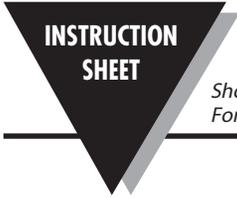




PHS Series STIRRERS



M-5423/0714

Shop online at: omega.com e-mail: info@omega.com
For latest product manuals: omegamanual.info

BEFORE USE:

Please read the following instructions:

	Read the Manual first before operating the instrument
	For indoor use only
	Check the integrity of the unit before plugging into the power outlet
	Use in a well-ventilated area and away from any flammable objects
	Only heat vessels containing liquid
	Only use approved heating vessels
	Do not remove any objects when the unit is in use

Warning

	ALL UNITS MUST BE GROUNDED
--	-----------------------------------

Check the line supply is sufficient to meet the power requirement of the unit!

Operation

1. Place the stirrer bar into the liquid – use the appropriate and normal cylinder shape stirrer bar to gain the maximum stirring effect.
2. Turn the stirring knob to gain the optimum stirring effect. In this time, the Stir LED will come on. With our special design, the stirring will occur at slightly delay time to minimize the disengaging movement of the stir bar. At maximum speed the stirring is vigorous; in order to avoid spillage, please test at maximum speed before leaving the unit unattended. The standard length of the stir bar is 30 mm length, use a standard bar first and change to a longer stir bar if needed. Adjust the speed with various stir bars to avoid the disengagement.
3. Monitoring the stirring effect when stirring, especially when the viscosity of the liquid changes during heating.

Maintenance and Service

After use, use a wet cloth to clean the top of the unit. Promptly cleaning is recommended to prolong the life time of the unit.



OMEGA®

OMEGAnet® Online Service
omega.com

Internet e-mail
info@omega.com

Servicing North America:

U.S.A.: Omega Engineering, Inc., One Omega Drive, P.O. Box 4047
ISO 9001 Certified Stamford, CT 06907-0047
 Toll-Free: 1-800-826-6342 Tel: (203) 359-1660
 FAX: (203) 359-7700 e-mail: info@omega.com

Canada: 976 Bergar
 Laval (Quebec), Canada H7L 5A1
 Toll-Free: 1-800-826-6342 TEL: (514) 856-6928
 FAX: (514) 856-6886 e-mail: info@omega.ca

Servicing Europe:

Benelux: Managed by the United Kingdom Office
 Toll-Free: 0800 099 3344 TEL: +31 20 347 21 21
 FAX: +31 20 643 46 43 e-mail: sales@omega.nl

Czech Republic: Frystatska 184
 733 01 Karviná, Czech Republic
 Toll-Free: 0800-1-66342 TEL: +420-59-6311899
 FAX: +420-59-6311114 e-mail: info@omegashop.cz

France: Managed by the United Kingdom Office
 Toll-Free: 0800 466 342 TEL: +33 (0) 161 37 29 00
 FAX: +33 (0) 130 57 54 27 e-mail: sales@omega.fr

Germany/Austria: Daimlerstrasse 26, D-75392 Deckenpfronn, Germany
 Toll-Free: 0 800 6397678 TEL: +49 (0) 7059 9398-0
 FAX: +49 (0) 7056 9398-29 e-mail: info@omega.de

United Kingdom: OMEGA Engineering Ltd.
ISO 9001 Certified One Omega Drive, River Bend Technology Centre, Northbank
 Irlam, Manchester M44 5BD England
 Toll-Free: 0800-488-488 TEL: +44 (0)161 777-6611
 FAX: +44 (0)161 777-6622 e-mail: sales@omega.co.uk

For immediate technical or application assistance:

U.S.A. and Canada: Sales Service: 1-800-826-6342/1-800-TC-OMEGA®
 Customer Service: 1-800-622-2378/1-800-622-BEST®
 Engineering Service: 1-800-872-9436/1-800-USA-WHEN®

Mexico: En Español: 001 (203) 359-7803 FAX: (001) 203-359-7807
 info@omega.com.mx e-mail: espanol@omega.com

It is the policy of OMEGA Engineering, Inc. to comply with all worldwide safety and EMC/EMI regulations that apply. OMEGA is constantly pursuing certification of its products to the European New Approach Directives. OMEGA will add the CE mark to every appropriate device upon certification.

The information contained in this document is believed to be correct, but OMEGA accepts no liability for any errors it contains, and reserves the right to alter specifications without notice. **WARNING:** These products are not designed for use in, and should not be used for, human applications.

WARRANTY/DISCLAIMER

OMEGA ENGINEERING, INC. warrants this unit to be free of defects in materials and workmanship for a period of **13 months** from date of purchase. OMEGA's WARRANTY adds an additional one (1) month grace period to the normal **one (1) year product warranty** to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product.

If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components in which wear is not warranted, include but are not limited to contact points, fuses, and triacs.

OMEGA is pleased to offer suggestions on the use of its various products. However, OMEGA neither assumes responsibility for any omissions or errors nor assumes liability for any damages that result from the use of its products in accordance with information provided by OMEGA, either verbal or written. OMEGA warrants only that the parts manufactured by the company will be as specified and free of defects. OMEGA MAKES NO OTHER WARRANTIES OR REPRESENTATIONS OF ANY KIND WHATSOEVER, EXPRESSED OR IMPLIED, EXCEPT THAT OF TITLE, AND ALL IMPLIED WARRANTIES INCLUDING ANY WARRANTY OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED. LIMITATION OF LIABILITY: The remedies of purchaser set forth herein are exclusive, and the total liability of OMEGA with respect to this order, whether based on contract, warranty, negligence, indemnification, strict liability or otherwise, shall not exceed the purchase price of the component upon which liability is based. In no event shall OMEGA be liable for consequential, incidental or special damages.

CONDITIONS: Equipment sold by OMEGA is not intended to be used, nor shall it be used: (1) as a "Basic Component" under 10 CFR 21 (NRC), used in or with any nuclear installation or activity; or (2) in medical applications or used on humans. Should any Product(s) be used in or with any nuclear installation or activity, medical application, used on humans, or misused in any way, OMEGA assumes no responsibility as set forth in our basic WARRANTY/DISCLAIMER language, and, additionally, purchaser will indemnify OMEGA and hold OMEGA harmless from any liability or damage whatsoever arising out of the use of the Product(s) in such a manner.

RETURN REQUESTS / INQUIRIES

Direct all warranty and repair requests/inquiries to the OMEGA Customer Service Department. BEFORE RETURNING ANY PRODUCT(S) TO OMEGA, PURCHASER MUST OBTAIN AN AUTHORIZED RETURN (AR) NUMBER FROM OMEGA'S CUSTOMER SERVICE DEPARTMENT (IN ORDER TO AVOID PROCESSING DELAYS). The assigned AR number should then be marked on the outside of the return package and on any correspondence.

The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

FOR **WARRANTY** RETURNS, please have the following information available BEFORE contacting OMEGA:

1. Purchase Order number under which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

FOR **NON-WARRANTY** REPAIRS, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA:

1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of the product, and
3. Repair instructions and/or specific problems relative to the product.

OMEGA's policy is to make running changes, not model changes, whenever an improvement is possible. This affords our customers the latest in technology and engineering. OMEGA is a registered trademark of OMEGA ENGINEERING, INC.

© Copyright 2009 OMEGA ENGINEERING, INC. All rights reserved. This document may not be copied, photocopied, reproduced, translated, or reduced to any electronic medium or machine-readable form, in whole or in part, without the prior written consent of OMEGA ENGINEERING, INC.