1. Does the unit stay on all the time?

The heater is equipped with a thermo-sensor. This will shut off the unit only if for some reason the de-icer is removed from the pond. The thermo-sensor is set at 34 °C (93 °F). This was added to the unit as a safety feature so that if a child or animal were to remove the unit from the water the core temperature would trip the thermo fuse and protect the unit from starting a fire or causing damage.

2. What do I do if the light goes off and the unit is not heating?

If the thermo fuse is tripped, the unit needs to be disconnected from the power, allowed to cool, and then re-plugged. The unit should then function properly.

We found that some consumers were plugging in the unit and then placing the unit in the water. This could trip the Thermo fuse and the unit would need to be reset. Ask the consumer to try and reset the Thermo fuse by unplugging waiting 2.5 hours and then replugging.

Installation procedure:

- a) Place the De-Icer in the pond first.
- b) Connect the cord to the electrical supply after the De-Icer is properly installed in the pond water. DO NOT CONNECT THE DE-ICER TO THE ELECTRICAL SUPPLY BEFORE IT IS PLACED IN THE POND WATER.

To restart the De-Icer, immediately unplug it to cool and allow about 2-1/2 hours for the thermostat to reset.

3. The unit is tripping my GFI?

Ask the consumer if they have another GFI circuit in the house to see if it is indeed the unit causing the problem. The problem could be as simple as the circuit does not have enough power to run the unit. If the unit blows the second circuit, it could be a short and the unit will need to be replaced.

4. Will the unit over heat my pond?

The unit should only be used in a pond that that is able to over winter fish. Small performs or ponds that normally would not be able to over winter fish will not allow the unit to work properly. In most cases ponds should be a minimum of 36" deep and in extreme climates we strongly recommend the use of an aeration kit as well as the de-icer.

5. How big of a hole should the unit keep open?

The de-icer is only made to leave a small hole open in the ice to allow gas exchange. In most cases about one inch around the unit.

6. I removed the De-Icer from the pond while it was still plugged into the electrical supply. It then stopped working after a few minutes.

The De-Icer is fitted with a sealed thermostat that controls the output of the De-Icer and protects it from damage to internal components. If for any reason the De-Icer is moved from the water while still plugged in, it will automatically shut off within 90 seconds.

If this occurs, immediately unplug it to cool and allow about 2-1/2 hours for the thermostat to reset.

7. How can I tell if the De-Icer is working?

The LED pilot light located at the top of the De-Icer is designed to indicate when the De-Icer is functioning. When the light is ON, the De-Icer is functioning. When the light is OFF, the De-Icer is not functioning.

8. The De-Icer does not maintain a large enough air hole for degassing. The hole freezes up. What can I do?

The primary function of a heated de-Icer is to maintain a small opening at the surface of the pond to allow natural degassing to occur.

For climates with severe winter conditions, we strongly recommend using a Laguna Aeration Pump (sold separately) in conjunction with the surface de-Icer.

Procedure for installing the aeration pump (see illustration in the manual):

Note: The De-Icer should not be plugged to the electrical supply during this procedure. Unplug it and leave it in the pond for 10 minutes to cool, before handling it.

- Place the aeration pump in a sheltered location.
- Attach one end of the tubing to the aeration pump
- Run the tubing to the De-Icer, attach the air stone to the other end of the tubing and place the tubing on the hook located on the underside of the De-Icer.

9. The surface of my pond is already frozen. Can I chop at the pond surface to make a hole and install the De-Icer?

No. Do the following:

- Fill a pot with boiling water, attach a cord or string to it and place it on the frozen surface
- The hot pot will eventually melt a hole through the ice surface.
- Once a suitably large hole is created, install the unit.
- Never break or chop at the ice as the shock waves can unnecessarily stress pond fish.

10. Can I use an extension cord?

No. The De-Icer is not approved for use with an electrical extension.

11. Can I handle the De-Icer immediately after I unplug it from the electrical supply?

No. Wait 10 minutes to let the de-icer cool off before handling it.

12. Can I use the De-Icer to heat my pond in the summer?

No. The De-Icer is not designed to heat pond water. Is it designed solely for de-icing a small air hole at the surface of the pond.

13. Can I use the De-Icer to heat my pool water?

No. The De-Icer is not designed to heat pool water.

14. The electrical cord is damaged. Can I repair it and use the De-Icer again?

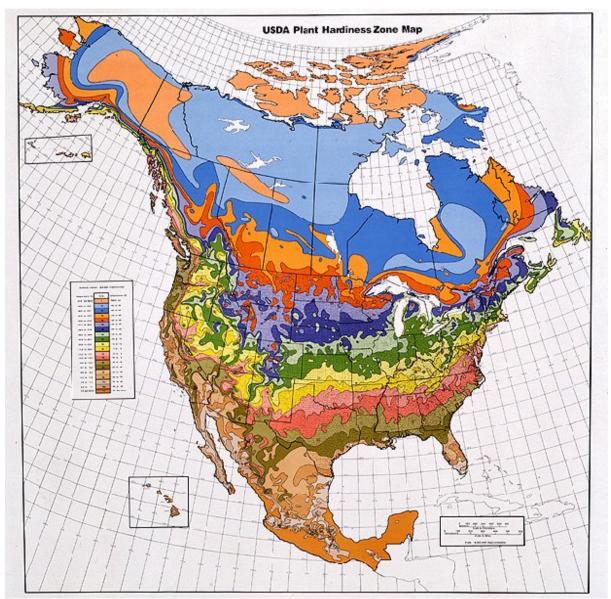
No. If the electrical cord is damaged, it cannot be repaired or replaced.

15. Where can I store the De-Icer when not in use?

We recommend storing the unit indoors.

Climate Zones

What zone does your customer live in? Use this chart to help determine which products are best suited for their climate.



*Source: U.S. department of Agriculture

Zone	Fahrenheit	Celsius	Example Cities
1	Below -50 F	Below -45.6 C	Fairbanks, Alaska; Resolute, Northwest Territories (Canada)
2a	-50 to -45 F	-42.8 to -45.5 C	Prudhoe Bay, Alaska; Flin Flon, Manitoba (Canada)
2b	-45 to -40 F	-40.0 to -42.7 C	Unalakleet, Alaska; Pinecreek, Minnesota
3a	-40 to -35 F	-37.3 to -39.9 C	International Falls, Minnesota; St. Michael, Alaska
3b	-35 to -30 F	-34.5 to -37.2 C	Tomahawk, Wisconsin; Sidney, Montana
4a	-30 to -25 F	-31.7 to -34.4 C	Minneapolis/St.Paul, Minnesota; Lewistown, Montana
4b	-25 to -20 F	-28.9 to -31.6 C	Northwood, Iowa; Nebraska
5a	-20 to -15 F	-26.2 to -28.8 C	Des Moines, Iowa; Illinois
5b	-15 to -10 F	-23.4 to -26.1 C	Columbia, Missouri; Mansfield, Pennsylvania
6a	-10 to -5 F	-20.6 to -23.3 C	St. Louis, Missouri; Lebanon, Pennsylvania
6b	-5 to 0 F	-17.8 to -20.5 C	McMinnville, Tennessee; Branson, Missouri
7a	0 to 5 F	-15.0 to -17.7 C	Oklahoma City, Oklahoma; South Boston, Virginia
7b	5 to 10 F	-12.3 to -14.9 C	Little Rock, Arkansas; Griffin, Georgia
8a	10 to 15 F	-9.5 to -12.2 C	Tifton, Georgia; Dallas, Texas
8b	15 to 20 F	-6.7 to -9.4 C	Austin, Texas; Gainesville, Florida
9a	20 to 25 F	-3.9 to -6.6 C	Houston, Texas; St. Augustine, Florida
9b	25 to 30 F	-1.2 to -3.8 C	Brownsville, Texas; Fort Pierce, Florida
10a	30 to 35 F	1.6 to -1.1 C	Naples, Florida; Victorville, California
10b	35 to 40 F	4.4 to 1.7 C	Miami, Florida; Coral Gables, Florida
11	above 40 F	above 4.5 C	Honolulu, Hawaii; Mazatlan, Mexico

Zones 1 to 5b - a combination of a Pond Heater (PT-1642) and Aeration Kit (PT-1630) is recommended

Zones 6a to 7b - the use of either a Pond Heater (PT-1642) or Pond De-icer (PT-1645) is recommended

Zones 8a to 11 - the use of an Aeration Kit (PT-1630) is recommended



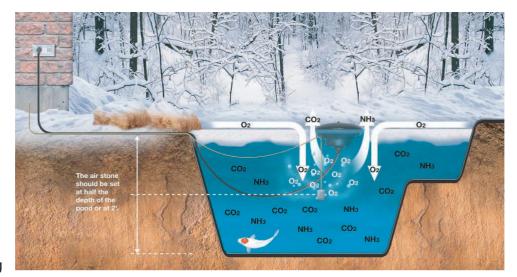
Customer Service Memo

PowerHeat De-Icer February 17, 2007



Laguna PowerHeat De-Icer PT-1642

Safe for plastic and liner ponds and won't harm fish or plants.
Integrated thermostat shuts off the De-Icer when it overheats, protecting internal components from damage.



Product Update:

The note below will be silk-screened on all de-icers:

Important

Always Place Heated De-Icer in Pond Water BEFORE Plugging it into Power Source. Always UNPLUG Heated De-Icer & Wait 10 Minutes Before Removing it from Pond Water. This unit will shut off within 90 seconds if removed from pond water. If this occurs, immediately unplug it to cool and allow about 2-1/2 hours for thermostat to reset.

These notes will be added to the manual:

Safeguard Note:

Note: Your Heated De-Icer is fitted with a sealed thermostat which controls the output of the De-Icer and protects it from damage to internal components. If for any reason the De-Icer is allowed to operate out of water, the unit will automatically shut off within 90 seconds. If this occurs, immediately unplug the unit from the power source and allow it to cool. The thermostat will automatically reset in approximately 2-1/2 hours.

In the installation instructions:

Place the de-icer in the pond first. Then connect the cord to the electrical supply after the de-icer is properly installed in the pond water. DO NOT CONNECT THE DE-ICER TO THE ELECTRICAL SUPPLY BEFORE IT IS PLACED IN THE POND WATER.

