# SPEAKMAN GRAVITYFLO<sup>™</sup> PORTABLE EYEWASH SE-4000

INSTALLATION AND OWNER'S MANUAL

#### CONTENTS

- I. Introduction
- II. Product Dimensions
- III. Installation
- IV. Operation in Emergency Situation
- V. Periodic Cleaning & Maintenance
- VI. Replacements Parts

#### KEEP THIS MANUAL WITH EMERGENCY FIXTURE

U.S. Patent No. 5,216,765

Meets ANSI Z358.1 for portable eye wash units and ANSI A117.1-2003 for barrier free design

0

# SE-4000 GRAVITYFLO™ by

### I. INTRODUCTION

Speakman's GRAVITYFLO<sup>™</sup> Eyewash is an engineering triumph. Ergonomically designed and barrier-free, the GRAVITYFLO<sup>™</sup> reservoir body is one-piece molded from light, durable, high-density polyethylene. Its bright blue color provides high visibility during an emergency. Unique, high efficiency spray heads of contoured rubber give through eye and face coverage. The quick opening, reliable value is representative of Speakman's commitment to excellence. The graceful design incorporates an easy-carry molded-in handle grip.

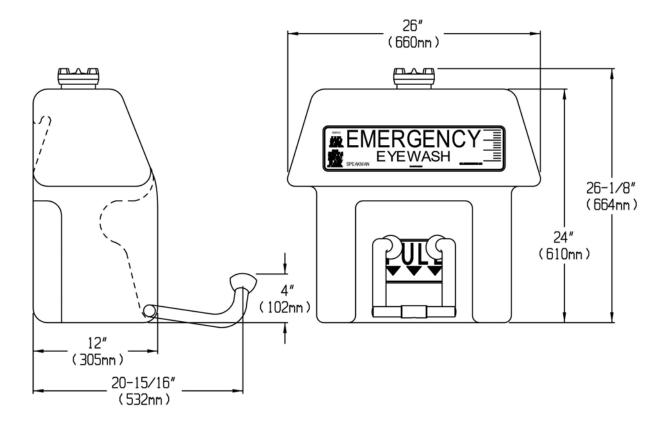
GRAVITYFLO<sup>™</sup> is ideally suited for use in a variety of Locations: industrial plants, laboratories, or at any site Without a portable or permanent plumbed-in water source.

GRAVITYFLO<sup>™</sup> can also be used as a temporary back-up device for plumbed-in stations which are temporarily out of service. Additionally, this unit can be used for first aid while in transit to a hospital during emergency situations.

Speakman's GRAVITYFLO<sup>™</sup> Eyewash is designed to exceed the ANSI recommended flow for a portable eyewash. Model SE-4000 makes emergency protection instantly available when required.

<u>CAUTION</u>: This Eyewash container should only be used with portable water and/or Eyewash solutions intended for portable units.

### **II. PRODUCT DIMENSIONS**



Capacity: 16-21 (US) gallons portable water. Meets ANSI Z358.1 for portable eyewash units. All dimensions +/- 1/4", and subject to change without Notice.

## III. INSTALLATION

#### READ THIS SECTION COMPLETELY BEFORE INSTALLING

The following is a step-by-step sequence of how to install and maintain your Speakman SE-4000 GRAVITYFLO<sup>™</sup> Eyewash.

The SE-4000 comes complete with:

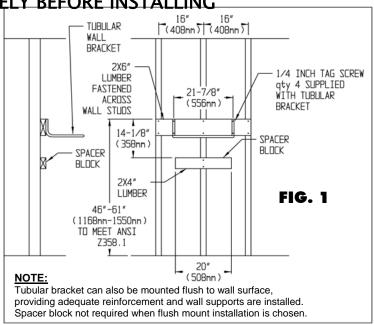
Part No	Quantity	Description		
SE-4000	1	Tank Assembly		
	1	Tubular Wall Bracket		
	1	Hardware Wall Mounting Group		
	1	Installation Manual and Accessories		

<u>Caution:</u> The Eyewash SE-4000 weighs approximately 185 lbs. When filled with 21 gallons of water.

*IMPORTANT:* When fastening or mounting the SE-4000 to a wall, make sure that the wall construction is suitable to hold a vertical load of 300 lbs. The SE-4000 comes complete with a tubular wall bracket and hardware to mount the bracket. The tubular bracket must be fastened securely to the wall studs as shown in Fig. No. 1. Where concrete or other composition wall constructions are involved, consult a building contractor for the correct fastening and mounting hardware to install the tubular wall bracket. Installation height for the SE-4000 should be 33" to 45" from floor to eyewash spray heads (to meet ANSI Z358.1). See Fig. No. 2.

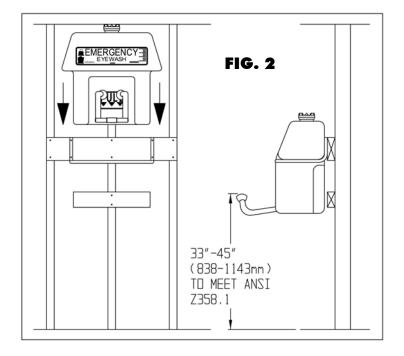
- 1. Clean inside of tank and flush system with clean water. Rinse thoroughly. (For periodic cleaning and maintenance see Section V of this manual.)
- Select a suitable location. Do not allow your GRAVITYFLO<sup>™</sup> product to freeze or become overheated. We recommend the emergency Eyewash unit be in an accessible location that requires no more than 10 seconds to reach and within a travel distance of no more than 100 ft. from the hazard (to meet ANSI Z358.1). The area around the Eyewash should be well-lighted.

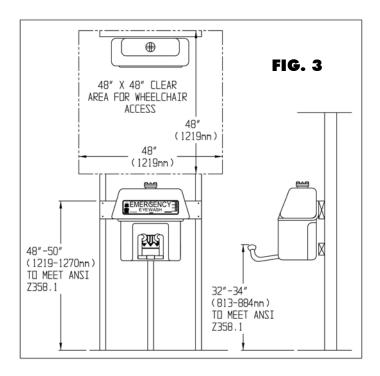
**\*NOTE:** Where physically challenged people in wheelchairs use this product it may be necessary to lower the installation height to between 32" and 34" for ease of use.



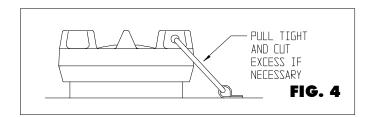
A clear area at each Eyewash station should be at least 48" by 48" and should allow either a forward or parallel approach by a person using a wheelchair. (See Fig. No. 3)

- Position tubular wall bracket as shown in Fig. No. 1 and secure with four (4) 1/4" lag screws provided. When drilling into tile, masonry, concrete, or other hard materials, wear safety goggles to prevent eye injuries.
- 4. Insert SE-4000 down into the tubular wall bracket as shown in Fig. No. 2. Make sure that overhangs on left and right hand side of plastic Eyewash container rest securely on tubular side arms.





- 5. Install drain plug and fill unit to desired capacity. (See Filling Instructions)
- 6. Pull down on rubber hand grip to insure water flows to Eyewash heads. Return to closed vertical position.
- 7. Date and replace "Testing Record Tag" and affix "Tamper Evident Tie" to the small plastic clip fastened to the top cap of the SE-4000. See Fig. No. 4.



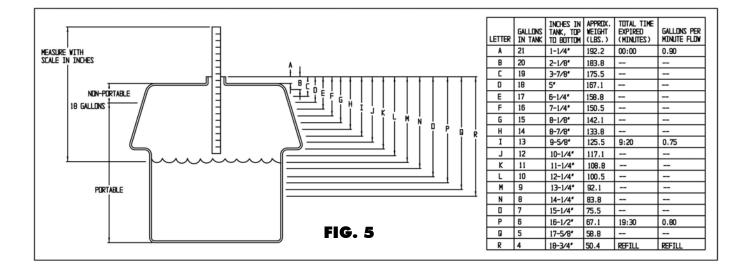
### **FILLING INSTRUCTIONS**

- The SE-4000 has a total fill capacity of 21 US gallons for maximum performance. <u>In the interest of safety,</u> <u>Speakman Company recommends that the unit be</u> <u>filled to capacity of 21 US gallons at all times.</u> For a more detailed understanding of fill capacity and gallons per minute flow see Chart Figure No.5
- 2. Start with a clean eyewash container.
- 3. Fill the eyewash tank with 21 gallons of clean, potable water.
- 4. When measuring depth level of fluid in tank, measure from the neck of the tank and refer to the Eyewash chart for desired information. See Fig. No. 5.
- 5. Speakman also provides an optional <u>Fluid Level Cap</u> <u>Gauge (SE-4200)</u>. This gauge allows the service maintenance engineer to quickly see the number of gallons of flushing fluid in the tank. It also assists during filling and mixing of eyewash solution.

# FOR INFORMATION ON THE FOLLOWING SEE FIG. No. 5:

- a) Running time in minutes
- b) Volume of tank in US gallons
- c) Functional performance of Eyewash
- d) Weight of product in Ibs.

For Eyewash solutions, see Section V of manual.



### **IV. OPERATION**

WARNING: THIS EMERGENCY PRODUCT IS INTENDED ONLY FOR EMERGENCY FIRST AID FOR VICTIMS OF FLUID CHEMICAL OR SMALL SOFT PARTICULATE MATTER. THE VICTIM SHOULD SEEK QUALIFIED MEDICAL TREATMENT AS QUICKLY AS POSSIBLE. IT SHOULD BE NOTED THAT THE GRAVITYFLO EMERGENCY EYEWASH SHOULD NOT BE CONSIDERED A SUBSTITUTE FOR PRIMARY PROTECTIVE DEVICES. PERSONAL PROTECTIVE EQUIPMENT SHOULD BE WORN AS A DEFENCE AGAINST BOTH FLYING PARTICLES AND SPLASHING OF INJURIOUS LIQUIDS.

*IMPORTANT:* The more quickly the victim can flush the eyes, the less risk there will be of eye injury. Seconds can make the difference in preventing serious eye of face injury.

Instruct all employees in use of this emergency Eyewash

unit to test weekly and make sure a minimum of 16 gallons of flushing fluids is in the tank. An individual should be assigned to check eyewash liquid level daily. All employees or potential users of this Eyewash should be reminded that <u>this unit is for emergency</u> <u>use only</u>; tampering with the unit or using it for nonemergency purposes may cause the unit to be empty when needed.

- 1. Pull down spray arms and lower face into stream of water solution.
- Using thumbs and forefingers, hold eye lids open to allow affected tissue full exposure. Flush eyes for a minimum of 15 minutes. An injured person may require assistance in holding eye lids open.
- 3. Seek medical attention immediately.

# V. PERIODIC CLEANING & MAINTENANCE

The Speakman GRAVITYFLO<sup>™</sup> Portable Eyewash has been designed for years of trouble-free service. It is critical to keep this unit clean at all times.

#### **Daily Cleaning (Portable Water Solution)**

It may be necessary under certain conditions to replace the portable water on a daily basis where quality of water is suspect of where excessive Hot/Cold water temperature changes occur. Empty unit by removing side plug or allow water to run from spray heads by activating the valve. Another alternative is to siphon water with a hose.

## Weekly Cleaning & Disinfecting (Potable Water Solution)

Add 1/2 cup (4 fl. oz.) of Clorox (liquid bleach) to the 21 gallons of potable water and mix thoroughly. Allow

Clorox/water mixture to sit for 15 minutes, drain contents, and **rinse several times thoroughly with clean potable water.** This procedure will disinfect and clean the inside of the tank. Finally, refill the Eye/Face Wash container with clean potable water. A high pressure spray nozzle can also be used to clean the inside of tank, if necessary. For further information on Clorox, call them toll-free at 1-800-292-2200.

#### <u>Reminder</u>

Speakman Company recommends weekly testing for optimum performance and recording of results for maximum efficiency. Several test record tags are provided for this purpose.

#### **Cleaning Rubber Eye Guard Assembly**

Unscrew rubber eye guard assembly from threaded rubber arm grip using a counter-clockwise motion. During cleaning, seal threaded arms with plastic caps provided. Push back on rubber eye guard and remove spray head. Twist turn cap and base to disassemble. Scrub all components clean with hot soapy water and rinse thoroughly. Reassemble and replace on unit. Test water flow to be sure unit is operational.

#### Important:

Self-contained eyewash equipment shall be visually checked frequently to determine if flushing fluid needs to be changed or supplemented. Frequency of these inspections is dependent on environment conditions, but at a minimum weekly. Failure to conduct visual checks could lead to further injury.-Customer shall take precautions to help prevent the growth of potentially harmful bacteria in eyewash tanks. Either of the following procedures is recommended.

Procedure 1: Use suitable Bacteriostatic preservative to help prevent growth of bacteria in eyewash tank. Eyewash tank should be drained, flushed and refilled with clean potable water and Bacteriostatic preservative added as directed by the preservative's manufacturer.

Procedure 2: Drain, flush and refill units with clean potable water at least once every week unless site conditions require more frequent changing. Thoroughly cleanse tank at least once every month. See cleaning instructions for further information of cleaning unit.

### **VI. REPLACEMENT**

Part No.	<b>Description</b>
RPG07-0089	Cap Standard
SE-4200	Cap <sup>–</sup> Gauge level indicator
RPG38-0347	Spray head assembly
RPG20-1894	Complete valve
RPG05-0660	Supply tube, Connector, and In-Line Strainer
RPG99-0095	Tamper evident ties (pkg of 10)
RPG99-0094	Test record tag (pkg of 10)

#### **TESTING RECORD EYE/FACE WASH**

DATE	INITIALS	DATE	INITIALS	DATE	INITIALS	DATE	INITIALS

DATE PURCHASED	
SUPPLIER	
MODEL NO.	
OPTION	

#### **SPEAKMAN**<sup>®</sup>

PO Box 191 Wilmington, DE 19899 Phone: 800-537-2107 Fax: 800-977-2747 Visit us on the web at www.speakmancompany.com

92-0410 REV.-4 07-25-14