Parts Assembly List

To order parts for the GENIE TEMP-SHAKER™: Contact your local distributor or visit scientificindustries.com. Please specify Part No., quantity and electric voltage. 49 48 46 18 SI-G1650/SI-G1750 22 **PLATFORMS MOTOR** 45 **ASSEMBLY** 16 15 14 13 SI-G1550 12 **PLATFORM** 31 30 11 **RACK ASSEMBLY** SI-G150 **PLATFORM** Item No. Description Description Part No. Item No. Part No. WAP0049 Spacer 26 0M-G100-220 Spacer 2a SCP0105 Screw #1/4-28 X 1" 27 EPP0034 Power supply SCP0134 Screw #1/4-28 X 5/8" (Pulley-300 only) EPP0035 2b 28 Relay 0A-G100-030 BRP0001 29 Kickstand Assembly 3 Bearing 4 WAP0050 Washer 30 PP-G100-400 Housing Controller PCB 5 0M-G100-201 Bearing Block 31 EB-G100-500 6 HWP0131 Sleeve 32a EL-G100-575 Overlay-100 7 EL-G1500-575 Overlay-300 0M-G100-217 Offset 32b 8 0M-G100-202 33a ESP0006 Rocker Switch 120V 5A Cage HWP0141 ESP0007 9 Standoff 33b Rocker Switch 240V 2.5A Pulley-100 Disc Bubble 10a 0M-G100-219 34 0M-G100-212 10b 0M-G1500-200 Pulley-300 35 0M-G100-207 Disc Heat Shield 0M-G100-223 Belt-100 36 0M-G100-218 Access Tube 11a 0M-G1500-206 Belt-300 37 HWP0147 11b Can Motor Pulley-100 Heating Element Assembly 0M-M100-214 38 0A-G100-020 12a Motor Pulley-300 12b 0M-M1500-208 39 0M-G100-208 Plate, Heating Element 13 0M-M100-215 Motor Bracket 40 0M-G100-203 Plate, Adaptor HWP0139 Vibration Mount 41 HWP0144 Grommet 14 Motor Pad Non-Slip Platform 15 0M-M100-206 42 SI-G150 EMP0016 Stacking Tray 43 SI-M150 16 Motor WAP0055 Universal Ratchet Clamp Washer 44 17 SI-G1510 18 WAP0054 Wave Washer 45 SI-G1550 Ratcheting Clamp Platform HWP0143 Bushing 46 SI-G1650 Flask Clamp Platform 19 100mL Flask Clamp 20 0M-G100-209 47a SI-1610 Door 21 22 125/150mL Flask Clamp PP-G100-401 Chamber 47b SI-1611 Chamber Assembly NOVUS[®] Plastic Polish #1 0A-G100-010 250mL Flask Clamp 47c SI-1612 23 CLP0002 47d SI-1613 500 mL Flask Clamp 24 HWP0034 Foot 47e SI-1614 1 L Flask Clamp 25a 318-0510-02 120V Line Cord 47f SI-1615 2 L Flask Clamp 230V Line Cord, C14 Socket Adhering Mat 25b SI-M1617 0K-0246-901 48 Double Sided Adhesive Roll 25c 0K-0256-901 230V Line Cord, Euro Plug 49 SI-1616

0K-0266-901

0K-0276-901

0K-0286-901

230V Line Cord, British Plug

230V Line Cord, Swiss Plug

100V Line Cord

25d

25e

25f

GENIE TEMP-SHAKER™ ORBITAL SHAKING INCUBATOR OPERATING INSTRUCTIONS

Models SI-G100 through SI-G106 and SI-G1500 through SI-G1706





80 Orville Drive, Suite 102, Bohemia, NY 11716 U.S.A.
Phone: (631) 567-4700 • Fax: (631) 567-5896 Toll Free: 888-850-6208
Customer Service: custsvc@scientificindustries.com
scientificindustries.com

The GENIE TEMP-SHAKER™ is designed to provide environmentally controlled, variable speed, multi vessel orbital shaking in a compact, durable and user friendly unit. Chamber air is gently and continuously circulating at a rate that ensures the temperature consistency and uniformity of all test samples. Microprocessor control easily achieves desired speed and temperature (28°C to 75°C) which are shown on large, easy to read displays for accurate reproducible conditions. Visible and audible alarms exist for temperature. Models SI-G100 thru SI-G106 have speed ranges of 20-100 RPM. Models SI-G1500 thru SI-G1506, SI-G1600 thru SI-G1606 and SI-G1700 thru SI-G1706 have speed ranges of 35-300 RPM.

OPERATING INSTRUCTIONS

We recommend you retain the original packaging for 90 days in case you need to return the product for any reason to your distributor or Scientific Industries.

Plug the line cord into a properly grounded electrical outlet.

The work surface on which the shaker is placed must be level, stable and non-slip.







GENIE TEMP-SHAKER™ 100 with Non Slip Platform

The shaker is supplied with a durable thermoplastic platform with an anti-slip rubber mat (Fig.1). The platform has a molded raised edging that contains minor spills and keeps the work surface dry and clean. Place the vessels so that they do not touch each other. Position vessels evenly distributed on the platform. Uneven loading may result in excessive vibrating of the shaker and support table. Should this occur, reduce the speed or turn the shaker off and redistribute the vessels. The platform can accommodate up to 2 liter vessels with a 2.3 Kg (5 lbs) load capacity. Stacking trays are available that increase the capacity of vessels that can be utilized (Fig.2). These trays also have an anti-slip rubber mat and raised molded edge.

GENIE TEMP-SHAKER™ 300 with Ratcheting Clamp Platform

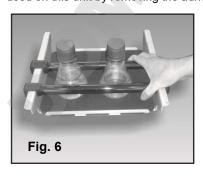
The shaker is supplied with two ratcheting cushioned clamps (Fig.3) Position the two ratcheting clamps on the platform with sufficient space to fit the vessels. It is very important to regularly monitor shaking cycles to ensure that the vessels remain firmly secure. Press the ratcheting clamps together until the foam is compressed against the vessels (Fig.6). To release the ratcheting clamps, press the release arm and slide away (Fig.7).

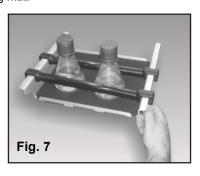
GENIE TEMP-SHAKER™ 300 with Flask Clamp Platform

The shaker is supplied with a platform for accepting various size flasks or beakers (Fig.4). Flask clamps attach to the platform with captive mounting screws. Flask clamps are sold separately. Position clamps evenly distributed on the platform. Uneven loading may result in excessive vibrating of the shaker and support table. Should this occur, reduce the mixing speed or turn the shaker off and redistribute the load of the vessels.

GENIE TEMP-SHAKER™ 300 with Adhering Mat Platform

The shaker is supplied with an adhering rubber mat for use with bottles and dishes that cannot be held with conventional clamps (Fig.5). Patented material is naturally adhering. Rinse the rubber clean to renew adhering properties. Flasks clamps can be used on this unit by removing the adhering mat.









OPERATION

The unit can be turned on/off by pressing the start/stop button. When the unit is first turned ON (rocker switch on right side of housing) the heater and fan will turn on and begin regulating toward the set temperature. During this time, the temperature display will blink green. The display will become solid green after achieving the desired temperature.

Pressing the Up/Down Arrow buttons in the temperature control area allows you to change the desired temperature. While adjusting temperature, the display will be amber in color.

If there is a change of ±2°C, the display will turn solid red. At ±3°C deviation, the display will blink red. At ±4°C the display will blink red and the alarm will sound. UP and DOWN buttons in the speed area are used for changing the speed value. While adjusting speed, the display will be amber in color. The display will turn back to solid red shortly after the button is released.

START/STOP button is used for starting/stopping the operation.

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CALIBRATION

The unit is electronically factory calibrated and should not need calibration, nor is it recommended. However, should the need arise, the unit may be calibrated, as follows:

In order to calibrate, you will need to make an independent measurement of the chamber temperature. Make sure the thermometer is accurate! Generally speaking, glass thermometers found around the lab will be less accurate than your *GENIE TEMP-SHAKER*™. Good, certified glass or digital thermometers are available from laboratory supply dealers. A thermocouple wire may be passed through the access port (rear/underside of unit).

Measure the temperature in the chamber via the lab thermometer, after chamber temperature has been allowed to settle for twenty minutes. Note the difference in temperature between *GENIE TEMP-SHAKER*™ displayed temperature and your lab thermometer temperature (ex. *GENIE TEMP-SHAKER*™ display reads 37°C, lab thermometer reads 38°C; difference is −1°C). This difference is the calibration value to be entered.

To access the calibration menu, simultaneously press and hold the UP ARROW button in the temperature control area and the START/STOP button while turning the unit ON.

The parameters on the display show:

TEMPERATURE: The temperature blinks amber and begins adjusting to reach the last temperature setting. Once there, it changes to solid amber.

SPEED: 0 - The speed readout displays "0" in an amber color and can be adjusted ± 9 for each °C desired.

Press the START/STOP button to exit calibration mode.

SPECIFICATIONS

The GENIE TEMP-SHAKER™ is classified as "Installation Category 2", "Overvoltage Category 2" and "Pollution Degree 2".

Environmental: 0°C - 38°C (32°F-100°F), 95% Humidity max.

Indoor use only in elevation up to 2000m of altitude.

Weight: 9 Kg (20 lbs.)

Dimensions: (WxD) 450 x 480mm (17.6 x 19 in.)

Orbit: 19mm

Temperature: 28°C to 75°C

Platform: 305mm x 305mm (12 x 12 in.) Chamber Height: 305mm (12 in.) Chamber Volume: 40 L (2400 cubic inches)

SI-G100		60HZ	0.50A	SI-G104		1.0	0.25A
SI-G1500		60HZ	0.50A	SI-G1504	(• • •)	1.0	0.25A
SI-G1600		60HZ	0.50A	SI-G1604		1.0	0.25A
SI-G1700		60HZ	0.50A	SI-G1704		1.0	0.25A
SI-G101		50HZ	0.25A	SI-G106		1.0	0.25A
SI-G1501		50HZ	0.25A	SI-G1506		1.0	0.25A
SI-G1601		50HZ	0.25A	SI-G1606		1.0	0.25A
SI-G1701		50HZ	0.25A	SI-G1706		1.0	0.25A
SI-G102		50HZ	0.25A	SI-G105		50/60HZ	0.50A
SI-G1502		50HZ	0.25A	SI-G1505		50/60HZ	0.50A
SI-G1602		50HZ	0.25A	SI-G1605		50/60HZ	0.50A
SI-G1702		50HZ	0.25A	SI-G1705		50/60HZ	0.50A
SI-G103		50HZ	0.25A			•	
SI-G1503	(-!-)	50HZ	0.25A				
SI-G1603		50HZ	0.25A				
SI-G1703		50HZ	0.25A				

CAUTION! Do not lift your *GENIE TEMP-SHAKER* $^{\text{TM}}$ by the platform.

CAUTION! If this equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

CAUTION! Unplug from power before cleaning. Do not immerse.

CAUTION! Do not position the equipment so that it is difficult to disconnect the power cord.

CAUTION! This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CARE & HANDLING

Your *GENIE TEMP-SHAKER™* should be given the care normally required for any electrical appliance. Unplug unit and wipe housing with damp cloth and detergent. Blot any spills immediately. We recommend cleaning the clear dome with Novus Plastic Polish #1 and a clean soft cloth. Alternatively, mild soap or detergent and luke warm water may be used. Do not dry rub the clear dome as scratching will occur.