AIRMAX®

ICE EATER

PLEASE READ ENTIRELY BEFORE OPERATING

- P250 — .25HP Ice Eater
- P500 — .5HP Ice Eater
- P750 — .75HP Ice Eater
- P1000 — 1HP Ice Eater

AIRMAX

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WARNING

This product contains lead, a chemical known to the State of California to cause cancer and birth defects, or other reproductive harm.

AIRMAX

WARNING

- Caution should be used when dealing with any electrical equipment with moving parts.
- Never lift or drag the unit by the power cord. Use the provided mooring line to move the unit as necessary.
- 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.
- A qualified electrican must be consulted to insure a safe installation.
- 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.
- 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
- Do not remove end cover plate. Removal of plate will void warranty. All authorized repairs must be made at factory or an authorized service station.
- Recommended commercial grade breaker. Use dedicated circuit per unit.

AIRMAX®

SPECIFICATION

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.
- 20'-25' (.25HP), 40' (.5HP), 60' (.75HP) & 80' (1HP) are the average open diameter under normal winter conditions.
- Complete package includes assembled motor unit, shroud, (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 115V or 230V.
- Able to operate in water as shallow as 24" (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.
- Industrial strength design.

STATISTICS BY HORSEPOWER

- P250; .25 HP; Gingle phase; 2.6 AMPS (115V) / 1.3 AMPS (230V); 360 Gallons per minute (GPM).
- P500; .5 HP; Single phase; 6 AMPS (115V) / 3 AMPS (230V); 1075 Gallons per minute (GPM).
- P750; .75 HP; Single phase; 6 AMPS (115V) / 3 AMPS (230V); 1250 Gallons per minute (GPM).
- P1000; 1 HP; Single phase; 7 AMPS (115V) / 35 AMPS (230V); 1400 Gallons per minute (GPM).

ALL MOTORS

- 1,650 Rotations per minute (RPM).
- 24 Pounds of thrust.
- Fluid 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.

ALL MOTORS

- 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', and 400' 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.

WARNING

Do not run the unit out of water.

Ground Fault Circuit Interrupter (GFCI) or Residual Current Device (RCD) protected circuit required.

INSTALLATION & OPERATION

QUICK FACTS

- Immediately after delivery, inspect the ice eater shipment for any visible damages. Report any damage to your dealer.
- 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.
- 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.
- 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.
- 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 sized as follows:
Up to 100ft. - Use #12/3 wire cord.
Up to 200ft. - Use #10/3 wire cord.

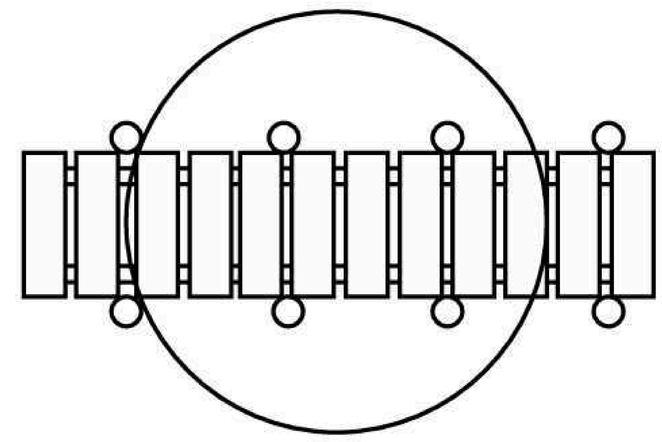
OPERATION

- 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.

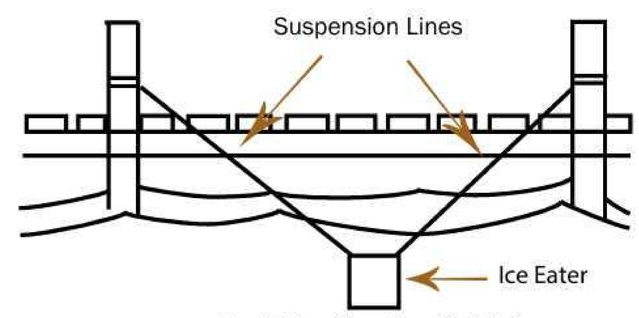
- A thermostat is available as an additional accessory. This will greatly reduce the amount of energy consumed by ice eater, while still maintaining ice free conditions

Figure 1A



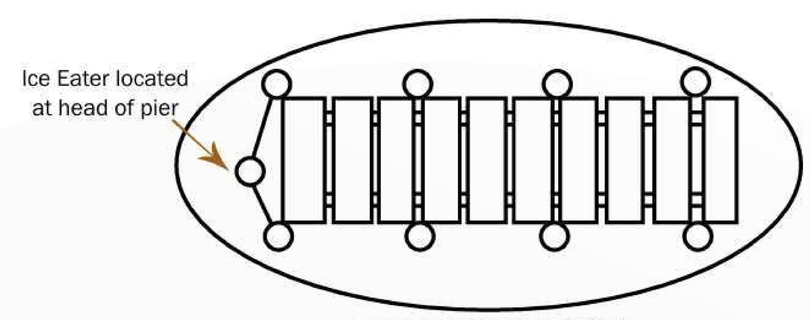
Circular De-Icing Pattern
(Install Ice Eater as shown in Figure 1B)

Figure 1B



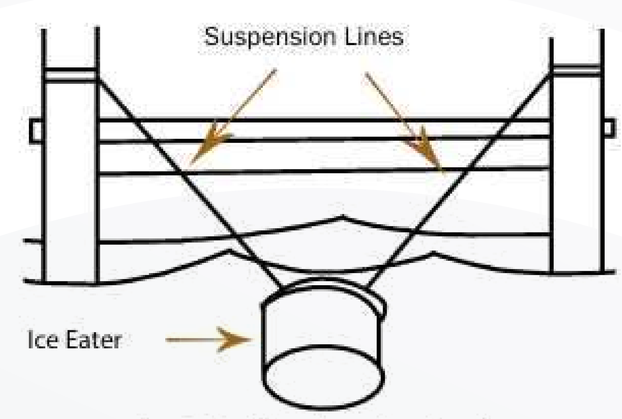
Ice Eater Hanging Staight

Figure 2A

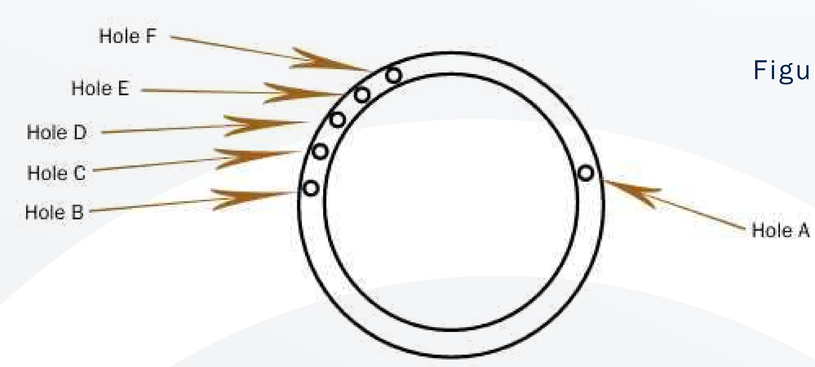


Elongated De-Icing Pattern
(install Ice Eater as shown in Figure 2B)

Figure 2B



Ice Eater Hanging at an Angle



Top Rim of Ice Eater

Figure 3

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.

• Units placed in 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.

• 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, send the unit to the manufacturer or authorized service center every four to five years for standard service. Commercial duty operations may wish to service units more frequently.

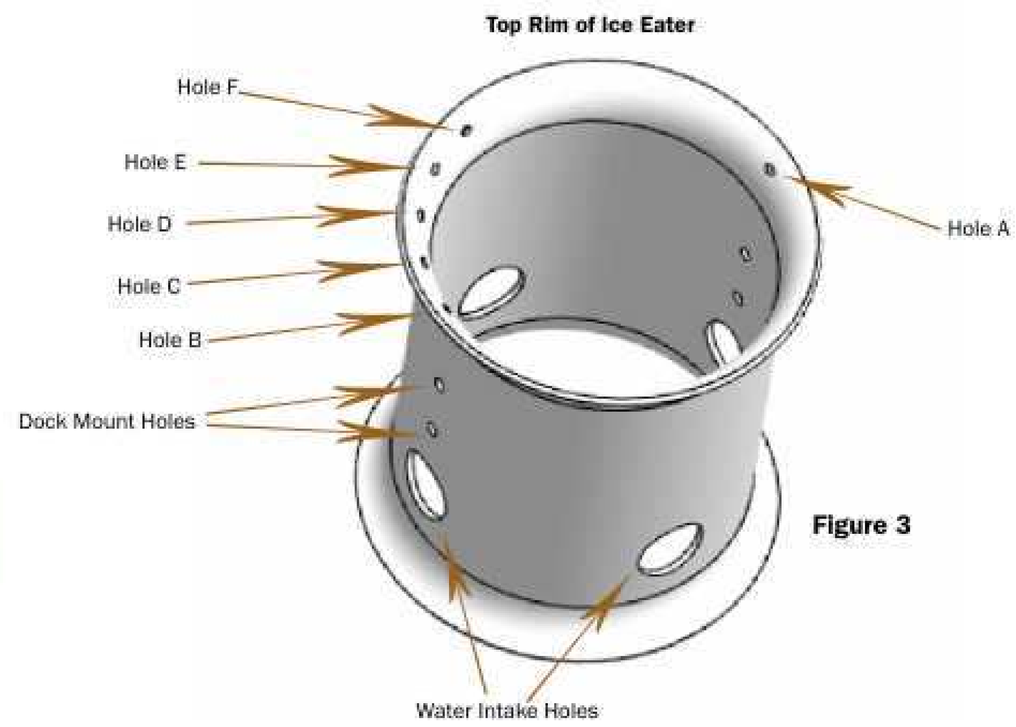


Figure 3

TROUBLESHOOTING TIPS

1) If the 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 the circuit breaker is tripped or has a blown fuse. Check the 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.

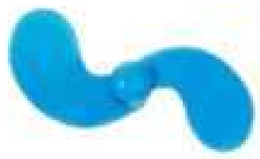
B Unplug unit and make sure there is no debris around prop or shaft. Unit may be overheating due to overload.

PARTS & ACCESSORIES

Mini blue propeller - Fits P250

Yellow propeller - Fits P500

Blue propeller - Fits P750



Green propeller - Fits P1000

Brackets (Set Of 4)
Small - Fits P250
Large - Fits P500, P750, P1000

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.

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 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. 115v & 230v

Screen kit
Small - Fits P500
Large - Fits P750, P1000

Sacrificial anode aluminium - Fits all models. 1 anode and 1 hex key included. protects against corrosion and electrolysis in salt water, high electrical current and/or warm water.

Electroylsis kit 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)
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)
(2) 25' 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.
Small - Fits P500
Large - Fits P750 & P1000

Ice eater shrouds
patented heavy - Duty pvc venturi housing designed for superior water flow and motor/propeller replacement power cords, critter sleeving, and motor assemblies are available for every ice eater model.
Protection.
Half - Fits P250
Small - 10"X12", Fits P500
Large - 12"X15", Fits P750 &

Replacement power cords, critter sleeving, and motor assemblies are available for every ice eater model.

WARRANTY

Airmax, Inc., (here in called “Airmax”), warrants products to be free from defects in material and workmanship for the warranty period specified below from the date of manufacture by Airmax, under normal use and service. This limited warranty does not include defects or failures due to mishandling, misuse, improper installation, or improper electrical supply.

Airmax will replace any defective parts covered by its warranty without charge for parts or labor, provided that the full unit is returned to Airmax (or an Authorized Service Center) within thirty (30) days after discovering the defect.

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 Airmax. In no event shall Airmax be liable for incidental or consequential damages.

In addition to the product-specific limitations below, the warranty will be voided if any of the following occurs:

- The unit is damaged or altered by unauthorized tampering and/or repairs.
- The unit was subjected to abuse, negligence, accident, or misapplication (e.g., chips/nicks and deterioration in propeller size).
- The unit is not stored properly.
- The unit was run out of water.
- An improper-sized extension cord or circuit was used.

Standard maintenance services and the replacement of service items connected with such services are covered by warranty. Standard service items include seals, bearings, dielectric fluid, boot, and capacitor. Standard service is only available for Ice Eater, Power House Aeration, and Weeds Away products..

All units must be shipped complete prepaid/brought to the attention of:

Airmax, Inc.
Attn: Service Center
15425 Chets Way Street
Armada, MI 48005

OR can be shipped complete prepaid or brought to an authorized Airmax repair center.

There are no warranties beyond those contained herein, and no person is authorized to give any other warranties or assume liabilities on behalf of Airmax. An evaluation fee (see specific product for details), plus return shipping, will be charged when a unit is returned for repair and found to be in good working condition. The evaluation fee also applies for units customers decide not to repair but wish to reclaim certain parts. The evaluation fee is waived if the unit is scrapped (at Airmax) or the unit is repaired. After the original warranty period described below has ended, there is a thirty (30) day warranty period for a standard repair by Airmax. A new, full warranty is only reissued if a customer purchases a brand new motor with service.

- Warranty Period: Three (3) years from the date of manufacture by Airmax.
- If a unit is used for purposes other than de-icing, then a one (1) year limited warranty shall apply.
- NOTE: There are certain conditions under which no circulator de-icer 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 temperature is the same as the ice (very shallow water). The operation efficiency will be somewhat reduced when the flow is restricted by allowing too little bottom clearance.
- In areas of high salinity, high electrical current, and/or warm temperatures, an Airmax electrolysis kit must be mounted to the stainless steel can.
- In addition to the limitations above, this limited warranty does not include any defects or failures of the sacrificial anode, ropes, power cord, propeller, or brackets. The warranty will be voided if the sacrificial anode around the propeller, shaft, and/or stainless steel can shows significant deterioration. Failure to keep the shaft and can clear of debris (including string, bags, calcium buildup, barnacles, etc.); or the propeller shows signs of excessive or unusual wear and tear.
- Failure to inspect and replace anodes constitutes misuse.
- Complete units must be shipped for evaluation.
- The evaluation fee is $65.

All units sent to Airmax or authorized repair center are considered abandoned, if not claimed, after six (6) months. Airmax is no longer responsible for such units, and units will be scrapped.

Airmax, Inc.

15425 Chets Way Street
Armada, MI 48005

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