

# User Instructions



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## OPERATING AND SAFETY INSTRUCTIONS

### For Bench Top Shaker

CATALOG #: 099A S60012 & 099A S60024  
Variable Speed



## **General:**

The Bench Top Shaker provides thorough mixing via a reciprocating shaking action. The shaking action circulates liquid alternately forward and backward for thorough and effective mixing. This shaker is capable of handling loads up to 20-lb. Variable motor speed from 0 to 125 revolutions per minute. Furnished with a lighted power switch, circuit breaker and 3-wire cord.

Various interchangeable glassware holders and racks, sold separately, are available with for the shaker. The racks and holders are held to the head of the shaker with the triangular knobs provided. A jam nut and lock washer is provided with each knob for load of 10 lbs or more. The load need not be balanced.

The shaker has a weight of approximately 48 lb. Place the shaker in the space on the bench allowed for it. The shaker may walk depending on the weight of the load and the intensity of the shaking action. (If walking does occur, holes are provided in the base plate for bolting down and locking the unit in place if the user so desires or if the lab is so equipped). The shaker will fit easily in most fume hoods.

## **Specifications:**

Power:

S60012	115 to 130 vac +/-10% 50 to 60Hz. +/- 5%
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S60024	220 to 240 vac +/-10% 50 to 60Hz. +/- 5%
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Ambient Temperature:	77 °F/25 °C +/-5 °C
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Operating Environment:	0 to 90% relative humidity 32 to 100 °F/0 to 37 °C
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## **Operation:**

Make sure all glassware holders are secured to the shaker head and all glassware is secured within the glassware holders. Turn the power switch to the OFF position and turn the motor knob to 0. Plug the line cord into the appropriate 3-wire receptacle.

Turn the power switch ON. The lighted power switch indicated power to the unit. Turn the motor control knob until the desired shaking action occurs. The knob range is from 0 to 100 percent and will vary the shaking from 0 to 125 strokes per minute. When the shaking is complete, turn the power switch to the OFF position. The glassware and holders may now be handled safely.

## **Control Features:**

1. *SPEED POSITION KNOB*: This allows adjustable speed of the shaker.
2. *ON/OFF POWER SWITCH*: For power to shaker.
3. *CIRCUIT BREAKER*: The shaker circuit is protected against overloads with a 2-amp circuit breaker.

Always use proper safety equipment when stirring, for example, gloves, glasses, etc. Read and follow instructions that are supplied with your shaker.

Use of a shaker for an alternate purpose or alteration of shaker construction features such as electrical connecting devices, may cause unsatisfactory performance and the warranty to be voided.

Your shaker requires very little maintenance. Keep it clean and avoid spills. Inspect the motor brushed occasionally (with the power cord disconnected) to make sure they have not worn excessively. Do not use if electrical cords are worn or frayed.

## **Spare Parts:**

Spare parts for Glas-Col shakers are generally available from the factory. Consult Glas-Col for part numbers and pricing.

## **Limited Warranty:**

Glas-Col warrants products of its manufacture to be free from defects in material and workmanship **for one year** and agrees to repair or replace without charge any products found defective upon examination at the factory. With proper care and operation, Glas-Col products will give long and efficient service. Chemical spillage, overheating, overloading and general misuse will greatly reduce the service life. Glas-Col is not responsible for damage to apparatus due to improper installation or through attempts to operate the apparatus beyond its rated capacity, intentional or otherwise. Normally expendable parts are not covered by this warranty.

In the event of an incident due to a defective replacement component, Glas-Col will accept responsibility only if the component was defective from the outset. Glas-Col reserves the right to deny responsibility for the incident if the user fails to comply with any instructions provided by using spare parts, which are not guaranteed.

**APART FROM SUCH WRITTEN STATEMENT OF WARRANTY, THERE ARE NO WARRANTIES, EXPRESSED, IMPLIED OR STATUTORY, WHICH EXTEND BEYOND THE DESCRIPTION OF THE PRODUCTS ON THE FACE HEREOF.**

Glas-Col products are intended only for legal and legitimate purposes in commercial, laboratory and industrial settings.

Glas-Col reserves the right to make product refinements without prior notice.

## **Returns:**

Call or fax Customer Service for a Return Goods Authorization (RGA) number before returning a heating mantle.

Reference the RMA number on the shipping box and on a written description of the problem.

A 20% restock charge of the net price is charged for all standard product returned to stock.

### **Glas-Col, LLC**

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