

# IMPORTANT SAFETY INSTRUCTIONS

WHEN INSTALLING AND USING THIS ELECTRICAL EQUIPMENT, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED, INCLUDING THE FOLLOWING:

## 1. READ AND FOLLOW ALL INSTRUCTIONS

2. (For permanently installed units only) A green colored terminal (or a wire connector marked "G," "GR," "Ground," or "Grounding") is provided within the control box. To reduce the risk of electric shock, connect this terminal or connector to the grounding terminal of your electric service or supply panel with a continuous green insulated copper wire equivalent in size to the circuit conductors supplying this equipment, but no smaller than No. 12 AWG (3.3 mm<sup>2</sup>). In addition, a second wire connector is provided for bonding to local ground points. To reduce the risk of electric shock, this connector should be bonded with a No. 8 AWG (8.4 mm<sup>2</sup>) solid copper wire to any metal ladders, water pipes, or other metal within 5 feet (1.52 m) of the tub.

## SAVE THESE INSTRUCTIONS

### THE ABCO WARRANTY AND DISCLAIMERS WARRANTY

ABCO warrants all equipment manufactured by it and bearing its name to be free from defects in material and workmanship on the date of sale by an authorized ABCO Distributor to the original purchaser for use. As purchaser's sole remedy for breach of this warranty, ABCO will, for a period of twelve months from the date of sale, repair or replace any part of the equipment proven defective. This warranty applies only when the equipment is installed, operated and maintained in accordance with ABCO's written recommendations.

This warranty does not cover, and ABCO shall not be liable for, any malfunction, normal wear of parts, damage or wear caused by faulty installation, misapplication, abrasion, corrosion, inadequate or improper maintenance, negligence, accident, tampering, repair or alteration by any person other than the manufacturer, or substitution of non-ABCO component parts. Nor shall ABCO be liable for malfunction, damage or wear caused by the incompatibility with ABCO equipment of structures, accessories, equipment or materials not supplied by ABCO, or the improper design, manufacture, installation, operation or maintenance of structures, accessories, equipment or materials not supplied by ABCO.

- Contact your dealer or ABCO before removing equipment, claimed to be defective, from job site.

This warranty is conditioned upon the prepaid return of the equipment claimed to be defective for examination by ABCO to verify the claimed defect. In order to obtain warranty service, contact your dealer or ABCO Distributor (A Division of P.S.P., Inc.) for warranty return authorization and shipping instructions. If the claimed defect is verified, ABCO will repair or replace free of charge any defective parts. The equipment will be returned to the original purchaser, transportation prepaid. If inspection of the equipment does not disclose any defect in material or workmanship, repairs will be made at a reasonable charge. (charges may include the cost of parts, labor and transportation.)

### DISCLAIMERS AND LIMITATIONS

THE TERMS OF THIS WARRANTY CONSTITUTE PURCHASER'S SOLE AND EXCLUSIVE REMEDY AND ARE IN LIEU OF ANY OTHER WARRANTIES (EXPRESSED OR IMPLIED), INCLUDING WARRANTY OF MERCHANTABILITY OR WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND OF ANY NON-CONTRACTUAL LIABILITIES, INCLUDING PRODUCT LIABILITIES, BASED ON NEGLIGENCE OR STRICT LIABILITY. EVERY FORM OF LIABILITY FOR DIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES OR LOSS IS EXPRESSLY EXCLUDED AND DENIED. IN NO CASE SHALL LIABILITY EXCEED THE AMOUNT OF THE PURCHASE PRICE. ANY ACTION FOR BREACH OF WARRANTY MUST BE BROUGHT WITHIN TWO YEARS OF THE DATE OF SALE.

### EQUIPMENT NOT COVERED BY ABCO WARRANTY

ABCO MAKES NO WARRANTY, AND DISCLAIMS ALL IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO ACCESSORIES, EQUIPMENT, MATERIALS OR COMPONENTS SOLD BUT NOT MANUFACTURED BY ABCO. These items sold, but not manufactured by ABCO (such as electric motors, switches, hoses, etc.) are subject to warranty, if any, of their manufacturer. ABCO will provide purchaser with reasonable assistance in making any claim for breach of these warranties.

To the extent any provision of this warranty is prohibited by federal, state, or municipal law and cannot be preempted, it shall not be applicable. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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# FREEZE PROTECTOR™

## INSTRUCTIONS PLEASE READ AND SAVE

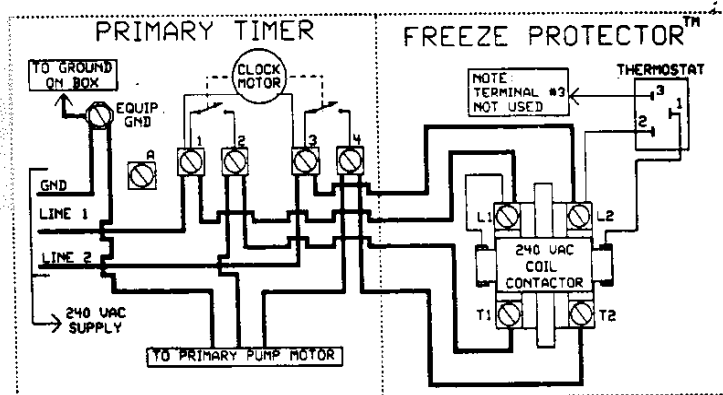
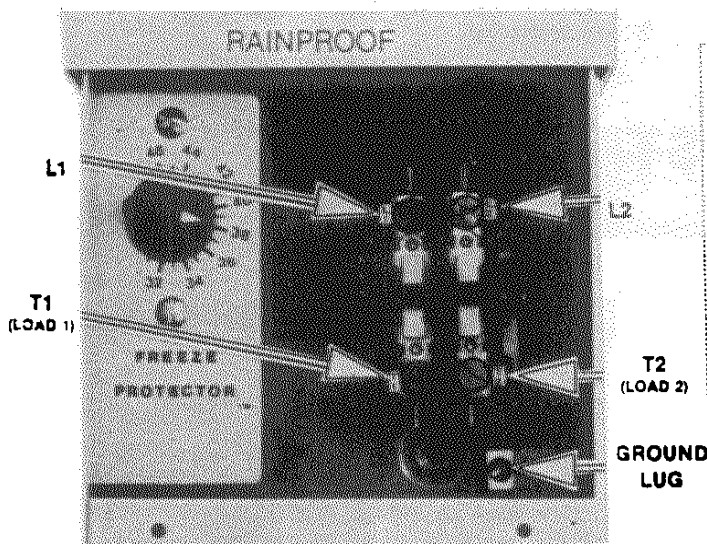
## FP-240 V

**FREEZE PROTECTOR™** is available in 120 volt and 240 volt models. Use the 120 V unit with 120 V circuit only. Use the 240 V unit with 240 V circuit only. **FREEZE PROTECTOR™** is **rainproof** when mounted in an upright position. Turn OFF electric supply to the pump motor before making any connections. Use 12 gauge insulated copper wire run in conduit for connection.

### IMPROPER INSTALLATION VOIDS WARRANTY

Warranty is void if chemicals are stored in the vicinity of this control.

**DANGER:** All ABCO controls must be factory installed or installed by a licensed electrician according to the instructions.



240 V WIRING SCHEMATIC

Connect **FREEZE PROTECTOR™** ground lug to time clock ground. Connect L1 of F/P to LINE 1 of time clock. Connect L2 of F/P to LINE 2 of time clock. Connect T1 (Load 1) of F/P to Load 1 of time clock. Connect T2 (Load 2) of F/P to Load 2 of time clock.

### IMPORTANT

After installation is complete, follow instructions in Test 1 and Test 2.

#### Test 1

Check for proper phasing of **FREEZE PROTECTOR™** and time clock. Turn on power (main circuit breaker). If circuit breaker trips when **FREEZE PROTECTOR™** and time clock are engaged simultaneously, proper phasing was not maintained, Reverse wires going to T1 and T2 of **FREEZE PROTECTOR™**.

#### Test 2

Check unit for proper operation; TURN OFF POWER (main circuit breaker), turn time clock to off position, turn thermostat dial to lowest setting (31), place ice cube on capillary tube of thermostat, turn on power (main circuit breaker). wait 15 seconds, then slowly turn thermostat dial toward 38. **FREEZE PROTECTOR™** should engage and pump motor will come on. Unit should disengage and turn pump motor off when ice cube has been removed. (CAUTION: Remove ice cube with a small piece of wood or plastic. **DO NOT USE** any type of metal, screwdriver, etc.) Insert high voltage shield and set thermostat dial at 38, replace lid and secure with two screws.

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"IMPORTANT NOTICE"

If this unit is installed in a location where it could get direct sun light any time of the day from sun-up to sun-down, Then remove the two thermostat screws from the left side of the unit, Tilt top of thermostat out from box and remove, be careful with wires so they don't become loose or unplugged from unit. Uncoil approximately 7" of copper capillary tube and extend it thru small pre-drilled hole in bottom of unit, Make a gentle 90° bend to the rear of box, Make another gentle 90° bend to the right, Make adjustments in copper tube so that it does not touch bottom of box or mounting surface, (House wall, Fence, Etc.)

[NOTE: capillary tube is attached to thermostat body with a solder joint, Be careful and do not break this joint or tube as this will let vapor escape and thermostat will not function.]

