



ALLIED PRECISION INDUSTRIES, INC.
705 E. NORTH STREET
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IMPORTANT: To insure safety for both you and your animals it is essential that you read and follow the instructions carefully.

INSTRUCTIONS FOR MODEL 250D, 200W, 120V AC



In a pail or pan



In a bird bath

GENERAL INSTRUCTIONS

CAUTION: (1) have a qualified electrician install a properly grounded, receptacle outlet, acceptable for outdoor use and protected from snow and rain, immediately adjacent to the location where this heater will be used, (2) route the supply cord and locate the heater so as to be protected from damage by livestock, (3) do not use extension cord, (4) inspect cord before using, (5) unplug heater at receptacle outlet when not in use or before removing from tank, (6) store heater indoors after winter season and (7) to ensure continued protection against shock hazard, connect to properly grounded outlets only. Use ground fault interrupter in circuit.

PROTECTION FROM ANIMALS

If you feel your animals are capable of chewing or penetrating the power cord then it's your responsibility to install this heater so the animal will not be able to chew the power cord. You may accomplish this by running the cord through a piece of pipe or conduit.

NEVER ALLOW MOISTURE TO PENETRATE YOUR ELECTRICAL CONNECTION

If you must use an extension cord make sure the electrical connection stays above the snow or damp ground. Always rap several layers of electrical tape tightly around your electrical connection. If your moisture seal is not done properly there will be a danger to both you and to others - WE SUGGEST THAT YOU CONTACT AN ELECTRICIAN TO MAKE SURE YOUR ELECTRICAL CONNECTIONS ARE SAFE FROM MOISTURE.

TO GUARD AGAINST FIRE DANGER NEVER OPERATE THIS HEATER WITHOUT THE GUARD FASTENED TIGHTLY IN PLACE.

THIS HEATER HAS A BUILT-IN SAFETY THERMOSTAT

In the event this heater is removed or thrown from the water tank, the unit is designed to shut-off before the heating element becomes hot enough to ignite a fire. If left energized the built-in safety device will gradually begin to cool - eventually allowing the heater to begin to operate. The heater will "cycle" like this until it is either immersed once again in water or the plug is pulled. Although the heater will not be hot enough to ignite a fire it will be hot enough to burn your hand or possibly scorch the surface it is lying on.

This safety thermostat should be regarded as an emergency back-up, therefore; you should install this de-icer so it will not come in contact with combustible materials.

MAINTENANCE

Do not allow lime or other impurities (e.g. iron, mud, fish waste etc.) in the water to build up on excess of 1/32" on the diameter of the tubular heating element. This is an allowance of 1/64" on each side. An excess build up can cause the heating element to burst, sending electric current directly into the water. The frequency of cleaning depends directly upon the composition of your water supply (e.g. lime and iron content).

Remove these deposits with ordinary household vinegar or a lime removing compound obtained in any hardware store.

DO NOT OPERATE WITHOUT GUARD IN PLACE

After you have removed the guard soak the heating element in a shallow pan containing the vinegar (usually one to two days) and then remove the deposits being careful not to damage the heating element.

If you need to soak the heating element for a period longer than 24 hours - be sure to replace the "old vinegar" with "fresh vinegar". This is necessary to maintain the "lime removing strength" of the vinegar.

During the heating season **EMPTY** and refill your container on a regular basis. This will prevent the build-up of dissolved lime in your water which is caused by evaporation.

TROUBLE SHOOTING

If the heater doesn't appear to be heating . . .

- The unit is designed to de-ice water. This means the heater will not operate until the water temperature is approximately 40°F — and you must wait as long as 30 minutes for this to happen
- For your safety the heater is designed to shut off within 60 seconds when removed from water, it will not come "on" again when allowed to remain in water or air at a temperature below 40° for about 30 minutes.
- Check to see that you have electricity to your female receptacle. Have you blown a fuse? Outdoor receptacles gather a good deal of corrosion and this corrosion can stop electricity from reaching the heater. We suggest you unplug the heater, then slightly spread the prongs on the plug, and then re-plug into the receptacle. If this solves the problem, we suggest you install a new receptacle.

GROUND FAULT INTERRUPTER

You should have a Ground Fault Interrupter installed in the circuit. This is a very sensitive device that cuts off the electrical current if there is any leakage of electricity in your water container. This device may be obtained from any electrician or hardware store.

USE IN BIRDBATH

You must read and follow the additional instructions under the heading "Additional Instructions for use in a bird bath".

WARRANTY

This de-icer is warranted for a period of 12 months from the date of purchase. If you believe your de-icer is defective and still within the warranty period, return it to the factory for inspection and possible replacement. The warranty is voided if (1) the ground terminal on plug has been removed, (2) excessive deposits have been allowed to accumulate on heating element, (3) there is evidence of general abuse such as animals chewing on cord.

ADDITIONAL INSTRUCTIONS FOR USE IN A BIRD BATH

For your convenience this heater is supplied with a six foot cord. Install this heater so the electrical connection is not on the ground or snow. Do this by wrapping the cord around the base of your bird bath or coiling cord through the clamp and securing, **TIGHT** against your bird bath.

We recommend applying weight (rock etc.) to the top of the plastic housing when used in a bird bath. This will keep the deicer flat in the bird bath.

The clamp enclosed with this deicer is designed primarily for a pail or pan. It will work on some bird baths.

NEVER ALLOW THIS HEATER TO BE PULLED OR BLOWN FROM THE BIRD BATH WHILE PULGED IN.

Always apply weight to the deicer in the bird bath. **STAKE** the cord (making sure the electrical connection is above the snow line) at the base of your bird bath — this will minimize the risk of your heater being pulled from the bird bath.

PROTECTION AGAINST DAMAGING LIME BUILD UP

While using this heater — empty and refill your bird bath periodically. This will eliminate build-up of dissolved lime in the water. See use section under maintenance.

PLEASE NOTE: Read and follow the instructions under the section title "GENERAL INSTRUCTIONS" as well.