

# Maxi-Mix® Vortex Mixer OPERATION MANUAL AND PARTS LIST

Model M16714 M16715 M16710-33 Voltage 100 Volt 120 Volt 230 Volt

### **Environmental Conditions**

Operating:

17°C - 27°C; 20% - 80% relative humidity, non-condensing. Installation Category II (over-voltage) in accordance with IEC 664. Pollution Degree 2 in accordance with IEC 664.

Altitude limit: 2,000 meters.

Storage: -25°C - 65°C; 20% to 85% relative humidity.

# **Declaration of Conformity**

We hereby declare under our sole responsibility that this product conforms with the technical requirements of the following standards:

EMC: EN 61000-3-2 Limits for Harmonic Current Emissions

EN 61000-3-3 Limits for Voltage Fluctuations and Flicker

EN 61326 Electrical Equipment for Measurement,

Control, and Laboratory Use; Part I:

General Requirements

Safety: EN 61010-1 Safety Requirements for Electrical

Equipment for Measurement, Control

and Laboratory Use; Part I:

General Requirements

EN 61010-2-051 Part II: Particular Requirements for

Laboratory Equipment for Mixing and Stirring

per the provisions of the Electromagnetic Compatibility Directive 89/336/EEC, as amended by 92/31/EEC and 93/68/EEC, and per the provisions of the Low Voltage Directive 73/23/EEC, as amended by 93/68/EEC.

The authorized representative located within the European Community is:

Thermo Fisher Scientific Robert-Bosch-Strasse 1, D-63505

Langenselbold, Germany.

Copies of the Declaration of Conformity are available upon request.



#### Warning

To avoid electrical shock, use with a properly grounded electrical outlet of correct voltage and current handling capacity.



#### Note

Some misalignment of the motor bearings in this product may have occurred during shipping and handling. Prior to first use, the stirrer should be run at maximum speed for 10 minutes to realign the motor bearings.



#### Warning

To avoid personal injury, do not use in the presence of flammable or combustible materials; fire or explosion may result. This device contains components which may ignite such materials.



#### Note

#### IMPORTANT NOTICE:

The smaller disc on the top of this unit is the **Push Button** for the ON/OFF Push Button Switch. Do NOT attempt to turn it.



#### Warning

Disconnect from the power supply prior to maintenance and servicing.

Refer servicing to qualified personnel.



#### **Hot Surface**

Hot surfaces alert you to a possibility of personal injury if you come in contact with a surface during use or for a period of time after use.

# Unpacking

Do not overlook extra foam rubber replacement top, shipped with each Maxi-Mix.

# Set-up

Place on bench top or other flat surface. It is not necessary that the suction cup feet adhere to the surface unless larger vessels are used, when there is a tendency toward "walking."

For adherence, the surface must be very smooth; moistening the cups with water or glycerin will also help.

# Operation

Depress the small disc (On/Off knob) with your finger or the vessel to be stirred. The larger disc will begin oscillating. Touching the vessel to the larger disc will initiate the vortex action.

Mixing action will intensify as a vessel is held nearer its top and as greater pressure is exerted against the foam disc.

To stop the mixer, again depress the smaller disc (On/Off knob).

# Mixing in Larger Vessels

There is no absolute limit on the maximum size of vessel which can be used; much depends on technique, the shape of the vessel, the viscosity of the contents, and the amount of liquid. In general, about 100 ml in volume represents an upper limit.

# Maintenance

The foam top will occasionally require replacement. Merely peel off the old top, remove the paper backing from the new top, and apply.

# Replacement Parts

Part Number	Description
PT167X2	Foam Mixing Surface, self-adhesive back
PT167X5B	Cast Aluminum Top Plate
KB268X1	Knob for ON/OFF Switch
SWX48	ON/OFF Switch, with nut and lock washer
CT1329X1	Plastic Outer Case
CW167X1	Counterweight
MTX17	Motor, 120 volt for Model M16714 &
M16715	
MTX20	Motor, 230 volt for Model M16710-33
CR1329X1	Cord and Plug Set for Model M16714 &
M16715	
CR1329X2	Cord and Plug Set for Model M16710-33
FZX59	Fuse for Model M16714 & M16715
FZX35	Fuse for Model M16710-33

(For assistance on replacement parts not listed above, contact our Customer Service Department.)

# **Ordering Procedures**

Please refer to the Specification Plate for the complete model number, serial number, and series number when requesting service, replacement parts or in any correspondence concerning this unit.

All parts listed herein may be ordered from the **Thermo Scientific** dealer from whom you purchased this unit or can be obtained promptly from the factory. When service or replacement parts are needed we ask that you check first with your dealer. If the dealer cannot handle your request, then contact our Customer Service Department at 800-943-2006 or 800-926-0505.

Prior to returning any materials, please contact our Customer Service Department for a "Return Materials Authorization" number (RMA). Material returned without an RMA number will be refused.

# One Year Limited Warranty

This Thermo Scientific product is warranted to be free of defects in materials and workmanship for one (1) year from the first to occur of (i) the date the product is sold by the manufacturer or (ii) the date the product is purchased by the original retail customer (the "Commencement Date"). Except as expressly stated above, the MANUFACTURER MAKES NO OTHER WARRANTY, EXPRESSED OR IMPLIED, WITH RESPECT TO THE PRODUCTS AND EXPRESSLY DISCLAIMS ANY AND ALL WARRANTIES, INCLUDING BUT NOT LIMITED TO, WARRANTIES OF DESIGN, MERCHANT ABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

An authorized representative of the manufacturer must perform all warranty inspections. In the event of a defect covered by the warranty, we shall, as our sole obligation and exclusive remedy, provide free replacement parts to remedy the defective product. In addition, for products sold within the continental United States or Canada, the manufacturer shall provide free labor to repair the products with the replacement parts, but only for a period of ninety (90) days from the Commencement Date.

The warranty provided hereunder shall be null and void and without further force or effect if there is any (i) repair made to the product by a party other than the manufacturer or its duly authorized service representative, (ii) misuse (including use inconsistent with written operating instructions for the product), mishandling, contamination, overheating, modification or alteration of the product by any customer or third party or (iii) use of replacement parts that are obtained from a party who is not an authorized dealer of Thermo Scientific products.

Heating elements, because of their susceptibility to overheating and contamination, must be returned to the factory and if, upon inspection, it is concluded that failure is due to factors other than excessive high temperature or contamination, the manufacturer will provide warranty replacement. As a condition to the return of any product, or any constituent part thereof, to the factory, it shall be sent prepaid and a prior written authorization from the manufacturer assigning a Return Materials Number to the product or part shall be obtained.

IN NO EVENT SHALL THE MANUFACTURER BE LIABLE TO ANY PARTY FOR ANY DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, OR FOR ANY DAMAGES RESULTING FROM LOSS OF USE OR PROFITS, ANTICIPATED OR OTHERWISE, ARISING OUT OF OR IN CONNECTION WITH THE SALE, USE OR PERFORMANCE OF ANY PRODUCTS, WHETHER SUCH CLAIM IS BASED ON CONTRACT, TORT (INCLUDING NEGLIGENCE), ANY THEORY OF STRICT LIABILITY OR REGULATORY ACTION.

For the name of the authorized Thermo Scientific product dealer nearest you or any additional information, contact us:

North America: USA/Canada +1 866 984 3766 (866-9-THERMO) www.thermo.com

Europe: Austria +43 1 801 40 0, Belgium +32 2 482 30 30, France +33 2 2803 2180, Germany national toll free 08001-536 376,

Germany international +49 6184 90 6940, Italy +39 02 02 95059 434-254-375, Netherlands +31 76 571 4440, Nordic/Baltic countries +358 9 329 100,

Russia/CIS +7 (812) 703 42 15, Spain/Portugal +34 93 223 09 18, Switzerland +41 44 454 12 12, UK/ Ireland +44 870 609 9203

Asia: China +86 21 6865 4588 or +86 10 8419 3588, India toll free 1800 22 8374, India +91 22 6716 2200, Japan +81 45 453 9220,

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