6V AC Adapter with U.S. Plug** available. Order Part No. 3974-57 (For non-U.S. compatible plugs, order Part No. 3974-55).

#### **OPERATION:**

To fill dispenser, insert tip of standard BobKey provided into opening of the concealed locking mechanism in the Spout Assembly with spout body to disengage door for quick and easy top filling. Lid will rotate open for filling dispenser with bulk **liquid** hand soap. Rotate door counter-clockwise to close and lock in place.

To activate dispenser, place hand under spout near the sensor for approximately 1/2 second. Spout dispenses adjustable amount (adjustment range approximately .4 to 3 ml.) of liquid hand soap.

*Designers Note:* Bobrick Liquid soap dispensers are designed to dispense commercially marketed all purpose hand soaps including liquid and lotion soap and synthetic detergents. Acceptable soaps need to have a viscosity in the range of 1cP to 19,000cP (centipoise).

#### **INSTALLATION:**

Unit is designed for installation into counters up to 2" (50mm) maximum thickness with 1-3/8" (35mm) diameter mounting hole. Unit may be mounted through special hole requisitioned when lavatory is ordered from manufacturer (specify hole location). Recommended mounting location is between 6" to 8" (150 to 205mm) from back wall and 3" (75mm) from the sink rim to the center of the mounting hole. Minimum 18" (455mm) vertical and 5" (125mm) diameter clearance required for soap bottle and bottom housing below mounting hole. Mount Battery Pack (mounting hardware located inside Battery Pack) on back or side wall in a convenient location nearest dispenser for ease of access to replace batteries. Install 4 "D" cell high quality batteries (not included) in battery pack and insert plug in power port on bottom housing.

*Designers Note:* Unit is not compatible with above the counter sink rims greater than 1" W x 1-1/2" H (25 x 40mm) or 2-1/2" W x 1/2" H (65 x 12.7mm). **Caution:** Sink rim must not come into contact with activation area. For more information refer to Form No. 824-391.

#### **SPECIFICATIONS:**

Counter-Mounted, Automatic, Top-Fill Bulk Liquid Soap Dispenser shall dispense adjustable amount (.4 to 3 ml) of commercially marketed all-purpose bulk liquid hand soaps of various viscosities, non-iodine based soaps and do not use alcohol based sanitizers. Spout assembly shall be bright polished chrome plated ABS plastic with integral stem to accommodate up to 2" (50mm) thick counter tops. Unit shall be equipped with oversized funnel shape opening, covered by a 180° rotatable lid with concealed locking mechanism to allow for top filling. Unit shall have LED indicators to show when unit has been activated and low battery life. Unit shall have IR Sensor located on PC board housed in water-resistant ABS plastic housing. Activation Lens shall allow for defined activation range to eliminate chance of false activation during hand washing. Portion Control Knob shall allow field adjustment of desired volume of soap dispensed per hand wash. Unit shall be equipped with an Automatic System Flush Button to allow for cleaning and maintenance. Battery Pack uses 4 "D" cell batteries (not included) providing a battery life of up to 200,000 cycles or 2 years. Optional A/C adapter available, order Part No. 3974-57.

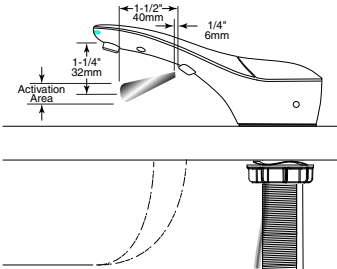
**Counter-Mounted SureFlo Automatic Top-Fill Bulk Liquid Soap Dispenser shall be Model B-824 of Bobrick Washroom Equipment, Inc., Clifton Park, New York; Jackson, Tennessee; Los Angeles, California; Bobrick Washroom Equipment Company, Scarborough, Ontario; Bobrick Washroom Equipment Pty. Ltd., Australia; and Bobrick Washroom Equipment Limited, United Kingdom.**

To Operate:

1. **Prime Unit** – After filling dispenser, plug in power to start prime. If unit is plugged in prior to filling dispenser, place hand under spout within sensor location to start prime.



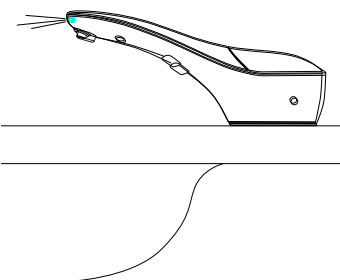
2. **Standard Dispense** – Place hand under spout within the sensor location for approximately 1/2 second to dispense controlled amount of liquid hand soap.



3. **Adjusting amount of soap dispensed** – Depending on viscosity of liquid soap used, unit may dispense between 0.4 ml to 3 ml of soap. To reduce output of liquid soap, rotate Portion Control Knob counter-clockwise. To increase the output of liquid soap, turn the knob clockwise.



4. **LED Light Indicators** – When activated, solid green LED will light. If green light is flashing, remove hand to allow unit to reset, then activate again. Flashing red LED light indicates time to replace batteries.



Routine Cleaning and Maintenance:

Using a damp cloth, wipe the chrome-plated exterior of the dispenser daily. Periodically (about 3 to 6 months), it is recommended to flush the system with lukewarm water for cleaning and maintenance.

1. When minimal amount of soap is left in the bottle, fill dispenser with lukewarm water from top to dilute soap.
2. Press the Automatic System Flush Button to flush the system.
3. Once unit is flushed, press the Automatic System Flush Button again to stop dispensing.
4. Fill unit with fresh soap and dispense as usual.



Troubleshooting:

1. Soap dispenser does not dispense soap, but you can hear motor running. The green LED lights up when hands are under spout.
  - a. Press the Automatic System Flush Button until soap comes out
  - b. Press the Automatic System Flush Button again to turn it off
2. Soap dispenser does not dispense soap and you cannot hear motor running. The green LED does not light up when hands are under spout.
  - a. Be sure power is supplied to unit.
  - b. Make sure Fiber Optic Nut is tight on Fiber Optic Port.

Warranty:

SureFlo Automatic Liquid Soap Dispenser is warranted to be free from defects in workmanship and material under normal usage from the date of purchase for a period of 3 years.

SureFlo® Automatic, Counter-Mounted Soap Dispenser  
INSTRUCTIONS FOR INSTALLATION, OPERATION & MAINTENANCE  
BOBRICK MODEL B-824 LIQUID SOAP DISPENSER

Clearances and Mounting Requirements:

- 1-3/8" (35mm) diameter mounting hole required.
- Minimum 18" (457mm) vertical clearance needed below the counter.
- 5" (127mm) diameter clearance needed below the mounting hole to accommodate bottle and bottom housing.
- Minimum 2-1/4" (57mm) diameter clearance needed for Mounting nut directly below the counter to clear sink rim.
- Recommend drilling mounting hole 6" to 8" (152 to 203mm) from the wall, and 2-1/2" to 3" (64 to 76mm) from sink rim.



Scan For SureFlo Installation and Maintenance Instructions.

For New Installation:

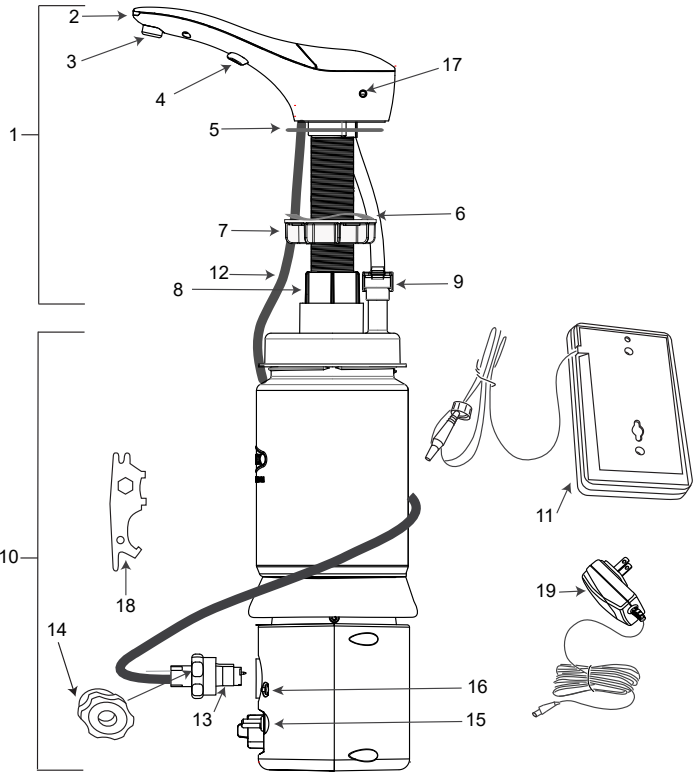
- Refer to mounting template for drilling locations (Form No. 824-307).

For Retrofit:

1. Remove existing dispenser(s).
2. Clean area.
3. Ensure hole is 1-3/8" (35mm) diameter.
4. If necessary, enlarge opening using appropriate hole saw. For granite/marble counters, recommend using a diamond hole saw (consult with stone and granite specialist). If needed, mounting hole should be offset to clear the sink rim. The Mounting Nut requires 2-1/4" (57mm) diameter clearance directly below the counter.

Unit Diagram:

Item	Description
1	Top Assembly with Spout, Door and Stem
2	LED Light Pipe
3	Liquid Nozzle Tip
4	Fiber Optic Insert with Sensor Lenses
5	Rubber Counter Gasket
6	Wave Washer
7	Mounting Nut
8	Stem Mounting Nut
9	Duckbill Housing
10	Bottom Housing Assembly (includes Soap Bottle)
11	Battery Pack (requires (4) "D" cell alkaline batteries not included)
12	(3) Fiber Optic Cables for Sensor and LED Light Pipe
13	Fiber Optic Connector Tip Assembly
14	Fiber Optic Nut
15	Portion Control Knob
16	Automatic System Flush Button
17	Key Hole
18	BobKey
19	Optional: A/C Adapter Kit with U.S. Plug, Order Part No. 3974-57. International AC Adapter Plug Kit (UK, Europe Australia) 3974-55





Installation:



1. Place Counter Gasket over mounting hole to align with profile of dispenser.



2. Insert Stem with tube and all Fiber Optic Cables carefully through mounting hole.



3. Place the Wave Washer on top of the Mounting Nut. Install Mounting Nut on Stem and thread upwards. (Minimum 2-1/4" (57mm) diameter clearance needed below mounting nut).

**NOTE:** The outer diameter of the Mounting Nut may need to be dremeled down if space under the counter is tight.

**NOTE:** Make sure Fiber Optic Cables and Tubing are **INSIDE** Mounting Nut. Do not tighten completely until end of installation.



4. Thread the Stem Locking Nut onto the Stem. The ribs on the Nut are to be towards the top. Once it goes past the two red o-rings, the nut will automatically stop threading.



5. Attach the tubing to the top barb of the Duckbill Housing.



6. The Bottle Cap can only be placed onto the Stem in one orientation.

The flat section on the Stem is to be aligned with the flat section on the Bottle Cap.



7. Rotate the Bottle back and forth to align the flat section of the Stem to the flat section on the Bottle.



8. Push the Bottle Assembly up onto the Stem while also inserting the Duckbill Housing into the hole in the post on the Bottle Cap.

Fully insert the Bottle Assembly over the Stem until it stops. Both red o-rings must be inside the Bottle Cap.



9. While pushing upwards on the Bottle, Thread the Stem Locking Nut down onto the Bottle Cap threads

**NOTE:** After assembly, hold the Stem and lightly rotate the Bottle back and forth and tug down to be sure it is on tight. If it is loose, repeat Steps 7 and 8.

**NOTE:** Tug Tubing on Duckbill Housing down from under the counter to straighten out the tubing.



10. Insert Fiber Optic Connector Tip into Bottom Housing. Keyed feature on Connector Tip ensures Fiber Optic Cables are always located correctly.



11. Thread Fiber Optic Nut onto Connector Port and hand snug only. Do not over-tighten.

**NOTE:** DO NOT bend or kink Fiber Optic Cables.



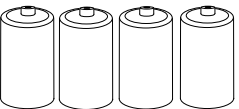
12. Align the Top Assembly above the counter to the desired position and tighten the Mounting Nut against the bottom of counter so the Top Assembly does not easily rotate. Make sure Fiber Optic Cables are not between the underside of the counter and top of Mounting Nut. See Steps 3 and 4.

Apply a bead of Silicone around the base of the Top Housing to prevent spilled soap from going through the mounting hole.



13. Mount Battery Pack on wall nearest dispenser. Mounting hardware is inside the Battery Pack.

\*Round Cap on plug is not required for this model, pull back prior to plugging into port.



14. Install 4 "D" cell Alkaline batteries.

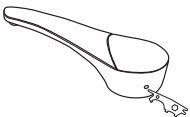


15. Plug Power Supply into Bottom Housing base.

Replacement Parts List

Part Name	Part No.
- A/C Adapter	3974-57
- International AC Adapter Plug Kit (U. K., Europe, Australia)	3974-55
- Mack Gasket Kit	824-167
(To secure Top Assembly under the counter due to irregular counter surface)	
- External A/C Multi Adapter Kit	824-201
- Nozzle Tip Replacement Kit Liquid	824-210
- D Size Battery Pack (Batteries not included)	824-241
- Duckbill Housing	824-322
- Installation Hardware Packet	824-443
(Includes Wave Washer, Counter Gasket, Mounting Nut, BobKey, Stem Mounting Nut)	
- Top Housing Assembly Liquid	824-525
(Includes Installation Hardware Packet and Duckbill Housing)	
- Bottom Housing Assembly Liquid	824-550

TOP FILL ONLY !



Filling Instructions: (use liquid soap only)

Unit will dispense Bulk Liquid Soap within a viscosity range of 100 to 19,000 cP.

1. Insert tip of BobKey provided into opening of concealed locking mechanism to disengage door.
2. Door will disengage and rotate clockwise for filling from the top.
3. Fill dispenser with commercially marketed bulk liquid hand soap (**Do not use foam liquid**).
4. Close door counter-clockwise to lock in place.