



ALLIED PRECISION INDUSTRIES, INC.  
705 E. North Street  
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## Instructions for Floating De-icers Model 521G & Model 621G Setup and Operation

### IMPORTANT

*The use of the guard is mandatory to prevent the heating element from coming into contact with combustible materials such as the side or bottom of a non-metallic tank. See the back of this sheet for instructions on attaching the guard. Read and follow all instructions in this sheet.*

### SPECIFICATIONS

Model 521G: 1500 watts, 120 VAC, 60 Hz

Model 621G: 1000 watts, 120 VAC, 60 Hz

### INSTALLATION

#### 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 the heater will be used.
2. Route the supply cord and locate the heater so as to be protected from damage.
3. Do not use extension cords.
4. Inspect the cord before using.
5. Unplug the heater at receptacle outlet when not in use or before removing from tank or pond.
6. Store heater indoors after winter season.
7. Connect to properly grounded outlets only.
8. **Connect only to a circuit that is protected by a Ground Fault Circuit Interrupter (GFCI).** This is a sensitive device that cuts off the electricity if there is any leakage of current. This device may be obtained from any electrician or hardware store.

#### Maintenance

Do not allow lime or other impurities in the water to build up on the heating element. The frequency of cleaning depends directly upon the composition of your water supply. Lime removing cleaners can be obtained at any farm or hardware store.

#### Troubleshooting

The de-icer has been fully tested and is guaranteed to perform to specifications; there are no user adjustments or modifications on the unit. However, you can perform certain checks for the following conditions:

- *The tank or pond freezes over:*

Unplug the unit and plug in an electrical device such as a lamp or power tool. If no power is present, check that a breaker has not been tripped or a fuse blown. If the breaker or fuse is ok, check the wiring to the outlet, otherwise remove the unit from the tank *before* resetting the breaker or replacing the fuse and test the unit with a Ground Fault Circuit Interrupter (GFCI) as described in the next section below.

If the de-icer is located far from the electrical breaker box, there could be a significant voltage drop in the wiring to the outlet, which, in turn, could reduce the power output of the de-icer. You should consult a qualified electrician if you suspect this is a problem.

If the air temperature has dropped quickly, some ice may form before the unit senses the drop in temperature. If, however, the ice has not begun melting within 2 hours, you should return the unit to the place of purchase.

- *The livestock are being shocked:*

If you suspect that the animals are being shocked when they contact the water, **DO NOT TOUCH THE WATER.** Instead, unplug the unit and remove it from the tank. If the de-icer has been plugged into a GFCI (see Installation #8) outlet and did not trip the GFCI, the unit is operating properly and is not leaking electricity to the tank. If it was not plugged into a GFCI outlet, you should locate a GFCI to test the unit. (Most newer homes will have a GFCI in the bathroom.)

To test the de-icer, place the unit into a freezer for 30 minutes to make sure the thermostats are on. Next, place the unit into water (eg. sink or bathtub), and--*without touching the unit or the water*--plug the de-icer into the GFCI for 15 seconds. If the GFCI trips, return the unit to the place of purchase.

If the GFCI does not trip, the unit is operating properly and the source of shocking is most commonly due to a leakage of voltage to the ground circuit in the electrical supply. Many times, this leakage is coming directly from the electric utility company. For help with this problem, contact Allied Precision at (800) 627-6179.

#### 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 or place of purchase for inspection and possible replacement. The warranty is voided if (1) the ground terminal on the plug has been removed, (2) excessive deposits have been allowed to accumulate on the heating element, or (3) there is evidence of general abuse such as animals chewing on the cord. This warranty does not cover incidental or consequential damage resulting from either a defect in parts, materials, or operation failure. Some states do not allow the exclusion or limitation of the above damages so the above limitation may not apply to you. No agent, employee, or representative of Allied Precision has any authority to bind Allied Precision to any affirmation, representation or warranty directed towards any products bearing the Allied Precision name, except as stated herein. This warranty gives you specific legal rights--you may also have other rights which vary from state to state.