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Date: _____

RGA #: _____
(REQUIRED: Please call factory to obtain)

DISTRIBUTOR

Name: _____
Branch: _____
Tested By: _____
Phone: _____
Fax: _____
E-mail: _____

CONTRACTOR/CUSTOMER

Name: _____
Address: _____
City: _____ ST: _____ Zip: _____
Phone: _____
Fax: _____
E-Mail: _____

PowerCenter™

Stainless Steel

- Modular
- Non-Modular

- T-100SS
- T-150SS
- T-250SS
- T-500SS
- T-1000SS
- H30-250SS
- H30-500SS
- H30-1000SS

Green

- Plain
- Photocell

Timing Option

- Plain SS
- Analog Timer
- Analog Timer & Photocell
- Digital Timer
- Digital Timer & Photocell
- Photocell only
- X-10
- 12 volt Islander Relay
- Sprinkler Control
- V-600 Dimmer

Physical Damage?

- Yes
- No

PowerCenter™ Testing

- Input Voltage: _____
- Place 4 position switch in HI position.
- Insert new fustat(s).
- Make sure PowerCenter does NOT have a load attached.
- If toggle switch present, switch to ON/TEST position...continue to Voltage Test below.
 - If no toggle switch, or plain SS with no timer options...use red jumper wire between terminals 1 & 2 inside module compartment (UNPLUG FIRST! MODULE COMPARTMENT IS 120 VOLTS!)...continue to Voltage Test below.
 - If non-modular or green:
 - Plain with no control options...plug in and continue to Voltage Test below.
 - With timing options: Follow test procedure below for timer/photocell:

Timer/Photocell Test Procedure:

- Analog Timers: Make sure timer is set properly:
 - Grasslin with white pins, no manual switch: Pins must be pulled out away from clock center in a CONTINUOUS SERIES. Spin dial clockwise until timer clicks ON.
 - Intermatic with red pins: Pins must be pulled up away from clock face in a CONTINUOUS SERIES. Spin dial clockwise until timer clicks ON.
 - Grasslin with white pins & manual switch: Turn manual switch to "O" (ON) position.
 - Intermatic with one red & one green pin: Insert green pin in dial. Spin dial clockwise until timer clicks ON.
- Digital Timers: Press manual ON button and continue to Voltage Test below.
- If photocell is present or is the only timing option, photocell must be covered with black electrical tape to simulate darkness. Photocell activates within 20 seconds to 10 minutes. Photocell will NOT activate immediately.

Continue to Voltage Test below

Voltage Test:

- Using VOLT METER ONLY, test for AC (not DC) output voltage.
 - RECORD OUTPUT VOLTAGE: HI _____ MED _____ LO _____

YES! PowerCenter™ WORKS! REPLACE TIMER/PHOTOCELL/CONTROL OPTION IF NECESSARY & RETURN POWERCENTER TO CUSTOMER.

NO! CALL NIGHTSCAPING® FOR RGA# BEFORE RETURNING PowerCenter™. THIS REPORT MUST ACCOMPANY PowerCenter™ UPON RETURN.

Comments: _____

TROUBLESHOOTING MODULAR POWERCENTERS™ IN THE FIELD

NECESSARY TROUBLESHOOTING TOOLS:

- Volt meter indicating 120 and 12 volts AC (NOT a test light).
- Additional fustats of same size and type or a fustat tester.
- Flat & Phillips screwdrivers.
- Needle-nose pliers.

GENERAL TROUBLESHOOTING PROCEDURE:

1. Test power source for 120 volt AC power.
2. Remove ALL low voltage cables from the low voltage terminal blocks.
3. Insert new fustat(s) of the same size and type, or use fustat tester. Make sure fustat(s) is snug in the fustat holder (hand tighten only).
4. Check the following items before testing:
 - Black 4 position switch is in the HI, MED, or LO position...not all the way to the right in the OFF position. Make sure it is securely in one of these positions. If switch sets in-between any position, it could produce a false "no power" reading.
 - Stainless steel toggle switch, if present, must be in the OFF position for normal operation.
5. After all above conditions have been met, manually flip the stainless steel toggle switch to the ON position. If stainless steel toggle switch is not present, proceed to #7.
6. Test each set of low voltage terminal blocks for 12 volt AC power using volt meter. Place volt meter leads INSIDE the low voltage terminal blocks where the low voltage cables install. DO NOT test on top of the screws of the low voltage terminal blocks. This may produce a false "no power" reading.
 - If power, proceed to #7.
 - If no power, repeat the above process 2-3 more times until it is determined that there is absolutely no power at the low voltage terminal blocks.
7. Follow troubleshooting instructions for specific module installed in powercenter:
 - If power after troubleshooting module, powercenter and module have been determined to be working properly. Re-connect low voltage cables, system is working properly.
 - If no power after troubleshooting module, proceed to #8.
8. UNPLUG POWERCENTER FROM POWER SOURCE! Remove screws holding module in place and pull module out from module compartment, but DO NOT remove module wiring. Make sure module is properly wired to powercenter.
 - If improperly wired, re-wire per specific module wiring diagram and repeat step #7.
9. MAKE SURE POWERCENTER IS UNPLUGGED FROM POWER SOURCE! Remove module completely, including wiring, from the module compartment. Make sure there are NO wires connected to any of the 120 volt terminals of the powercenter inside the module compartment.
10. If stainless steel toggle switch is present, Cover module compartment and plug powercenter in. Turn toggle switch to ON position. If stainless steel toggle switch is not present, UNPLUG POWERCENTER FROM POWER SOURCE! Use one wire from the module (with spade lugs on BOTH ends) to jump between 120 volt powercenter terminal #1 and 120 volt powercenter terminal #2. Cover module compartment and plug powercenter in. Test each set of low voltage terminal blocks for 12 volt AC power using volt meter.
 - If power, powercenter is working properly, module is bad. Replace module. DO NOT REPLACE ENTIRE POWERCENTER, REPLACE MODULE ONLY.
 - If still no power, repeat steps 9 & 10 until it is determined that there is absolutely no power at the low voltage terminal blocks. If repeat processes produce no power and all above steps and conditions are met, powercenter may be bad. Call factory for service.

MOST "NO POWER" POWERCENTER PROBLEMS ARE A RESULT OF BAD FUSTATS OR BAD TIMER/PHOTOCELL. A FUSTAT WILL NOT ALWAYS "LOOK BURNT" IF BAD. TEST FUSTAT(S) FOR CONTINUITY TO DETERMINE GOOD OR BAD. FOLLOW ALL TROUBLESHOOTING PROCEDURES THOROUGHLY. MOST LIKELY IT IS ONLY THE CONTROL MODULE THAT NEEDS REPLACEMENT RATHER THAN RETURNING THE ENTIRE POWERCENTER. THOROUGH AND COMPLETE TROUBLESHOOTING WILL SAVE CONSIDERABLE TIME & MONEY.

SS MODULE: If stainless steel toggle switch is present, turn toggle switch to ON position. If stainless steel toggle switch is not present, UNPLUG POWERCENTER FROM POWER SOURCE! Remove module compartment cover. Use one wire from the module (with spade lugs on BOTH ends) to jump between 120 volt powercenter terminal #1 and 120 volt powercenter terminal #2. Cover module compartment and plug powercenter in. Test each set of low voltage terminal blocks for 12 volt AC power using volt meter.

- If power, powercenter is working properly.
- If no power, repeat above process 2-3 times until it is determined that there is absolutely no power at the low voltage terminal blocks. If repeat processes produce no power and all above steps and conditions are met, powercenter may be bad. Call factory for service.

ANALOG TIMER:

1. Set timer properly:
 - White pins/no switch inside dial: Pull series of pins AWAY from clock center.
 - Red pins: Pull series of pins UP from clock face.
 - White pins/switch inside dial: Push series of pins IN towards clock center.
 - Green & Red pins: Green is ON pin, Red is OFF pin.
2. Spin analog timer clockwise until ON pin(s) "click ON". Test each set of low voltage terminal blocks for 12 volt AC power using volt meter.
 - If power, powercenter and module are working properly.
 - If no power, repeat above process 2-3 times until it is determined that there is absolutely no power at the low voltage terminal blocks.

DIGITAL TIMER:

1. Set timer properly per digital timer instructions.
2. Press digital timer manual ON button. Test each set of low voltage terminal blocks for 12 volt power using volt meter.
 - If power, powercenter is working properly.
 - If no power, proceed to #3.
3. Set a dummy program on the digital timer to turn ON within a few minutes. Set the program to turn OFF after 5 minutes. Once digital timer has turned ON, test each set of low voltage terminal blocks for 12 volt AC power using volt meter.
 - If power, powercenter and module are working properly.
 - If no power, repeat above process 2-3 times until it is determined that there is absolutely no power at the low voltage terminal blocks.

PHOTOCELL:

1. Cover photocell with black electrical tape to simulate darkness. Covering the photocell with black electrical tape WILL NOT disable the photocell.
2. Test each set of low voltage terminal blocks for 12 volt AC power using volt meter. It may take as long as 10 minutes for the photocell to adjust and turn the system on.
 - If power, powercenter and module are working properly.
 - If no power, repeat above process 2-3 times until it is determined that there is absolutely no power at the low voltage terminal blocks.

NOTE: If photocell is installed with analog or digital timer, photocell MUST be covered with black electrical tape to simulate darkness and it may take as long as 10 minutes for the photocell to adjust and turn the system on.

ALL OTHER MODULES: UNPLUG POWERCENTER FROM POWER SOURCE & remove module from module compartment. Follow troubleshooting procedure for SS Module.

- If power, powercenter is working properly. Replace module.
- If no power, repeat above process 2-3 times until it is determined that there is absolutely no power at the low voltage terminal blocks.

If repeat processes produce no power and all above steps and general troubleshooting conditions are met, and power is derived from the powercenter WITHOUT the module in place (see SS module troubleshooting instructions), module is bad. Replace ONLY the control module. DO NOT replace the entire powercenter.