IMPORTANT!!!

PLEASE TAKE THE TIME TO FILL OUT THIS FORM COMPLETELY. FILE IT IN A SAFE PLACE. IN THE EVENT YOU EXPERIENCE PROBLEMS WITH, OR HAVE QUESTIONS CONCERNING YOUR CONTROLLER, THE FOLLOWING INFORMATION IS NECESSARY TO OBTAIN PROPER SERVICE AND PARTS.

MODEL #     AA1MLED-230V

SERIAL #

PURCHASE DATE

PURCHASED FROM
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APPENDIX

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OL1VLED2 ......................................................................................... 100656i (REV E)
WRAPLOCK FASTENING DETAIL ......................................................... 100984
1.0 GENERAL INFORMATION

The TWR Lighting®, Inc. (TWR®) Model AA1MLED-230V Controller is for A1 lighting of towers 151’ to 350’ AGL in accordance with the FAA Advisory Circular 70/7460-1K. One (1) LED beacon should be placed at the top. Obstruction lights should be placed at mid-level with respect to overall tower height.

The flash rate of the LED beacon is 30 per minute. The LED sidelights burn steady.

A by-pass switch (SW1) allows the controller to be turned on during daylight hours without covering the photocell. This is particularly helpful since the controller can be mounted indoors while the photocell is outdoors. SW1 can be operated by turning the switch to the “On” position.

The photocell is the three (3) blade, twist to lock, type.

Power supplied to the controller shall be 230V AC single phase.

The controller housing is rated at NEMA 4X. It is suitable for indoor or outdoor mounting.

Controller functions that are monitored by remote alarms in the form of dry contact closures (Form C) are as follows:

**POWER FAILURE**
Monitors 230V AC to the controller. Alarms in the event of power failure, or tripped circuit breaker.

**LIGHTS “ON”**
Gives an indication whenever the controller is activated.

**LED BEACON**
Will give an alarm in the event the LED beacon fails, along with visual indicator for that circuit.

**FLASHER FAILURE**
Will give an alarm in the event of failure of flasher.

**OBSTRUCTION LIGHTS**
Will give an alarm when one (1) of three (3) LED sidelights fails.
2.0 INSTALLATION INSTRUCTIONS

2.1 MOUNTING THE CONTROL CABINET
(Refer to Drawing 1215-R)

The power supply control cabinet can be located at the base of the structure or in an equipment building. Mounting footprints are shown on drawing 1215-R. Power wiring to the control cabinet should be in accordance with local methods and the National Electrical Codes (NEC).

2.1.1 If the control cabinet is mounted inside an equipment building, the photocell should be mounted vertically on ½” conduit outside the building above the eaves facing north. Wiring from the photocell socket to the control cabinet should consist of one (1) each, red, black, and white wires. The white wire is connected to the socket terminal marked “N,” the black wire is connected to the socket terminal marked “Li,” and the red wire is connected to the socket terminal marked “Lo.” Care must be taken to assure that the photocell does not “see” any ambient light that would prevent it from switching into the nightmode.

2.1.2 If the control cabinet is mounted outside an equipment building, the photocell should be mounted vertically on ½” conduit so the photocell is above the control cabinet. As above, the photocell should be positioned so that it does not “see” ambient light, which would prevent it from switching to the nightmode. The photocell wiring is the same as in 2.1.1.

2.1.3 The wiring from the photocell, the service breaker, LED Beacon, and the LED sidelights should enter the control cabinet through the watertight connectors in the bottom of the cabinet. Inside the cabinet, the connections will be made on the terminal strips and circuit breakers located at the bottom of the chassis. These connections are made as follows:
2.2 EXTERNAL PHOTOCELL WIRING
(Refer to Drawing 1215-R)

2.2.1 Connect the **BLACK** wire from the photocell to terminal block TB2 marked “L.”

2.2.2 Connect the **RED** wire from the photocell to terminal block TB2 marked “SSR.”

2.2.3 Connect the **WHITE** wire from the photocell to terminal block TB2 marked “N.”

2.3 POWER WIRING
(Refer to Drawing 1215-R)

2.3.1 Power wiring to the control cabinet should be in accordance with local methods and the National Electrical Codes (NEC).

2.3.2 Circuit breaker needs to be rated at 10 amps.

2.3.3 Connect incoming 230V AC “Hot” to terminal block TB1 marked “L.”

2.3.4 Connect the neutral wire(s) to one (1) of the terminal blocks on TB1 marked “N.”

2.3.5 Connect the AC ground to the grounding lug on the aluminum mounting plate.

2.4 LED BEACON AND LED SIDELIGHT WIRING
(Refer to Drawings 1215-R and 800-01)

2.4.1 Connect the **YELLOW** wire from the LED Beacon to the circuit breaker marked “B.”

2.4.2 Connect the **RED** wire from the LED sidelight to the circuit breaker marked “S.”

2.4.3 Connect the **WHITE** neutral wire(s) to one (1) or more of the terminals marked “N” on TB1.
2.5 **LED BEACON AND LED SIDELIGHT ALARM WIRING**
(Refer to Drawings 1215-R and 1215-S)

2.5.1 Alarm relays K1-K3, and alarm Modules M2, and M3, are provided for independent contact closures for: Power Failure, Lights “On,” Flasher Failure, LED Beacon Burnout, and LED Sidelight Burnout.

2.5.2 Alarm Wiring: To utilize all of the red light alarms, the customer will need five (5) pairs of wires to interface with his alarm device. One (1) wire from each of the five (5) pairs will terminate at the points marking common (C). The remaining wire from each pair will terminate as follows:

- **Power Failure Alarm:** Connect to relay K1, terminal #3, for normally open (OR) terminal #6, for normally closed monitoring.

- **Lights “On”:** Connect to relay K2, terminal #3, for normally open (OR) terminal #6, for normally closed monitoring.

- **Flasher Failure:** Connect to relay K3, terminal #6, for normally open (OR) terminal #3, for normally closed monitoring.

- **“B” Burnout:** Connect to Module M3, terminal #18, for normally open (OR) terminal #16, for normally closed monitoring.

- **“S” Lamp Burnout:** Connect to Module M2, terminal #18, for normally open (OR) terminal #16, for normally closed monitoring.
2.5.3 Alarm Testing: To test alarms, follow the procedures using an “ohm” meter between alarm common and alarm points.

**Power Failure:** Pull circuit breaker at electrical panel.

**Lights “On”:** Operate photocell by-pass switch SW1 or cover the photocell.

**LED Beacon and LED Sidelights:**
Trip breakers on the controller panel.
3.0 THEORY OF OPERATION

3.1 POWER SUPPLY

230V AC enters the controller from the circuit breaker panel. Line “L” sits at the PRD, waiting to be switched, and also keeps the power failure relay K1 energized. When the 6390-FAA photocell is activated, Line “SSR” energizes the coil of the PRD and K2 “Lights On” relay. This also can be accomplished by using the photocell by-pass switch (SW1).

3.2 LED SIDELIGHTS

Line LDS is sent to Module M2, which is a current sensing module for LED sidelights. The RM22JA31MR monitors one (1) level of LED sidelights, and will provide a contact closure along a visual indication if one (1) or more lamps fail.

3.3 LED BEACON

Line LDB is sent to Modules M1 and M3. M1 is the primary flasher for the LED beacon. It is then sent through the current sensing Module M3, then to the circuit breaker output marked “B.” If Module M3 detects an LED beacon burnout, then that module would provide a contact closure along with a visual indication for that circuit.

Module M4 is a 10 second time delay module for flasher failure of the LED beacon. If Module M4 detects a flasher failure, it would then send voltage (230V AC) to Relay K3, which then will provide a contact closure for the flasher circuit.
4.0 MAINTENANCE

4.1 RED OBSTRUCTION LIGHTING

No scheduled maintenance is required. Perform on an “as needed” basis only.

TOOLS REQUIRED: NONE

4.2 L-864 LED BEACON REPLACEMENT

No scheduled maintenance is required. Perform on an “as needed” basis only.

4.3 L-864 CONTROLLER

No scheduled maintenance is required. Perform on an “as needed” basis only.

4.4 PHOTOCELL

The photocell is a sealed unit. No maintenance is needed or required other than replacement as necessary.
### 5.0 MAJOR COMPONENTS PARTS LIST

<table>
<thead>
<tr>
<th>QTY</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6390-FAA</td>
<td>120 – 240V Photocell (This replaces the 102FAA Photocell)</td>
</tr>
<tr>
<td>1</td>
<td>PF-250</td>
<td>Solid State Flasher (M1) 120-230V</td>
</tr>
<tr>
<td>1</td>
<td>STA08015</td>
<td>35k ohm 20W Resistor (R1)</td>
</tr>
<tr>
<td>1</td>
<td>PRD7AY0-240V</td>
<td>Mechanical Load Contactor (PRD)</td>
</tr>
<tr>
<td>3</td>
<td>PB27E122</td>
<td>Octal Sockets</td>
</tr>
<tr>
<td>3</td>
<td>9KE 240V</td>
<td>SPDT Relay (K1 – K3)</td>
</tr>
<tr>
<td>1</td>
<td>STJ01002</td>
<td>Switch (SW1)</td>
</tr>
<tr>
<td>1</td>
<td>VJ1210HWPL2</td>
<td>Enclosure</td>
</tr>
<tr>
<td>6</td>
<td>8WA1204</td>
<td>Terminal Block (TB1 &amp; TB2)</td>
</tr>
<tr>
<td>2</td>
<td>8WA1802</td>
<td>Rail Link</td>
</tr>
<tr>
<td>2</td>
<td>8WA1808</td>
<td>Terminal Block End Stop</td>
</tr>
<tr>
<td>2</td>
<td>S261D1</td>
<td>1 amp Circuit (B &amp; S)</td>
</tr>
<tr>
<td>2</td>
<td>RM22JA31MR</td>
<td>LED sidelight and LED beacon Current sensors (M2 &amp; M3)</td>
</tr>
</tbody>
</table>
# Suggested Spare Parts List

<table>
<thead>
<tr>
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<th>Part Number</th>
<th>Description</th>
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<tr>
<td>1</td>
<td>6390-FAA (This replaces the 102FAA Photocell)</td>
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<tr>
<td>1</td>
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<td>Solid State Flasher (M1) 120-230V</td>
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<tr>
<td>2</td>
<td>9KE 240V</td>
<td>SPDT Relay (K1 – K3)</td>
</tr>
<tr>
<td>1</td>
<td>RM22JA31MR</td>
<td>LED sidelight and LED beacon Current sensors (M2 &amp; M3)</td>
</tr>
</tbody>
</table>
Warranty & Return Policy

TWR Lighting®, Inc. (“TWR”) warrants its products (other than “LED Product”) against defects in design, material (excluding incandescent bulbs) and workmanship for a period ending on the earlier of two (2) years from the date of shipment or one (1) year from the date of installation.

TWR Lighting®, Inc. (“TWR”) warrants its “LED Product” against defects in design, material and workmanship for a period of five (5) years from the date of shipment. TWR®, at its sole option, will, itself, or through others, repair, replace or refund the purchase price paid for “LED Product” that TWR® verifies as being inoperable due to original design, material, or workmanship. All warranty replacement “LED Product” is warranted only for the remainder of the original warranty of the “LED Product” replaced. Replacement “LED Product” will be equivalent in function, but not necessarily identical, to the replaced “LED Product.”

TWR Lighting®, Inc. (“TWR”) warrants its “LED Product” against light degradation for a period of five (5) years from the date of installation. TWR®, at its sole option, will, itself, or through others, repair, replace, or refund the purchase price paid for “LED Product” that TWR® verifies as failing to meet 75% of the minimum intensity requirements as defined in the FAA Advisory Circular 150/5345-43G dated 09/26/12. All warranty replacement “LED Product” is warranted only for the remainder of the original warranty of the “LED Product” replaced. Replacement “LED Product” will be equivalent in function, but not necessarily identical, to the replaced “LED Product.”

Replacement parts (other than “LED Product”) are warranted for 90 days from the date of shipment.

Conditions not covered by this Warranty, or which might void this Warranty are as follows:

x Improper Installation or Operation
x Misuse
x Abuse
x Unauthorized or Improper Repair or Alteration
x Accident or Negligence in Use, Storage, Transportation, or Handling
x Any Acts of God or Nature
x Non-OEM Parts

The use of Non-OEM parts or modifications to original equipment design will void the manufacturer warranty and could invalidate the assurance of complying with FAA requirements as published in Advisory Circular 150/5345-43.
Warranty & Return Policy
(continued)

Field Service – Labor, Travel, and Tower Climb are not covered under warranty. Customer shall be obligated to pay for all incurred charges. An extensive network of certified and insured Service Representatives is available if requested.

Repair, Replacement or Product Return RMA Terms – You must first contact our Customer Service Department at 713-973-6905 to acquire a Return Merchandise Authorization (RMA) number in order to return the product(s). Please have the following information available when requesting an RMA number:

- The contact name and phone number of the tower owner or
- The contact name and phone number of the contractor
- The site name and number
- The part number(s)
- The serial number(s) (if any)
- A description of the problem
- The billing information
- The Ship To address

This RMA number must be clearly visible on the outside of the box. If the RMA number is not clearly labeled on the outside of the box, your shipment will be refused. Please ensure the material you are returning is packaged carefully. The warranty is null and void if the product(s) are damaged in the return shipment.

All RMAs must be received by TWR LIGHTING®, INC., 10810 W. LITTLE YORK RD., #130, HOUSTON, TX 77041-4051, within 30 days of issuance.

Upon full compliance with the Return Terms, TWR® will replace, repair and return, or credit product(s) returned by the customer. It is TWR®’s sole discretion to determine the disposition of the returned item(s).
Warranty & Return Policy
(continued)

**RMA Replacements** – Replacement part(s) will be shipped and billed to the customer for product(s) considered as Warranty, pending return of defective product(s). When available, a certified reconditioned part is shipped as warranty replacement with a Return Merchandise Authorization (RMA) number attached. Upon receipt of returned product(s), inspection, testing, and evaluation will be performed to determine the cause of defect. The customer is then notified of the determination of the testing.

- Product(s) that is deemed defective and/or unrepairable and covered under warranty - a credit will be issued to the customer’s account.
- Product(s) found to have no defect will be subject to a **$75.00 per hour testing charge (1 hour minimum), which will be invoiced to the customer.** At this time the customer may decide to have the tested part(s) returned and is responsible for the return charges.
- Product(s) under warranty, which the customer does not wish returned, the customer will be issued a credit against the replacement invoice.

**RMA Repair & Return** – A Return Merchandise Authorization (RMA) will be issued for all part(s) returned to TWR® for repair. Upon receipt of returned product(s), inspection, testing, and evaluation will be performed to determine the cause of defect. The customer is then notified of the determination of the testing. If the returned part(s) is deemed unrepairable, or the returned part(s) is found to have no defect, the customer will be subject to a **$75.00 per hour testing charge (1 hour minimum), which will be invoiced to the customer.** Should the returned parts be determined to be repairable, a written estimated cost of repair will be sent to the customer for their written approval prior to any work being performed. In order to have the tested part(s) repaired and/or returned, the customer must issue a purchase order and is responsible for the return shipping charges.

**RMA Return to Stock** – Any product order that is returned to TWR® for part(s) ordered incorrectly or found to be unneeded upon receipt by the customer, the customer may be required to pay a minimum **20% restocking fee.** Product returned for credit must be returned within 60-days of original purchase, be in new and resalable condition, and in original packaging. Once the product is received by TWR it’s condition will be evaluated and a credit will be issued only once it is determined that the RMA Return Terms have been met.

**Credits** – Credits are issued once it is determined that all of the Warranty and Return Terms are met. All credits are processed on Fridays. In the event a Friday falls on a Holiday, the credit will be issued on the following Friday.
Warranty & Return Policy
(continued)

**Freight** – All warranty replacement part(s) will be shipped via ground delivery and paid for by TWR®. Delivery other than ground is the responsibility of the customer.

Remedies under this warranty are limited to provisions of replacement parts and repairs as specifically provided. In no event shall TWR® be liable for any other losses, damages, costs, or expenses incurred by the customer, including, but not limited to, loss from failure of the product(s) to operate for any time, and all other direct, indirect, special, incidental, or consequential damages, including all personal injury or property damage due to alleged negligence, or any other legal theory whatsoever. This warranty is made by TWR® expressly in lieu of all other warranties, whether expressed or implied. Without limiting the generality of the foregoing, TWR® makes no warranty of merchantability or fitness of the product(s) for any particular purpose. TWR® expressly disclaims all other warranties.
RETURN MERCHANDISE AUTHORIZATION (RMA) FORM

RMA#: __________________________  DATE: __________________________

CUSTOMER: ______________________________________________________

_______________________________________________________________

CONTACT: __________________________ PHONE NO.: __________________

ITEM DESCRIPTION (PART NO.): ______________________________________

_______________________________________________________________

MODEL NO.: __________________________ SERIAL NO.: __________________

ORIGINAL TWR INVOICE NO.: _________ DATED: _________________

DESCRIPTION OF PROBLEM: ______________________________________

_______________________________________________________________

_______________________________________________________________

_______________________________________________________________

SIGNED __________________________  DATE NEEDED __________________

RETURN ADDRESS: ________________________________________________

_______________________________________________________________

PLEASE RETURN PRODUCT TO: 10810 W. LITTLE YORK RD., #130 HOUSTON, TX 77041-4051
RETURN MERCHANDISE AUTHORIZATION (RMA) FORM

RMA#: ___________________________ DATE: ___________________________

CUSTOMER: ___________________________

_____________________________________________________________________

CONTACT: ___________________________ PHONE NO.: _______________________

ITEM DESCRIPTION (PART NO.): ___________________________

_____________________________________________________________________

MODEL NO.: ___________________________ SERIAL NO.: _______________________

ORIGINAL TWR INVOICE NO.: _________ DATED: _________________

DESCRIPTION OF PROBLEM: ___________________________________________

_____________________________________________________________________

_____________________________________________________________________

_____________________________________________________________________

SIGNED ___________________________ DATE NEEDED _______________

RETURN ADDRESS: ________________________________________________

_____________________________________________________________________

PLEASE RETURN PRODUCT TO: 10810 W. LITTLE YORK RD., #130 HOUSTON, TX 77041-4051
NOTES:
1. WHEN REPLACING METAL BASE MODULES USE HEAT SINK COMPOUND BETWEEN MODULE AND ALUMINUM PLATE.
2. PLUG 6390–F44 PHOTOCELL INTO 43109 TWIST LOCK RECEPTACLE AND TWIST TO LOCK.
3. WIRES ARE CONNECTED LETTER TO LETTER. (EXAMPLE) LDB TO LDB TO LDB.
# Parts List

<table>
<thead>
<tr>
<th>ITEM</th>
<th>QTY</th>
<th>PART NUMBER</th>
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<td>1</td>
<td>PHOTOCELL</td>
</tr>
<tr>
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<td>2</td>
<td>6-32 x 1” SCREW</td>
</tr>
<tr>
<td>3</td>
<td>1</td>
<td>RECEPTACLE SOCKET</td>
</tr>
<tr>
<td>4</td>
<td>1</td>
<td>RECEPTACLE GASKET</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>RECEPTACLE HOUSING</td>
</tr>
<tr>
<td>6</td>
<td>1</td>
<td>1/2” CONDUIT LOCKNUT</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>3/4” TO :1/2” REDUCER</td>
</tr>
</tbody>
</table>

---

**NOTES:**

1. ITEM #7 CAN BE USED TO REDUCE 3/4" CCNDUIT TO 1/2" CONDUIT AT THE HOUSING OR AT THE CONTROLLER ITSELF.

2. IF ADDITIONAL WIRE IS REQUIRED OVER THE FACTORY 20', USE THE FOLLOWING CHART.

   - 21' TO 300' - 16 AWG TFFN
   - 301' TO 500' - 14 AWG TFFN

---

**PHOTOCELL HOUSING DETAIL**

---

**Design:**

- **DATE:** 10/18/1995
- **REV:** 1
- **AUTHOR:** H. UZAMORANO
- **DESCRIPTION:** UPDATED NOTES

---

**Document:**

- **DATE:** 02/03/2015
- **REV:** 1
- **AUTHOR:** H. UZAMORANO
- **DESCRIPTION:** UPDATED NOTES
120VAC PRODUCT SPECIFIC SETTINGS

<table>
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<th>#2</th>
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<td>E2</td>
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<td>30</td>
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<td>ORGA</td>
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<td>STLDBEACON2</td>
<td>E3</td>
<td>&lt;1</td>
<td>35</td>
<td>20</td>
<td>30</td>
<td>OFF</td>
<td>ORGA</td>
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</tbody>
</table>

*NO MEMORY

FUNCTIONS

1) Configuration: Selection of operation mode (<1 / >1 / >1<) with or without memory.
2) Adjustment of current threshold as % of setting range.
3) Hysteresis adjustment from 5% to 50%.
4) Time Delay adjustment from 0.1 to 30sec.
5) Diagnostic button.
6) Relay outputs status (Yellow) LED.
   • Steady yellow LED indicates relay energized
   • Blinking yellow LED indicates current below threshold and the time delay has started
   • Yellow LED "OUT" indicates relay de-energized
7) Dial Pointer (Green) LED
   • Steady green LED indicates that supply to the RM22 is present

Due to current draw tolerances slight adjustments to setting #2 may be needed for proper alarming.
Parts List

<table>
<thead>
<tr>
<th>ITEM</th>
<th>QTY</th>
<th>PART NUMBER</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>OL1VLED2</td>
<td>L810 OBSTRUCTION LIGHT</td>
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<tr>
<td>*</td>
<td>1.1</td>
<td>100588_RE</td>
<td>OL 6LED BASE PLATE</td>
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<tr>
<td>*</td>
<td>1.2</td>
<td>100591</td>
<td>OL 6LED STAR DISK</td>
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<td>*</td>
<td>1.3</td>
<td>100680</td>
<td>OL1/2 SERIAL # LABEL</td>
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<td>1A0290</td>
<td>5/32&quot; ID RUBBER GROMMET</td>
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<td>*</td>
<td>1.5</td>
<td>STD05008</td>
<td>LED EMITTER</td>
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<td>OL0G</td>
<td>OL GASKET</td>
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<td>AP100846</td>
<td>SIDELIGHT LENS CLEAR ACRYLIC</td>
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<td>106V</td>
<td>LENS HOLDER RING</td>
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<td>STED0-047</td>
<td>LED VERTICAL PCB</td>
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<td>18PRSS</td>
<td>1/8 X .45 SS POP RIVET</td>
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<td>*</td>
<td>1.11</td>
<td>PS90-260/24</td>
<td>POWER SUPPLY</td>
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<tr>
<td>*</td>
<td>1.12</td>
<td>20RED</td>
<td>#20AWG RED BELDON WIRE</td>
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<tr>
<td>*</td>
<td>1.13</td>
<td>WIRENUTBLU</td>
<td>BLUE WIRE NUT</td>
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<td>HC255SS</td>
<td>SIDELIGHT LATCH</td>
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<td>1/16 HOL 7X7 S.S. WIRE</td>
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<td>832X14PH</td>
<td>8-32 X 1/4 PH SS SLOT SCREW</td>
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<td>7</td>
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<td>A1A</td>
<td>STAKON CRIMP</td>
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<td>8</td>
<td>1</td>
<td>A314</td>
<td>3/4&quot; CONDUIT LOCKNUT GALV.</td>
</tr>
</tbody>
</table>

* = ITEMS NOT SHOWN

* GROUND WIRE MUST BE CONNECTED TO PROPERLY PROTECT POWER SUPPLY. FAILURE TO GROUND WILL VOID ALL WARRANTIES.
DIRECTIONS FOR USING WrapLock

CUT OFF BAND TO PROPER LENGTH.
(SEE TABLE ON COVER OF BOX)

1. PASS ONE END THROUGH YOKE AND BEND BACK ABOUT 1 1/2" AND FLATTEN DOWN.
2. PASS BAND AROUND WORK AND THROUGH YOKE.
3. REPEAT AND PASS END THROUGH A SECOND TIME, DRAW UP FREE END SNUGLY WITH PLIERS.
4. INSERT FREE END IN SLOT OF RATCHET.
5. TURN DOWN UNTIL CLAMP IS TIGHT.
6. BACK OFF SLIGHTLY TO REMOVE RATCHET. CLAMP IS NOW SECURELY LOCKED.

TO REMOVE WrapLock
UNCOIL END WITH RATCHET, PRESS DOWN AT POINT WHERE BAND METAL HAS BEEN FORCED THROUGH CURVED PART OF YOKE.

WRAPLOCK FASTENING DETAIL