

SPEAKMAN GRAVITYFLO® PORTABLE EYE WASH SE-4500 WITH WATER HEATING UNIT

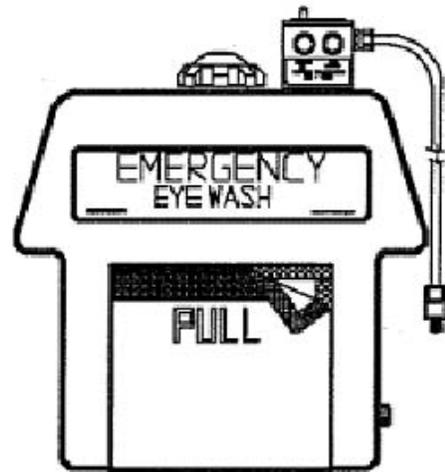


OWNERS' MANUAL AND INSTALLATION INSTRUCTIONS

KEEP THIS MANUAL WITH EMERGENCY FIXTURE

CONTENTS:

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



Meets ANSI Z358.1 for portable eyewash units and
ANSI A117.1-1986 for barrier-free design.
CSA/UL approvals.



SPEAKMAN®

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

I. PRODUCT OVERVIEW

Speakman HEATED GRAVITYFLO® Eyewash is an engineering triumph. Ergonomically designed and barrier-free, the GRAVITYFLO® reservoir body is one-piece molded from light, durable, high-density polyethylene. Its bright blue color provides high visibility during an emergency. The unique, high efficiency spray heads of contoured rubber give thorough eye and face coverage. The quick opening, reliable valve is representative of Speakman's commitment to excellence. The graceful design incorporates an easy-carry molded-in handle grip. The unit is supplied with a 1450 W/120VAC submersible heater, and can maintain a constant temperature between 75°F - 95°F inside the tank even when ambient goes down to -20°F.

BUILD:

There are 2 Temperature Sensors built in the Heater Element:

1. One Sensor activates a Cutout switch that trips the Reset Button to protect the overheat and meltdown of Heater.
2. Another Sensor maintains the water temperature between 75°F and 95°F during normal operation.

This second sensor also turns the Red light ON, when the temperature in tank is lower than 50°F signaling that the Heater is not working and caution should be taken to prevent freezing.

This Red light calls for the tank to be filled and the Reset button to be pressed in order to activate the Heater again.

FUNCTION:

The heater has a Green and a Red light on the front panel. The Green light ON indicates the unit is plugged in 120VAC. (there is no on-off switch).

Red light ON indicates that the temperature in tank has dropped below 50°F and precautions should be taken to not let the water freeze in the tank. This could mean:

1. If water level is low, Refill tank and push Reset button.
2. If Heater cutout tripped, push the Reset Button to activate.

NOTE: The Red light might not come ON if temperature in the tank is above 50°F, even if water is at low level. Refill tank after each usage, as Red Light does not always indicate low level. After filling the tank, always press the Reset button to activate the heater. Pressing Reset button will turn the Red light off.

CAUTION: If tank is not refilled (low water level) and the Reset button is pressed, the Heater will get to a hot red glow in the air, and the cutout switch will trip automatically to prevent overheating. Always Refill and then Reset. Let element cool down before adding cold water.

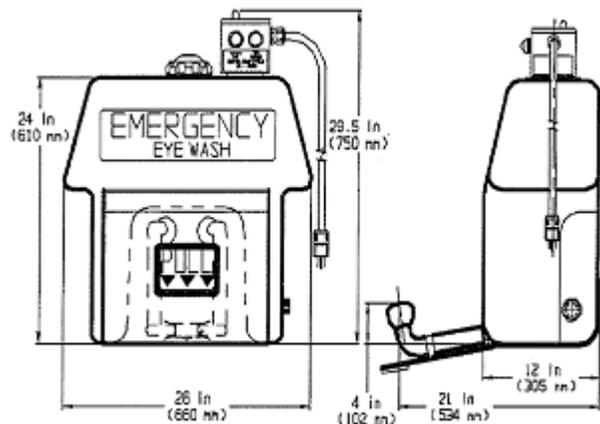
WEATHER CONDITIONS:

The unit is provided with an insulating jacket that covers the bottom and the front of the tank protecting the hose, valve, and the spray outlets from dust and freezing.

CAUTION: When weather conditions can experience freezing rain and snow, the Unit should be placed under a shelter to prevent snow and ice forming on the jacket and over tank. Failure to do so, could damage the valve and crack the tank.

As part of the weekly inspection, ensure that the Velcro is in good condition and the insulating jacket is properly secured over the valve and spray nozzles.

All these features make the HEATED GRAVITYFLO® ideally suitable for use in a variety of heated or unheated work areas. These include industrial plants, laboratories, warehouses, construction sites or any other sites without plumbed-in water. GRAVITYFLO® can also be used as a temporary back-up device for plumbed-in stations that 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 HEATED GRAVITYFLO® Eyewash is designed to exceed the ANSI recommended flow for portable eyewash. Model SE-4500 makes emergency protection instantly available when required.



CAUTION: This Eyewash container should only be used with water and the Speakman SE-4210 Anti-Microbial Water Preservative.

II. PRODUCT DIMENSIONS AND REQUIREMENTS

Heater: 120VAC/20AMPS; 1450 W; continuous duty.

Tank Capacity: 16 - 21 (US) gallons potable water.

Meets ANSI Z358.1 for portable eye wash units.

Meets ANSI A117.1-1986 providing accessibility and usability for physically challenged people.

All dimensions $\pm 1/4"$, and subject to change without notice.

Meets CSA/UL electrical safety standards. 

CAUTION: 120VAC/20AMPS POWER SUPPLY OUTLET SHOULD BE INSTALLED AND APPROVED BY A QUALIFIED ELECTRICIAN TO THE APPROPRIATE ELECTRICAL CODE.

III. INSTALLATION

READ THIS SECTION COMPLETELY BEFORE INSTALLING PRODUCT.

The following is a step-by-step sequence of how to install and maintain your Speakman SE-4500 HEATED GRAVITYFLO® Eye/Face Wash.

The SE-4500 comes complete with:

PART NO.	QTY.	DESCRIPTION
SE-4500	1	Tank Assembly
RPG76-0028	1	120V 1450W Heater
62-0044	1	Insulating Jacket
-	1	Tubular Wall Bracket
-	1	Hardware Wall Mounting Group
-	1	Installation Manual and Accessories

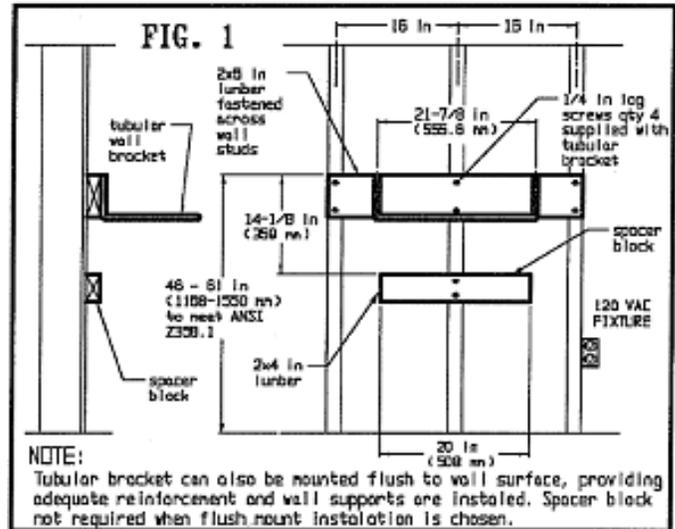
CAUTION: The Eyewash SE-4500 weights approximately 210 lbs. when filled with 21 gallons of water.

IMPORTANT: When fastening or mounting the SE-4500 to a wall, make sure that the wall construction is suitable to hold a vertical load of 300 lbs. The SE-4500 comes complete with a tubular wall bracket, support strap, and hardware to mount the bracket. The tubular bracket must be fastened securely to the wall studs as shown. 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-4500 should be 33" to 45" from floor to eyewash spray heads (to meet ANSI Z358.1).

1. Clean inside of tank and flush system with clean water. Rinse thoroughly. (For periodic cleaning and maintenance see Section V of the manual.)
2. Select a suitable location. In location with ambient temperature less than 50°F the heater will be plugged in 24 hours a day with insulating jacket on and checked periodically for solution/water level. *Caution: Make sure that the tank is refilled quickly in areas below freezing.* The heater will not work with low level solution (red light will be on) and the solution may freeze damaging the tank.

Do not allow your GRAVITYFLO® product to freeze or become overheated. ANSI Z358.1 recommends the emergency Eyewash unit be in an accessible location that requires no more than 10 seconds to reach, and shall be located on the same level as the hazard and the path of travel shall be free of obstruction. The area around the Eyewash should be well-lit

3. Install the GRAVITYFLO® close to a 120V/20AMP power supply wall fixture, or mount one close within 7 ft. (the power cord supplied is 8 ft. long.)
4. Assembly support strap to wall bracket by sliding one end of support strap over each end of the wall bracket.



Position tubular wall bracket 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.

***NOTE:** For ADA compliance, it may be necessary to lower the installation height so the spray heads in the on position are between 32" or 34" from the floor.

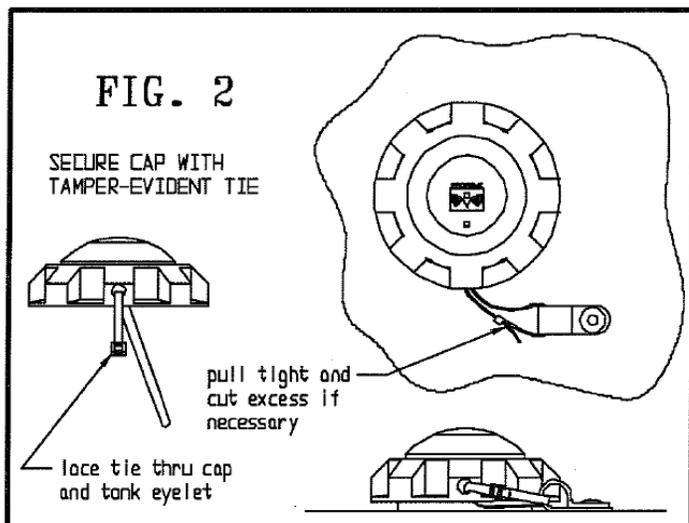
A clear access area at each Eyewash station should be at least 48" by 48" and should allow either a forward or parallel approach by a person using a wheelchair.

5. Insert SE-4500 down into the tubular wall bracket as shown in (Fig. 1), making sure that tank is being supported in the middle of the support strap, with no "twists" in the strap.

6. FILLING INSTRUCTIONS

- a) The SE-4500 has a total fill capacity of 21 US gallons for maximum Eyewash performance. In the interest of safety, Speakman Company recommends that the unit be filled to the maximum fill capacity of 21 US gallons at all times.
- b) Start with a clean Eyewash container.

- c) Check to see that drain plug is in place; fill to desired capacity with water and a Speakman SE-4210 antimicrobial water preservative.
7. Pull down on rubber handgrip, or pull strap on blanket to insure water flows to Eyewash heads. Return to closed vertical position.
8. Date and replace "Testing Record Tag" and affix "Tamper Evident Tie" to the small plastic clip fastened to the top cap of the SE-4500. (See Fig. No. 2)



9. Plug the heater cord into 120VAC/20AMPS wall fixture.

Make sure the tank is filled with solution/water. The green light comes ON and the red light is OFF. Check for power or change the light bulb (120VAC, 3.5 Watts maximum) if the green light is not ON. Check for solution level and reset the reset button if red light is ON.

It takes more than 1/2 hour for the full tank to warm up and stays this way as long as the heater is plugged in.

IV. OPERATION

WARNING: This Emergency Eyewash should be used for the emergency treatment of the eyes of a person who has been exposed to injurious material. 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 defense 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 or face injury.

1. Pull down the insulating jacket by the belt. The spray arms will come down at the same time because they are secured to the jacket by a holding belt. If not, pull them down. Lower face into stream of water solution.
2. Using thumbs and forefingers, hold eyelids open to allow affected tissue full exposure. Flush eyes for a minimum of 15 minutes. An injured person may require assistance in holding eyelids open.
3. Seek medical attention immediately.

Instruct all employees in use of this emergency Eyewash. Test weekly. An individual should be assigned to check eyewash liquid level weekly/daily.

All employees or potential users of the Eye/Face Wash should know that **this unit is for emergency use only**;

Tampering with the unit or using it for non-emergency purposes may cause the unit to have low water level when needed, as there is no water level indicator.

V. PERIODIC CLEANING & MAINTENANCE

The Speakman Heated GRAVITYFLO® Portable Eyewash has been designed for years of trouble-free service. It is critical to keep this unit clean at all times with Speakman SE-4210 Anti-Microbial Water Preservative.

Eye Wash Solutions

There are ready-to-use and concentrated brands of Isotonic saline solutions. The solutions are pH balanced and physiologically similar to human tears. Where a concentrate solution is used, follow recommended mix ratio and cautionary notes.

However, for best results, follow manufacturers' recommendations. For more information, please contact your local Speakman representative or Speakman's Customer Service Department at 1-800-537-2107 or fax at 1-800-977-2747.

Daily Cleaning (Potable Water Solution)

It may be necessary under certain conditions to replace the potable water on a daily basis where quality of water is suspect or 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.

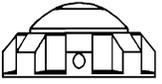
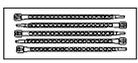
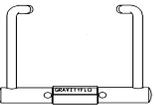
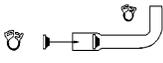
Unscrew rubber eye guard assembly from threaded rubber arm grip using a counterclockwise motion. During cleaning, seal threaded arms with plastic caps provided. Push back on rubber eye guard and remove spray head. Twist turn-cap and base to disassemble. Scrub all components clean with hot soapy water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

CAUTION: Make sure that Clorox/water mix is not left unattended during 15 minute period before emptying. This is recommended in order to prevent use of product/mixture which could result in damage to the user.
Cleaning Rubber Eye Guard Assembly

Reminder

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

VI. REPLACEMENT PARTS

PART NO.	DESCRIPTION		PART NO.	DESCRIPTION	
RP07-0089	CAP-STANDARD		RPG99-0095	TAMPER-EVIDENT TIES (QTY. 10)	
RPG38-0347	SPRAY HEAD ASSEMBLY		RP92-1584	MANUAL	
RPG20-1894-RCP	COMPLETE VALVE ASSEMBLY		RPG99-0094	TEST RECORD TAGS	
RPG05-0660	TUBE, STRAINER AND CLAMPS		RP76-0184	ELECTRIC BULB 120V / 3.5W MAX.	

TESTING RECORD EYE/FACE WASH							
DATE	INITIALS	DATE	INITIALS	DATE	INITIALS	DATE	INITIALS

DATE PURCHASED _____	MODEL NO. _____
SUPPLIER _____	OPTION _____

SPEAKMAN®

PO Box 191 Wilminaton DE 19899

Phone: 800-537-2107 Fax: 800-977-2747