

OPERATING INSTRUCTIONS

Isomantle Electric Heater

45-5580

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<p><i>In the interests of improving and updating its equipment, ELE reserves the right to alter specifications to equipment at any time</i> ELE International 2007 ©</p>		

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WEEE Directive

1 Mixer

In order to accommodate the Isomantle Electric Heater it is necessary to extend the vertical column of the Bench-mounting Mixer EL23-6191. This is achieved by the addition of a spacer (supplied) between the base of the mixer and the column. A steel tray is also supplied to provide a flat surface on which to stand the Isomantle heater.

1.1 Fitting the spacer

Lay the mixer on its side and remove the 4 bolts securing the base to the column.

Screw the 4 studs provided into the tapped holes in the bottom of the column vacated by the bolts.

Slide the spacer over the studs, followed by the base, and retain with the 4 nuts provided.

Fully tighten the nuts, then return the mixer to its upright position.

1.2 Assembling the tray

To prevent the tray from moving and damaging the work surface on which it is to be stood, and also provide the correct working height, 4 plastic feet are supplied.

Attach the feet to the underside of the tray using the 4 pan head screws provided.

Place the tray over the base of the mixer.

2 Isomantle

2.1 Storage

2.1.1 The mantle should be retained in its original packing until required for installation, and should be kept dry.

2.1.2 Wet lagging will cause electrical failure of the heating mantle and could cause damage to the mixing bowl.

2.2 Prior to installation

2.2.1 Check that the heating surface of the mantle is not damaged in any way.

2.2.2 Ensure that the electricity supply details on the rating plate conform to the available supply, noting that a neutral connection is required.

2.2.3 The heating mantle will have been tested electrically during manufacture but, due to the hygroscopic nature of the materials used in its construction, some moisture may have been absorbed during storage which will affect the insulation resistance of the heater system.

Check the insulation resistance of each circuit by using a 500V insulation resistance tester. The reading should not be less than 5 M Ω .

If the insulation resistance is less than 5 M Ω the most likely cause will be that moisture has been absorbed into the heating system. If this is the case the mantle should be left in a warm dry atmosphere to enable any absorbed moisture to evaporate.

Do not Portable Appliance Test (PAT) this unit!

2.3 Installation of the mantle

2.3.1 The unit is supplied fitted with 2 spring clips to secure it to the mixing bowl, and a power cable. It is intended that the longer hooked section of the clip is placed over the top lip of the bowl.

2.4 Installation of the mixing bowl

- 2.4.1 Ensure that the outer surface of the mixing bowl is dry and clean as the materials of the heating jacket are hygroscopic and will absorb moisture from the surface of the bowl.

Remove any foreign material from the outside of the bowl to be heated and the heating surface otherwise damage to both the bowl and mantle could result.

- 2.4.2 Install the mixing bowl by lowering it carefully into the top of the mantle.

- 2.4.3 Ensure the correct position of the bowl.

- 2.4.4 Check that the bowl is level and comfortably “nested” into the heater.

- 2.4.5 Fill the bowl with water and allow it to stand for a minimum of 2 hours to settle into the mantle.

2.5 Heater equipment identification

The heater jackets are fully described on the item plates attached to each unit.

Note that operation at lower voltage is acceptable but will result in a reduced power output.

2.6 Electrical connections

Note: All electrical work must be carried out by a suitably qualified electrician.
The heating mantle must be earthed.

- 2.6.1 Plug in the power cable (which is supplied) after safe electrical connection to the supply.

2.7 Operation

It is important the heater is not switched on if the liquid level inside the mixing bowl falls excessively.

If the heater is left switched on with no liquid covering it there is a risk that the bowl will become excessively hot in this area resulting in damage to the bowl and/or heater.

Do not add cold liquid if the bowl is hot. Wait for the bowl to cool or add liquid of a similar temperature to that in the bowl.

- 2.7.1 Fill the mixing bowl to the required level.

- 2.7.2 Turn on the heater by setting the energy regulator.

- 2.7.3 When starting the heating for the first time there may be some odour and/or vapours given off as temperature rises. This may be due to evaporation of small quantities of moisture or resins held in the fabric of the heater pack burning off.

All heaters are load tested during manufacture to allow the burning-off of such resins. The evidence of small quantities of odours and vapour at initial start-up should, however, be expected.

It is helpful to raise the temperature gradually in stages to allow the odours or vapours (if present) to evaporate away.

- 2.7.4 When the desired process temperature has been reached, the temperature can be controlled by adjusting the energy regulator accordingly.

If the liquid level drops excessively, the heater must be switched off manually by turning the energy regulator to zero.

The liquid might be below the top of a level because:-

- a) Insufficient liquid has been added to the mixing bowl, or
- b) Evaporation has caused a drop in the liquid level.

2.7.5 Mixing bowls should be cleaned at regular intervals to prevent the build-up of sediment inside, which can cause uneven temperature distribution and possible damage to the bowl, and to remove excessive foreign material from the outside.

2.8 Fault finding

Note: All electrical work must be carried out by a suitably qualified electrician.

2.8.1 The heater is fitted with an energy regulator to provide fine tuning of the heating demand.

2.8.2 Simply adjust the energy regulator to match demand.

2.8.3 The heating circuit is required to be protected by upstream fuses with the supply of the mantle heating equipment.

2.8.4 If the upstream fuses are intact it should therefore be possible to activate the heating output.

2.8.5 If the upstream fuse is healthy the operation of the energy regulator should power the unit.

2.8.6 If the above checks do not enable the heater load to operate, simple electrical checks can be made.

2.8.7 The heater level is made from wire elements that can be resistance checked, if required. These checks can be carried out at the terminals located in the terminal box.

2.8.8 The incoming voltage must be disconnected prior to Resistance Checking taking place.

2.8.9 Should the heating resistance be found to be "open circuit", the unit should be considered for factory repairs only – please contact **ELE International**.


2.9 Replacement of heating elements

2.9.1 In the event that the heating system needs to be replaced, it is normally recommended that the whole assembly is returned for the replacement of the heating pack and insulation using the original packing.

2.9.2 Factory repair activity includes for "curing" during manufacture which may not be practical on site.

2.9.3 In some cases the site/field replacement of heaters may be possible. For further assistance please contact **ELE International**.

DIRECTIVE ON WASTE ELECTRICAL & ELECTRONIC EQUIPMENT (WEEE)

	<p>Electrical equipment marked with this symbol may not be disposed of in European public disposal systems after 12 August of 2005. In conformity with European local and national regulations (EU Directive 2002/96/EC), European electrical equipment users must now return old or end-of life equipment to the Producer for disposal at no charge to the user.</p> <p>Note: <i>For return for recycling, please contact the equipment producer or supplier for instructions on how to return end-of-life equipment for proper disposal.</i></p> <p>Important document. Retain with product records.</p>
<p>GERMAN</p> <p>Elektrogeräte, die mit diesem Symbol gekennzeichnet sind, dürfen in Europa nach dem 12. August 2005 nicht mehr über die öffentliche Abfallentsorgung entsorgt werden. In Übereinstimmung mit lokalen und nationalen europäischen Bestimmungen (EU-Richtlinie 2002/96/EC), müssen Benutzer von Elektrogeräten in Europa ab diesem Zeitpunkt alte bzw. zu verschrottende Geräte zur Entsorgung kostenfrei an den Hersteller zurückgeben.</p> <p>Hinweis: <i>Bitte wenden Sie sich an den Hersteller bzw. an den Händler, von dem Sie das Gerät bezogen haben, um Informationen zur Rückgabe des Altgeräts zur ordnungsgemäßen Entsorgung zu erhalten.</i></p> <p>Wichtige Informationen. Bitte zusammen mit den Produktinformationen aufbewahren.</p>	
<p>FRENCH</p> <p>A partir du 12 août 2005, il est interdit de mettre au rebut le matériel électrique marqué de ce symbole par les voies habituelles de déchetterie publique. Conformément à la réglementation européenne (directive UE 2002/96/EC), les utilisateurs de matériel électrique en Europe doivent désormais retourner le matériel usé ou périmé au fabricant pour élimination, sans frais pour l'utilisateur.</p> <p>Remarque : <i>Veillez vous adresser au fabricant ou au fournisseur du matériel pour les instructions de retour du matériel usé ou périmé aux fins d'élimination conforme.</i></p> <p>Ce document est important. Conservez-le dans le dossier du produit.</p>	
<p>ITALIAN</p> <p>Le apparecchiature elettriche con apposto questo simbolo non possono essere smaltite nelle discariche pubbliche europee successivamente al 12 agosto 2005. In conformità alle normative europee locali e nazionali (Direttiva UE 2002/96/EC), gli utilizzatori europei di apparecchiature elettriche devono restituire al produttore le apparecchiature vecchie o a fine vita per lo smaltimento senza alcun costo a carico dell'utilizzatore.</p> <p>Nota: <i>Per conoscere le modalità di restituzione delle apparecchiature a fine vita da riciclare, contattare il produttore o il fornitore dell'apparecchiatura per un corretto smaltimento.</i></p> <p>Documento importante. Conservare con la documentazione del prodotto.</p>	
<p>DANISH</p> <p>Elektriske apparater, der er mærket med dette symbol, må ikke bortskaffes i europæiske offentlige affaldssystemer efter den 12. august 2005. I henhold til europæiske lokale og nationale regler (EU-direktiv 2002/96/EF) skal europæiske brugere af elektriske apparater nu returnere gamle eller udtjente apparater til producenten med henblik på bortskaffelse uden omkostninger for brugeren.</p> <p>Bemærk: <i>I forbindelse med returnering til genbrug skal du kontakte producenten eller leverandøren af apparatet for at få instruktioner om, hvordan udtjente apparater bortskaffes korrekt.</i></p> <p>Vigtigt dokument. Opbevares sammen med produktdokumenterne.</p>	

SWEDISH

Elektronikutrustning som är märkt med denna symbol kanske inte kan lämnas in på europeiska offentliga sopsstationer efter 2005-08-12. Enligt europeiska lokala och nationella föreskrifter (EU-direktiv 2002/96/EC) måste användare av elektronikutrustning i Europa nu återlämna gammal eller uträdd utrustning till tillverkaren för kassering utan kostnad för användaren.

Obs! Om du ska återlämna utrustning för återvinning ska du kontakta tillverkaren av utrustningen eller återförsäljaren för att få anvisningar om hur du återlämnar kasserad utrustning för att den ska bortskaffas på rätt sätt.

Viktigt dokument. Spara tillsammans med dina produktbeskrivningar.

SPANISH

A partir del 12 de agosto de 2005, los equipos eléctricos que lleven este símbolo no deberán ser desechados en los puntos limpios europeos. De conformidad con las normativas europeas locales y nacionales (Directiva de la UE 2002/96/EC), a partir de esa fecha, los usuarios europeos de equipos eléctricos deberán devolver los equipos usados u obsoletos al fabricante de los mismos para su reciclado, sin coste alguno para el usuario.

Nota: *Sírvase ponerse en contacto con el fabricante o proveedor de los equipos para solicitar instrucciones sobre cómo devolver los equipos obsoletos para su correcto reciclado.*

Documento importante. Guardar junto con los registros de los equipos.

DUTCH

Elektrische apparatuur die is voorzien van dit symbool mag na 12 augustus 2005 niet meer worden afgevoerd naar Europese openbare afvalsystemen. Conform Europese lokale en nationale wetgeving (EU-richtlijn 2002/96/EC) dienen gebruikers van elektrische apparaten voortaan hun oude of afgedankte apparatuur kosteloos voor recycling of vernietiging naar de producent terug te brengen.

Nota: *Als u apparatuur voor recycling terugbrengt, moet u contact opnemen met de producent of leverancier voor instructies voor het terugbrengen van de afgedankte apparatuur voor een juiste verwerking.*

Belangrijk document. Bewaar het bij de productpapieren.

POLISH

Sprzęt elektryczny oznaczony takim symbolem nie może być likwidowany w europejskich systemach utylizacji po dniu 12 sierpnia 2005. Zgodnie z europejskimi, lokalnymi i państwowymi przepisami prawa (Dyrektywa Unii Europejskiej 2002/96/EC), użytkownicy sprzętu elektrycznego w Europie muszą obecnie przekazywać Producentowi stary sprzęt lub sprzęt po okresie użytkowania do bezpłatnej utylizacji.

Uwaga: *Aby przekazać sprzęt do recyklingu, należy zwrócić się do producenta lub dostawcy sprzętu w celu uzyskania instrukcji dotyczących procedur przekazywania do utylizacji sprzętu po okresie użytkowania.*

Ważny dokument. Zachować z dokumentacją produktu.

PORTUGUESE

Qualquer equipamento eléctrico que ostente este símbolo não poderá ser eliminado através dos sistemas públicos europeus de tratamento de resíduos sólidos a partir de 12 de Agosto de 2005. De acordo com as normas locais e europeias (Directiva Europeia 2002/96/EC), os utilizadores europeus de equipamentos eléctricos deverão agora devolver os seus equipamentos velhos ou em fim de vida ao produtor para o respectivo tratamento sem quaisquer custos para o utilizador.

Nota: *No que toca à devolução para reciclagem, por favor, contacte o produtor ou fornecedor do equipamento para instruções de devolução de equipamento em fim de vida para a sua correcta eliminação.*

Documento importante. Mantenha junto dos registos do produto.