

Ice Eater - P500

1/2 Horsepower De-Icer



Owner's Manual

PLEASE READ ENTIRELY BEFORE OPERATING



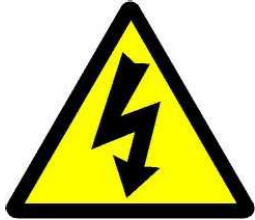
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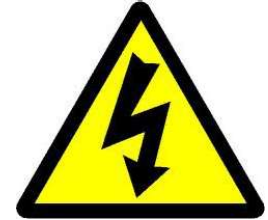
Contents

Safety Instructions	page 2
Specification Sheet	page 3
Installation & Operation Instructions	page 4
Maintenance & Trouble Shooting Tips	page 5
Maintenance Log	page 6
Parts & Accessories	page 7
3-Year Limited Warranty	page 8
Service & Repair Contact Form	page 9
Warranty Registration & Warranty Claim Procedure	page 10





**Ice Eater
Safety Instructions**



WARNING WARNING WARNING

CAUTION SHOULD BE USED WHEN DEALING WITH ANY ELECTRICAL EQUIPMENT WITH MOVING PARTS.

WARNING WARNING WARNING

NEVER LIFT OR DRAG THE UNIT BY THE POWER CORD. USE PROVIDED MOORING LINE TO MOVE THE UNIT AS NECESSARY.

WARNING WARNING WARNING

THIS MOTOR IS PROVIDED WITH A GROUND WIRE OR GROUNDING TYPE PLUG FOR YOUR PROTECTION. THE GROUND WIRE MUST BE SECURELY ATTACHED TO PROPER ELECTRICAL GROUND OR THE GROUNDING TYPE PLUG MUST BE USED ONLY WITH A PROPERLY GROUNDED RECEPTACLE. IN ADDITION, YOU SHALL USE GROUND FAULT INTERRUPTER PROTECTION IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE. DO NOT UNDER ANY CIRCUMSTANCES CUT OR REMOVE THE GROUND PRONG FROM A GROUNDING TYPE PLUG. ANY REWORK OR DAMAGE TO THIS CORD MAY CREATE SHOCK HAZARD AND WILL VOID THE WARRANTY.

WARNING WARNING WARNING

A QUALIFIED ELECTRICIAN MUST BE CONSULTED TO INSURE A SAFE INSTALLATION.

WARNING WARNING WARNING

UNDER NO CIRCUMSTANCES SHOULD ANYONE ENTER THE WATER WITH THE ELECTRICAL EQUIPMENT CONNECTED AND/OR IN OPERATION. IT IS NEVER RECOMMENDED TO ENTER THE WATER WITH THE EQUIPMENT IN OPERATION. ALWAYS DISCONNECT THE ICE EATER FROM THE POWER SOURCE BEFORE ANY SERVICING OR CLEANING OR MOVING OF THE UNIT, BY UNPLUGGING OR BY REMOVING FUSE OR DEACTIVATING CIRCUIT BREAKER.

WARNING WARNING WARNING

WHEN USING OUR ICE EATER AND OUR THERMOSTAT TOGETHER, UNIT WILL START AUTOMATICALLY BY AIR TEMPERATURE. ALWAYS DISCONNECT THE ICE EATER FROM POWER SOURCE BEFORE ANY SERVICING OR CLEANING OR MOVING OF THE UNIT, BY UNPLUGGING OR BY MOVING FUSE OR DEACTIVATING CIRCUIT BREAKER.

WARNING WARNING WARNING

DO NOT REMOVE END COVER PLATE. REMOVAL OF PLATE WILL VOID WARRANTY. ALL REPAIRS MUST BE MADE AT FACTORY OR AN AUTHORIZED SERVICE STATION.



Ice Eater P500 Specification Sheet

INTRODUCTION

When water freezes, it expands, becoming lighter. This fact is the principle upon which Ice Eater functions. Ice Eater's propeller draws up warmer subsurface water and deflects it to the surface creating a constant circulation of warmer water that prevents ice formation and melts existing ice.

The Ice Eater is custom designed and engineered for maximum efficiency and performance in all climates. Ice Eater obtains its superior operating efficiency through the use of an axial flow, shrouded propeller design. This design also provides protection for the rotating propeller.

Ice Eater is shipped complete with suspension lines. It can be taken straight from its shipping carton, hung in place and plugged in.

QUICK FACTS

- Agitate more fresh and salt water than any other de-icer on the market.
- 40' open diameter under normal winter conditions.
- Complete package includes assembled motor unit, shroud, UV resistant float, (2) 25' long 3/8" thick hollow braided polypropylene ropes, and SJTOW rated 3 wire power cord and Sacrificial Aluminum Anode.
- Sacrificial Aluminum Anode installed for corrosion protection and use in salt-water applications.
- Additional Sacrificial Aluminum Anode and Electrolysis Kit are available for corrosion protection and use in salt-water applications.
- Available in 115 or 230V
- Able to operate in water as shallow as 18" (41cm).
- 15 Amp Breaker Recommended
- Total Component Listed to meet UL and CSA Standards for Safety in Water.
- UL Listed Water Circulating Pump E481181
- Met Listing No. E112360
- Energy efficient with excellent Gallons per Minute (GPM)/kW Rates
- Industrial Strength Design
- 3-Year Warranty - Best in the Industry
- Made in the USA
- Ships via UPS & FedEx

WARNING

- **Do Not Run the Unit Out of Water**
- **Ground Fault Circuit Interrupter (GFCI) or Residual Current Device (RCD) protected circuit required.**

MOTOR UNIT

- 1/2 Horsepower Single Phase
- 6.5 Amps (115V) / 3.25 Amps (230V)
- 1,650 Rotations per Minute (RPM)
- 1,150 Gallons per Minute (GPM)
- 22 pounds of thrust
- Oil Cooled, Continuous Duty Rated
- (2) Long Life Bearings
- Thermal Overload Protection
- Fully Utilized Heavy Duty Carbon Ceramic Mechanical Seal
- Series 300 Austenitic Stainless Housing with Magnesium Bronze End-Bell

SHROUD

- Patented heavy-duty PVC Venturi housing designed for superior water flow and motor/propeller protection.
- Series 300 Stainless Steel Hardware
- (2) 25' long 3/8" thick hollow braided polypropylene ropes

POWER CABLE

- SJTOW UL & CSA Approved Underwater Rated Cable
- 3 Wire
- Available in 50', 100', and 150' in 115V with Quick Disconnect Power Cord.
- Available in 50', 100', 150, 200', 250', 300', 350' in 230V with Quick Disconnect Power Cord.
- Other cord lengths are available through special order but will not have a Quick Disconnect Power Cord.
- Potted Quick Disconnect Gauge Cord.
- 16/3 gauge for 25', 50', and 100' long
- 14/3 gauge for 150', 200' and longer

OPTIONAL THERMOSTAT

- Simple and easy to use. Plug in the portable thermostat into the wall outlet and then plug an Ice Eater into the back of the thermostat's piggyback plug and set the temperature.
- Not affected by surges and lightning strikes or power outages like a digital thermostat.
- Convenient flip open clear cover protects from weather and damage.
- Moisture proof box.
- Made in the USA

OPTIONAL TIMER

- Outdoor grade plastic
- Timer: 24-hour with 23-1/2 hour maximum on time. (2) "ON" & (2) "OFF" trippers - standard.
- Dial will accept up to 12 sets of trippers.
- Electrical Rating: 15 A (1800 W), Resistive or Tungsten
- Agency Approval: CSA/C-US
- Outdoor grade cord with ground plug, 3 wire, 22 inches

OPTIONAL DOCK MOUNT

- Adjusts the Ice Eater angle in 20 degree increments from horizontal to vertical with full 360 degree positioning.
- Steel mounting base, bail & pipe holder are all powder-coated twice to protect against corrosion.
- Maximum pipe length is 6' to provide secure mounting & prevents pole from bending.
- Made in the USA



Ice Eater Installation & Operation Instructions

INSTALLATION

1. Immediately after delivery, inspect the Ice Eater shipment for any visible damages. Report any damage to your dealer.
2. The Ice Eater is completely assembled. You will not need additional hardware unless you are installing it with an optional dock mount or shallow water stand.
3. Install the Ice Eater by hanging with provided mooring lines in the area to be kept clear of ice. A dock mount and shallow water stand are sold separately.

Ice Eater may be hung from a pier or from a boat.

Place Ice Eater at a depth which produces best results for each specific location (2 - 3 feet is a good average operating depth).

WARNING: Do not place Ice Eater on the bottom. Make sure to maintain at least 1' clearance from the bottom.

If the Ice Eater is hung from a boat or floating pier, try to guard against a falling tide depositing the unit on the bottom.

NOTE:

If a circular pattern of de-icing is desired, hang Ice Eater straight (see figures 1A & 1B). For straight hanging, use top rim holes A & B shown in figure 3.

If an elongated pattern of de-icing is desired, hang Ice Eater at an angle (see figures 2A & 2B).

For angle hanging, use Rim Hole A and C, D, E, or F. The Ice Eater operating angle will increase as the suspension line is moved around the rim towards Hole F.

4. Once your Ice Eater is properly installed and secured, you can now plug the electrical cord into properly grounded and GFCI protected circuit. Make sure to plug into corresponding 115 or 230 volt receptacle and proper voltage is available at the unit's motor.

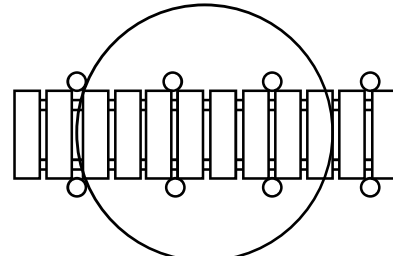
WARNING: When an extension cord is used, it must be sized as follows:

Up to 100ft. - Use #12/3 wire cord.

Up to 200ft. - Use #10/3 wire cord.

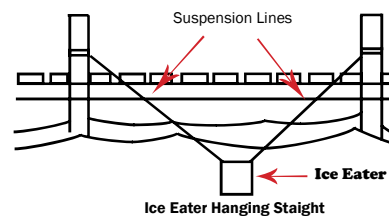
OPERATION

- After installation, the Ice Eater is ready for immediate use.
- The Ice Eater is designed and engineered for continuous duty in the harshest environments.
- Operating equipment should be observed on a regular basis for any reduction or variation in the Ice Eater's performance.
- Routinely inspect the sacrificial anode, propeller, etc. Replace parts as necessary.
- **WARNING: Do not run out of water. Unit must be submerged. Keep hands clear.**
- A thermostat is available as an additional accessory. This will greatly reduce the amount of energy consumed by Ice Eater, while still maintaining ice free conditions.



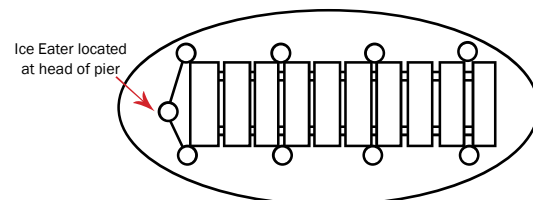
Circular De-icing Pattern
(Install Ice Eater as shown in Figure 1B)

Figure 1A



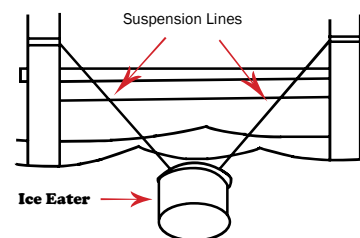
Ice Eater Hanging Straight

Figure 1B



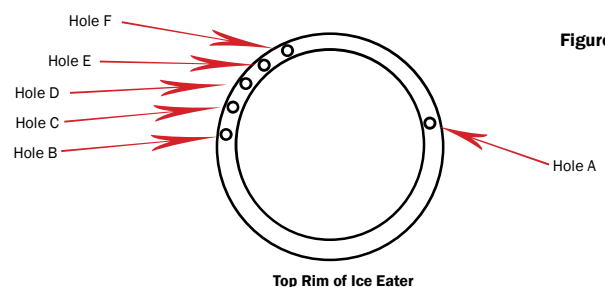
Elongated De-icing Pattern
(install Ice Eater as shown in Figure 2B)

Figure 2A



Ice Eater Hanging at an Angle

Figure 2B



Top Rim of Ice Eater

Figure 3



Ice Eater

Maintenance & Trouble Shooting Tips

MAINTENANCE

- The Ice Eater motor is filled and sealed with a special non-toxic dielectric lubricating fluid and does not require additional lubrication.
- When storing your unit, clean it thoroughly and place it propeller side down in a flat, cool place. Storing propeller side down will keep the seals lubricated.
- Heavy weed or plant locations may need to have the screen and prop cleaned occasionally. Before removing or cleaning the unit, unplug or disconnect the unit from the power source. Scrub with a stiff, nylon bristle brush. The unit will not be damaged by cleaners; however, these products could leave a residue that may damage plants and animals when the unit is put back in service. If cleaners are used, flush and rinse thoroughly with fresh, clean water.
- Routinely inspect the propeller, internal brackets and shaft for accumulation of weeds, vines or string. Foreign objects can damage the seals, prop and shaft. Keep the shaft and propeller clear of debris. Inspect the brackets and propeller for chips and cracks. Broken or damaged brackets or propeller can be replaced easily in the field with factory parts.
- Inspect the power cord for breaks, nicks and abrasion. Under normal conditions, the cord will be usable for many years. However, physical abuse and rodent, animal or equipment damage can result in safety hazards such as electrical shock. If the outer jacket is cut deeply enough that the inner conductors can be seen, the cord should be replaced. If the copper wire is showing, immediately remove the unit from service and replace the cord. Severe shock could result.
For CE labeled units: *If the power supply cord is damaged, it must be replaced by the manufacturer or it's service agent or similarly qualified person to avoid a hazard.*
- Units operated in brackish or salt water must have a sacrificial anode attached to the shaft. The anode must be inspected periodically for deterioration. Operation without the anode could result in metal deterioration and contamination and may void the warranty.
- The motor can only be opened and assembled under special conditions at the factory or authorized service center. Do not attempt to repair the motor. Any tampering or attempted repairs may void the warranty and could result in equipment failure or bodily injury.
WARNING: Do not open the sealed motor unit for any reason.
- For optimum operation, it is suggested that each unit be returned to the factory for regularly scheduled maintenance every four to five years, less for commercial duty usage.

TROUBLE SHOOTING TIPS

- 1) If unit does not start when plugged in or turned on:
 - a) Check power source to make sure that voltage is available.
 - b) Make certain the power cord connections are fully made. Check tightness at both the source end and at the unit.
 - c) See if circuit breaker is tripped or has a blown fuse. Check ground-fault interrupter. If any of these are tripped or blown, have an electrician check your installation.
 - d) Unplug unit and make certain the propeller turns freely. Turn propeller through several full revolutions.
 - e) Plug the unit back in and try to start again.
- 2) If unit starts slowly or does not have full flow:
 - a) Check power source for voltage drop or undersized service. If several pieces of equipment are operating on the same circuit, they may need to be started individually.
 - b) Unplug unit and make certain that prop turns freely. Turn prop through several full revolutions. Try to start unit again.
 - c) Unplug unit and make sure there is no debris around prop or shaft.
 - d) Check screen to make sure it is clean. Algae or grass accumulation must be removed.
- 3) If unit starts and stops then starts and stops:
 - a) Check power source for voltage drop or undersized service. Unit may be overheating due to low voltage.
 - b) Unplug unit and make sure there is no debris around prop or shaft. Unit may be overheating due to overload.



Ice Eater Maintenance Log

	Date of Service (Replacement/Inspection)											
Standard Service <i>Recommended every 4-5 years</i> (includes replacement of bearings, seals capacitor, fluid, & power cord connector)												
Brackets												
Power Cord <i>Inspect for nicks, cuts, bite marks, etc.</i>												
Sacrificial Anode <i>Varies based on water type and use</i> Replace when anode is approximately half of the original size or if anode is white in color.												
Electrolysis Kit <i>Varies based on water type and use</i> Not applicable to all units. Replace at the same time as the Sacrificial Anode												
Propeller <i>Inspect Regularly</i> <i>Replacement varies based on use</i>												



Ice Eater Parts & Accessories

PART NUMBER **PRODUCT DESCRIPTION**

20002 **Propeller** - fits F250 & P250



20006 **Propeller** - fits P500 Ice Eater



20005 **Propeller** - fits P750 Ice Eater



20000 **Propeller** - fits P1000 Ice Eater

Brackets (set of 4)

20100 **Small** - fits P250, & P500



20200 **Large** - fits P750, P1000

26100 **P1101 Timer** - for 115V Ice Eater
 This grounded plug-in timer utilizes an outdoor rated raintight flip-open enclosure.
 (2) On and (2) Off settings make this a perfect timer to control your Ice Eater and keep your costs low.



26200 **T104P Timer** - for 230V Ice Eater
 This heavy-duty timer stands the test of time while providing the highest horsepower ratings in the industry for industrial, commercial, and residential applications.



Thermostat

0°F - 80°F temperature range
 An inexpensive way to control the operation of your Ice Eater by using ambient air temperature.
 Set the temperature to turn your Ice Eater on when the temperature drops below that setting.



KT16110 **115V** - Plug & Receptacle for in-line use

KP16220 **230V** - Hard wired only

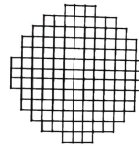


PART NUMBER **PRODUCT DESCRIPTION**

Screen Kit

24400 **Small** - fits P500

24500 **Large** - fits P750, P1000



Sacrificial Aluminum Anode

24901 **One Size** - fits all Ice Eater models
 *allen wrench included
 Protects against corrosion and electrolysis
 For use in salt water



Electrolysis Kit

26000 **One Size** - fits all Ice Eater models
 Additional protection against corrosion and electrolysis in areas of high salinity, high electrical current and/or warm waters



Shackles - (set of 2)

24600 **One Size** - fits all Ice Eater models
 1/4" stainless steel shackles with a 9/64" short arm hex key



Mooring Lines

(3/8" thick hollow braided polypropylene ropes)
50100 (2) 25' blue ropes
34310 (2) 50' blue ropes



Dock Mount

The premium option to consider for positioning your Ice Eater. Make your placement more secure than suspension lines, and unaffected by the current.

75001 **Small** - fits P500

75000 **Large** - fits P750 & P1000



Ice Eater Shrouds

Patented heavy-duty PVC Venturi housing designed for superior water flow and motor/propeller protection.

69010 **Small** - 10"x12", fits P500

69012 **Large** - 12"x15", fits P750 & P1000



Ice Eater **3-Year Warranty**

The Power House, Inc. warrants this de-icer to be free from defects in material and workmanship under normal use and service, but does not include in said warranty any defect or failures of the sacrificial anode, ropes, power cord, propeller, brackets or failure due to mishandling, misuse, improper installation, or improper electrical supply. In areas of high salinity, high electrical current, and/or warm temperatures, a Power House electrolysis kit must be mounted to the stainless steel canister. The Power House, Inc. will replace free of charge any defective part covered by this warranty within three (3) years from the date of manufacture (if the unit is used for purposes other than de-icing, then a one-year limited warranty shall apply). This warranty applies only to the original purchaser.

THIS WARRANTY IS IN LIEU OF ANY OTHER WARRANTY, EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND ANY OTHER OBLIGATION OR LIABILITY WHATSOEVER ON THE PART OF THE POWER HOUSE, INC., AND IN NO EVENT SHALL THE POWER HOUSE, INC. BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

THIS WARRANTY WILL BE VOIDED IF ANY OF THE FOLLOWING OCCURS:

- The unit is damaged by unauthorized tampering or repairs
- If the sacrificial anode around the propeller shaft and/or Stainless Steel can shows significant deterioration. Failure to inspect and replace the anode constitutes misuse and will void the warranty.
- The unit is not stored properly.
- The unit is run out of the water.
- Improperly sized extension cord or circuit is used.
- The propeller shows signs of excessive or unusual wear and tear

All units must be brought to the attention of **The Power House, Inc., 10233 S. Dolfield Rd., Owings Mills, MD 21117.**

All returned must be shipped freight prepaid to the above address. There are no warranties beyond those contained herein and no person is authorized to give any other warranties or to assume the liabilities on the part of The Power House, Inc. An evaluation fee of \$36.00 will be charged when a unit is returned for repair and found to be in working condition.

NOTE: There are certain conditions under which no circulator can prevent ice damage such as ice that moves as a result of wind or current, extremely cold weather where ice forms all the way to the bottom and in some cases, where the bottom water temperature is the same as ice (very shallow water). The efficiency of operation will be somewhat reduced when the flow is restricted by allowing too little bottom clearance.

**All warranty, service, and repair inquiries should be directed to
The Power House, Inc., at 800.243.4741 or info@hepowerhouseinc.com**

Register your Ice Eater today at www.thepowerhouseinc.com



Service & Repair Contact Form

In order to keep the units running in excellent condition, Aerating Fountains & Surface Aerators should be serviced every 3-4 years and Ice Eaters should be serviced every 4-5 years.

- The Power House, Inc. requires all service and repairs sent in must be accompanied by this form and marked **“Attn: Service Center”**
- Service and repairs returned **should include the motor assembly and power cord** when possible.
- It is the responsibility of the customer to ship and pay freight to The Power House, Inc. or an authorized service center. We accept shipments from Fed Ex, UPS, and USPS.
Our address is **10233 S. Dolfield Rd, Owings Mills MD 21117**
Or you can find an Authorized Service Center at <https://thepowerhouseinc.com/service-centers/>
- The Power House, Inc. is not responsible for damage accrued in return shipment.
- Please ensure to properly pack unit with appropriately sized box, packing peanuts/bubble wrap etc.
- Unless otherwise instructed, you do not need to ship the float or control panel with the unit.
- Refer to the **Instruction and Operations Manual** or the frequently asked questions section of our website at <https://thepowerhouseinc.com/faq/> for easy-to-follow troubleshooting tips.

Below contact information should be for the primary decision maker.

Company: _____

Name: _____

Address: _____

City: _____ **State:** _____ **Zip Code:** _____

Phone Number: _____ **Alternate Phone Number:** _____

Email Address: _____

Preferred method of contact: (circle one) **Phone** - **E-Mail**

Type of Equipment: (circle one) **Ice Eater** - **F Series Aerator** - **Olympus Series Display Fountain**

Describe issue with equipment:



Warranty Registration Information

Date of Purchase: _____ **Place of Purchase/Distributor:** _____

Warranty Claim Procedure:

1. Contact The Power House, Inc. at the earliest possible opportunity, either via email (info@thepowerhouseinc.com) or by telephone (800.243.4741), with the following minimum information:
 - Model
 - Serial Number
 - Date of Purchase
2. Register your Ice Eater online at www.thepowerhouseinc.com.
3. To assist us in swift processing of the claim, we require the claimant's help to understand the environment in which the Ice Eater was installed and operated. Photo images are appreciated and may be requested by The Power House, Inc. Regardless of the issue, a detailed description of the problem, when and how it is occurring is always required.
4. Please completely fill out and include the Service Center Contact Form with the unit (found inside the Owner's Manual or download from www.thepowerhouseinc.com).
Note: Where damage is alleged to be caused during delivery to the customer the incident must be reported in writing within 3 days after delivery.
5. Properly pack the Ice Eater with appropriately sized box, packing materials (peanuts, bubble wrap, etc.)
Note: Only complete motor assemblies will be accepted for warranty repair. The power cord and all other components must be returned with the motor as originally assembled. Some parts are essential in order to properly diagnose potential causes of failure.
6. Ship to: **Attn: Service Center The Power House, Inc., 10233 S Dolfield Rd, Owings Mills, MD 21117**
(Any shipping method for the return of the unit to The Power House, Inc. or an authorized service center is at the customer's expense.)
7. Once the Ice Eater has been evaluated, The Power House, Inc. will contact the customer in order to discuss cause of failure, possible corrections needed, timeline of repair, etc.
8. The Power House, Inc. reserves the right to rectify by means of repair, exchange or replacement at our own discretion. The decision for method of rectification will take place after evaluation of the product.
9. The Power House, Inc. will return units repaired under warranty at our expense via ground freight within the continental United States.

**All warranty, service, and repair inquiries should be directed to
The Power House, Inc., at 800.243.4741 or info@thepowerhouseinc.com**

Register your Ice Eater today at www.thepowerhouseinc.com

