

user instructions

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VARIABLE SPEED STIR TESTER

Models: 099D HST10N 1.5 amp, 120 Volt, 50/60 Hz.

Locate and identify parts shipped with the stirrer drive:

- Motor speed control
- Clamp
- Stir Blades, paddle and propeller
- Keyless Chuck

Mount the motor on a stand or vertical lattice rod with the clamp provided. Install the chuck assembly to the motor shaft using the allen wrench provided. Be sure you tighten the set screw on the flat spot on the motor shaft. Insert the metal stirring shaft in the chuck and tighten by hand.

Connect the motor cord to the control. This plug is polarized so that it can only be plugged in one way. Make sure the forward/reverse switch is in the center OFF position and the motor speed knob is fully counter clockwise. Plug the control power cord into a properly grounded and polarized receptacle. Select the desired direction with the forward/reverse switch. Turn the motor speed knob clockwise to set the motor speed.

The display indicated speed (RPM), or torque in (oz. in.) and can be selected by the switch under the display. The speed meter automatically changes scales above 1900 RPM to read in decimal multiple steps of 100 RPM (Example: 2320 RPM is designated 23.2) The scale returns to read RPM directly without decimal point as speed is reduced below 2000 RPM.

For best stability allow 15 minutes or so warm-up time before using the system (motor does not need to run at this time).

The motor is a totally enclosed 1/17 HP, ball bearing, reversible, permanent magnet type output shaft rated 1.730 Kg-cm.

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

When reversing the motor direction, let the motor stop before changing direction.

The controller is protected against overloads with a circuit breaker. If the circuit breaker trips, an overload condition might have occurred.

Your stirrer drive requires very little maintenance. Keep it clean and avoid spills. Inspect the motor brushes occasionally (with the power cord disconnected) to make sure they haven't worn excessively. Do not use electrical cords that are worn or frayed. If you find it necessary to send it to the factory for repair, call for a return goods authorization number.

Output signals for recorders, etc. are available via the 4-pin socket on the rear of the controller with the following connections:

Pin #1 = -Common
Pin #2 = +Torque (10mV/oz.in.)
Pin #3 = +Speed (1mV/RPM)
Pin #4 = -Common

To utilize these outputs, purchase a mating cable and plug part number 099d A052060. Connect cable to high-impedance (1 meg ohm or more) of the external device which must be isolated from earth ground. Make sure that these inputs are uncommitted to ground, floating and can sustain common mode voltage of 1500V above ground. Remove any connections grounding either input.

Warning: These connections are not isolated from AC line and are at a potential of 60 –120 volts above ground. Do not touch or ground any of the four signal leads (Pins 1-4). A protective 1/16 amp fuse in series with the common terminals is provided in fuseholder on rear of the controller, but damage may result if a ground occurs. Replace only with a 1/16 amp fuse of the same type and rating.

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 due 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.

Returns:

Call or fax Customer Service for a Return Goods Authorization (RGA) number before returning a Glas-Col product.

Reference the RGA 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.

LIMITATION OF WARRANTIES

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 and laboratory settings.

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