



Laboratory Equipment Manufacturer
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INSTRUCTION MANUAL FOR Vortex with 76mm platform & pop-off cup

GENIE-2



PLEASE READ THIS MANUAL CAREFULLY BEFORE OPERATION

3, Hagavish st. Israel 58817 Tel: 972 3 5595252, Fax: 972 3 5594529 mrc@mrclab.com

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The VORTEX-GENIE® 2 Mixer with Pop-off Cup and 3-inch Platform, is an enhanced version of the ORIGINAL VORTEX-GENIE® Mixer produced by Mrc. VORTEX-GENIE mixers are the "Gold Standard" for laboratory mixers. The quality and reliability, that you have come to know so well, are characteristics that are, by design, an integral part of all GENIE™ products.

APPLICATIONS

The 3-inch Platform accepts single or multiple test tubes, beakers and various flasks. The removable cover, made of thermoplastic rubber, is highly impervious to chemicals. It is, however recommended that spills are blotted quickly. Do not attempt to use the 3-inch Platform without the rubber cover.

The Pop-off Cup can accommodate tubes of virtually any size or shape from micro tubes to those up to 40mm in diameter and 200mm in length. In most instances, tubes without caps may be mixed with proper speed control. Tubes must be capped when potential aerosols may be hazardous.

Catalog numbers:

0K-0500-902 3-inch Platform with Rubber Cover
0K-0500-901 3-inch Platform without Rubber Cover
580-2013-00 Rubber Cover for 3-inch Platform

OPERATING INSTRUCTIONS

We recommend you retain the original packaging for 90 days in case you need to return the product for any reason to Mrc.

- 1.0 - Plug the cord into a properly grounded, three pronged outlet (**120 VAC for the G560 model, 230 VAC for the G560E model and 100V for the G560-100V model**).
- 2.0 - The VORTEX-GENIE 2 Mixer has the following modes of operation:
 - 2.1 - TOUCH MODE:
Place the toggle switch in the TOUCH position and set the speed control to any position between 3 and 10. A setting of 3 is least vigorous mixing and 10 is the most vigorous mixing. When you touch a vessel to the 3-inch Platform or Pop-off Cup, the mixer will start automatically. Releasing the pressure on the Platform or Cup will stop the mixer.
 - 2.2 - HANDS FREE MODE:
Place the toggle switch in the ON position and set the speed control to any position between 3 and 10. Hands Free mode allows for unattended operation that will continue indefinitely until you stop the mixer by placing the toggle switch into the OFF position. In this mode, you may use any of the accessory



attachments available for the VORTEX-GENIE® 2 Mixer. **Review instruction No. 3.0 before attempting to change attachments.**

Note: The speed control switch should be set between positions 3 and 10 to enable the mixing action to start. After the action has started, you may, if desired, reduce the speed below position 3 for the duration of the run. Before re-starting the mixer, re-set the speed control to a setting higher than position 3.

- 3.0 - To change accessory mixing attachments, the following sequence is to be followed explicitly.
- 3.1 - Turn the power OFF by placing the toggle switch into the OFF position.
- 3.2 - Grasp the installed attachment and pull straight up until it releases from the shaft. A technique of lifting the attachment with your finger tips while using your knuckles as a fulcrum will give you the leverage to remove the installed attachment component smoothly.
- 3.3 - Hold the part you wish to install so the "flat" part of the shaft is aligned with the "flat" of the receptacle in the attachment. Alternatively, you may place the attachment on the shaft and turn it until you feel the "flats" aligning.
- 3.4 - Press attachment firmly downward until it "snaps" into place. The VORTEX-GENIE 2 Mixer is now ready to use with the newly installed accessory attachment.
- 4.0 - With prolonged use, your VORTEX-GENIE 2 Mixer may become warm to the touch. It should not get HOT to the touch. The motor will radiate a certain amount of heat that will dissipate by the cast zinc housing.

 **CAUTION!** Do not lift your VORTEX-GENIE 2 Mixer by its attachment. All attachments, including the Pop-off Cup and the 3-inch Platform are removable. They will pop off easily if you lift them, and snap back on again just as easily by aligning the flats and pressing down firmly.

 **CAUTION!** Failure to follow operating instructions can compromise the user's safety.

CARE AND HANDLING

Your VORTEX-GENIE 2 Mixer should be given the care normally required for any electrical appliance. Avoid wetting or unnecessary exposure to fumes. The finish can be washed with water (after unplugging) and soap or detergents, using a cloth or sponge. Keep the unit clean by immediately blotting any spills. Replacement parts are available through most laboratory equipment distributors or directly from Mrc. Refer to "Parts Assembly List" and enclosed multi-fold brochure.

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

SPECIFICATIONS

The VORTEX-GENIE® 2 Mixer is classified as "Installation Category 2"

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

MODEL	POWER REQUIRED	AMPS
G560	120V/60Hz	0.65
G560E	230V/50Hz	0.5
G560-100V	100V/50-60Hz	1.0

ETL Listed
Conforms to UL Std. 3101-1
Certified to CAN/CSA C22.2

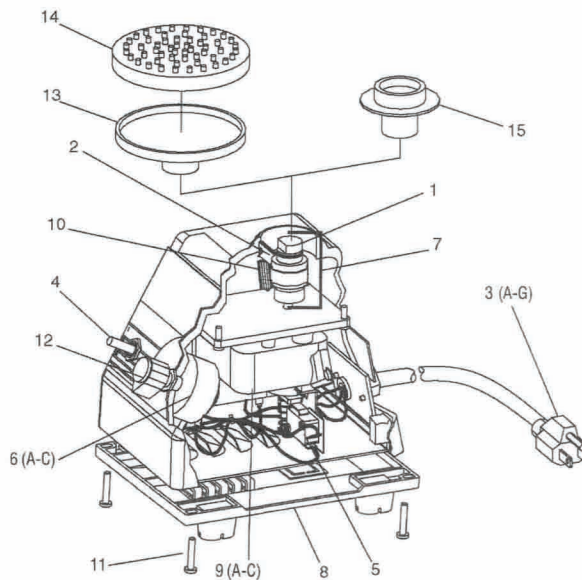


Weight: 4 Kg (8.8 lb) - Zinc casting with shock absorbing feet
Base Dimensions: (DxWxH) 165x122x165mm (6.5x4.8x6.5in)

PARTS ASSEMBLY LIST

To order parts for the VORTEX-GENIE 2 Mixer:

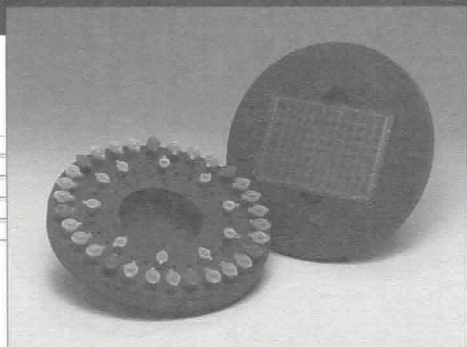
Please specify Part No., quantity and electric voltage.



Indicator No.	Part No.	Description	Indicator No.	Part No.	Description
1	0K-0236-902	Bearing Retainer Kit	6C	EB-0286-500	Speed Control 100V
2	0K-0236-903	Eccentric Clamp	7	0K-0236-904	Eccentric with Clamp Assembly
3A	318-0510-02	120V Line Cord	8	PP-0236-408	Bottom Closure with Feet
3B	0K-0246-901	230V Line Cord, No Plug	9A	0K-0236-905	Motor 120V Assembly
3C	0K-0256-901	230V Line Cord, Euro Plug	9B	0K-0246-915	Motor 230V Assembly
3D	0K-0266-901	230V Line Cord, British Plug	9C	0K-0286-915	Motor 100V Assembly
3E	0K-0276-901	230V Line Cord, Swiss Plug	10	566-0028-00	Spring, Extension, Eccentric
3F	0K-0286-901	100V Line Cord	11	SCP0059	Screws, Bottom Closure (4)
3G	ECP0021	Australian Plug (only)	12	0M-0236-209	Knob, Push-on
4	ESP0004	Switch, On/Off/On	13	0K-0500-901	3-inch Platform
5	ESP0005	Micro Switch	14	580-2013-00	Rubber Cover for 3-inch Platform
6A	EPP0005	Speed Control 120V	15	146-3011-00	Pop-off Cup
6B	EB-0246-500	Speed Control 230V			

GENIE-2 ACCESSORIES

H301 MULTIPLE SAMPLE SET

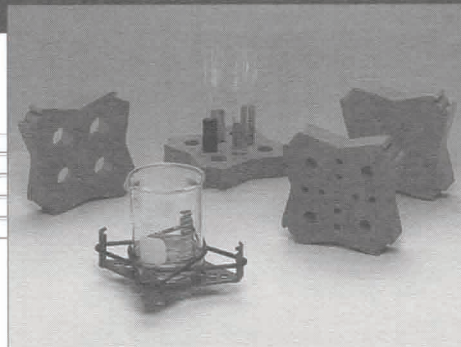


Consists of:

- 6-inch Platform – place onto Vortex-Genie 2 family mixer.
- Microtube Foam Insert – mount into the 6-inch platform for mixing of up to 60 microtubes from 0.5ml to 2.0ml tubes.
- Microplate Foam Insert – mount into the 6-inch platform for gentle to moderate mixing of a microplate.

All components are also available separately.

H302 LARGE SAMPLE SET

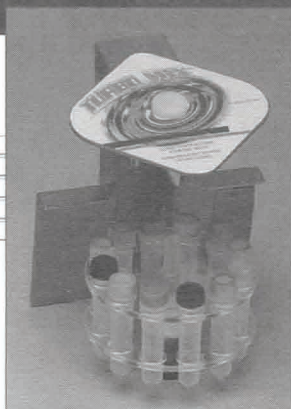
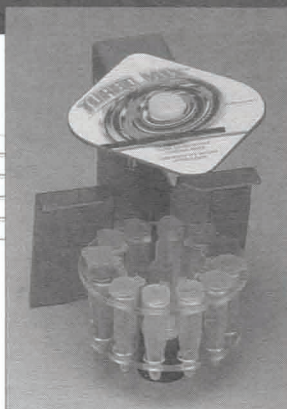


Consists of:

- Recessed Platform – place onto Vortex-Genie 2 family mixer.
- Elastic Bands – securely fasten beakers or flasks onto the recessed platform for shaking of volumes up to 500ml.
- Various Foam Inserts – mount into the recessed platform to mix tubes from 9mm to 37mm O.D. Inserts hold 4 to 12 tubes, depending upon size.

All components are also available separately.

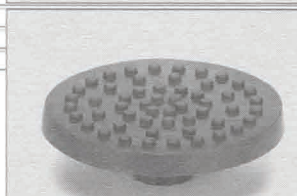
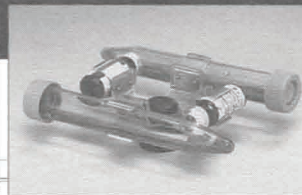
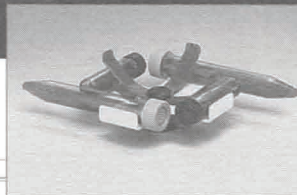
TURBOMIX™ ATTACHMENTS



The TurboMix Attachments permanently mount onto the Vortex-Genie 2 family mixer for extremely vigorous mixing/vortexing of either (12) 1.5ml tubes or (12) 2.0ml tubes.

This is especially useful for cell disruptions of yeast, bacteria, plant/animal tissue and pellet resuspensions.

ADDITIONAL ATTACHMENTS



- Large Ampule / Tube Attachment – provides vigorous end-to-end agitation combined with vortexing action for up to four 10mm to 17mm O.D. tubes or ampules.
- Small Ampule / Tube Attachment – provides vigorous end-to-end agitation combined with vortexing action for up to four 15mm to 17mm O.D. tubes or ampules.
- Three-inch Platform – permits one-handed vortexing of beakers, flasks and single or multiple tubes. Standard with all Vortex-Genie 2 family mixers.
- Pop-off Cup – permits vortexing of single tubes only. Standard with all Vortex-Genie mixers.

ORDERING INFORMATION

Catalog Number	Description
SI-0563	TurboMix Attachment, 1.5ml Tubes
SI-0562	TurboMix Attachment, 2.0ml Tubes
SI-0570	Small Ampule/Tube Attachment
SI-0511	Large Ampule/Tube Attachment
504-0233-00	Multiple Sample Starter Set (Model H301)
146-6005-00	6-inch Platform
504-0234-00	Microtube Foam Insert (2)
504-0235-00	Microplate Foam Insert (2)
SI-0510	Two-Tier Microplate Foam Insert
503-0282-00	Large Sample Set (Model H302)
504-0039-00	Recessed Platform
568-0001-00	Elastic Bands (2)
503-0278-00	9-16mm Tube Foam Inserts (2)
503-0279-00	14-29mm Tube Foam Inserts (2)
503-0280-00	29-37mm Tube Foam Inserts (2)
503-0277-00	Blank Foam Inserts (2)
503-0283-00	Assorted Foam Inserts (4)
146-3011-00	Pop-off Cup
0K-0500-902	3-inch Platform with Rubber Cover

Catalog Number	Description
G560	Vortex-Genie 2, 120V
G560E	Vortex-Genie 2, 230V
SI-T236	Vortex-Genie 2T, 120V
SI-T246	Vortex-Genie 2T, 230V
SI-0136	Vortex-Genie 1, 120V *
SI-0146	Vortex-Genie 1, 230V *
SI-A236	Digital Vortex-Genie 2, 120V
SI-A246	Digital Vortex-Genie 2, 230V
SI-M236	Multi Vortex-Genie, 120V**
SI-M246	Multi Vortex-Genie, 230V**

* Vortex-Genie 1 may only be used with pop-off cup and 3-inch platform.

** Attachments listed cannot be used with the Multi Vortex-Genie

Additional voltages and catalog numbers are available.