

# **USER GUIDE**

Models covered by this manual include:

SL427 (2) x 900 watt SL428 (2) x 1000 watt SL429 (2) x 1500 watt

SL441 (4) x 110 watt

SL442 (4) x 150 watt

SL443 (4) x 350 watt

SL445 (4) x 500 watt

SL447 (4) x 750 watt

**COMMAND LIGHT** 

P.O. BOX 87

LOVELAND, CO 80539

PHONE: 1-800-797-7974 FAX: 1-800-667-4296

WEB: www.commandlight.com

This document supersedes all previous documents. Effective Wednesday, May 02, 2007

#### **Breakage or Damage During Shipment**

The transportation company is fully responsible for all shipping damage and will resolve problems promptly if you handle it correctly. Please read these instructions carefully.

Examine the contents of all shipping cases. If you find any damage, call your transportation agent at once and have them make a description on the freight or express bill describing the damage and the number of pieces. Then write us and we will send you the original bill of lading. Get a claim blank from the express or truck company. Fill the claim form out. Attach the claim blank to the original bill of lading together with a copy of our invoice. Attach a memo on which you show the value of the damaged goods. Mail or hand these papers to your local transportation agent. They will process your claim with reasonable promptness.

Please note, we cannot and will not enter claims for damages. If we filed claim here, it would be sent to your local freight agent for verification and investigation. This time can be saved by you filing the claim directly. Every consignee is on the ground floor, in contact with the local agent who inspects the damaged goods, and thus, each claim can be given individual attention.

Since our goods are packed to comply with the regulations of all railroad, truck, and express companies, we cannot allow deduction from any invoice because of any damage, however, be sure to file your claim promptly. Our goods are sold F.O.B. factory. We take receipt from the transportation company certifying that the goods were delivered to them in good order and our responsibility ceases.

It is seldom that any breakage or damage occurs in any of our shipments and in no case will the customer be out any expense if they follow the above instructions.

Be sure to keep all damaged goods subject to examination of the truck or express company inspector, who may call on you some time later. These damaged goods, of course, will belong to them, and they will inform you what to do with them. If you dispose of these damaged goods, your claim may not be paid.

## **Product Safety Precautions**

- Never operate the *SHADOW RT* near overhead high voltage power lines. The *SHADOW RT* is manufactured from electrically conductive materials.
- Do not use the SHADOW RT for uses other than its' intended purpose.
- O not move emergency vehicle with the light extended. Visually verify that the light is completely nested before moving vehicle.
- Do not change light position while people are located within its' operating envelope. There are numerous pinch points that can cause serious bodily injury.
- O Disconnect power at the generator distribution panel before servicing the unit.
- O Do not use a high-pressure washer or subject the light to high volumes of water when cleaning.



DO NOT OPERATE NEAR



OVERHEAD WIRES

- Never use the *SHADOW RT* as a lifting device or mobile arm.
- Do not use a *SHADOW RT* that has been damaged or is not fully functional.
- Never hold any part of the *SHADOW RT* with a hand or foot while it is in motion.
- The *SHADOW RT* is not intended to be operated while the vehicle is in motion.

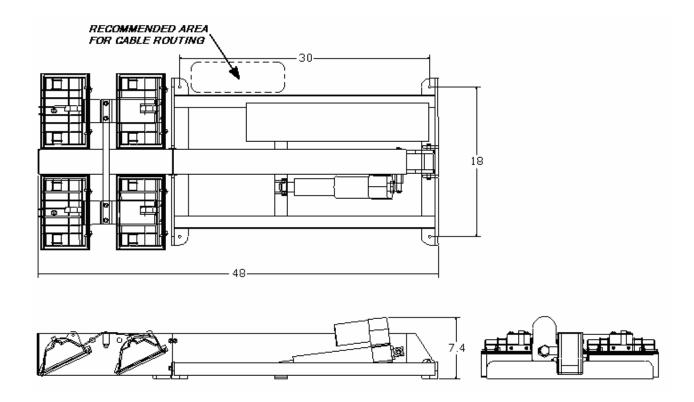
## **Installation Requirements**

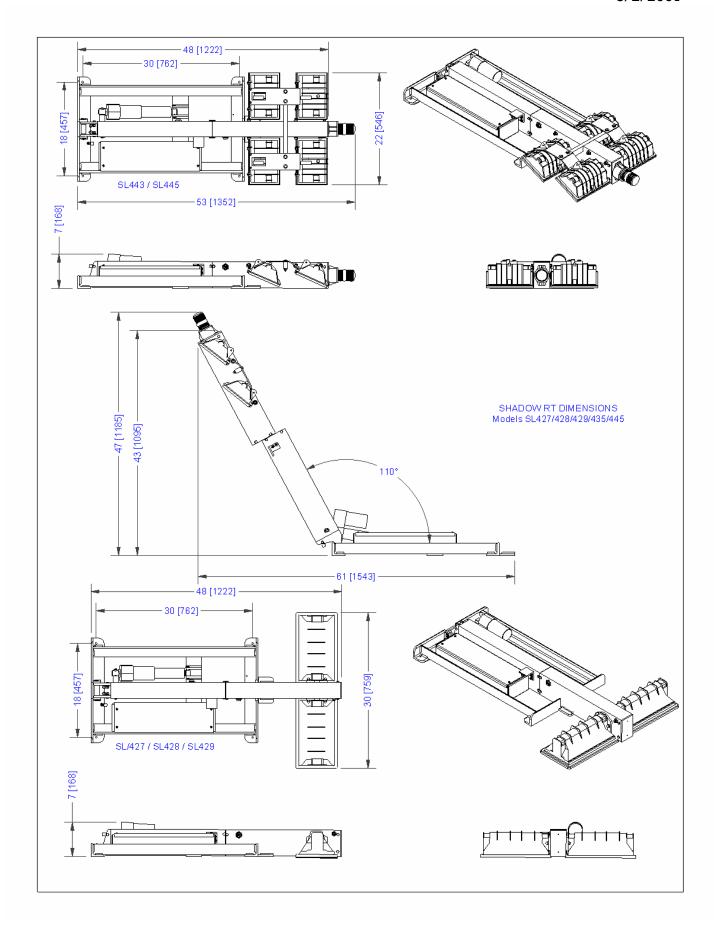
The SHADOW RT must be installed by a designated facility by qualified personnel only. All safety precautions must be thoroughly understood before installation. Please consult the factory for additional installation information or assistance at 1-800-797-7974.

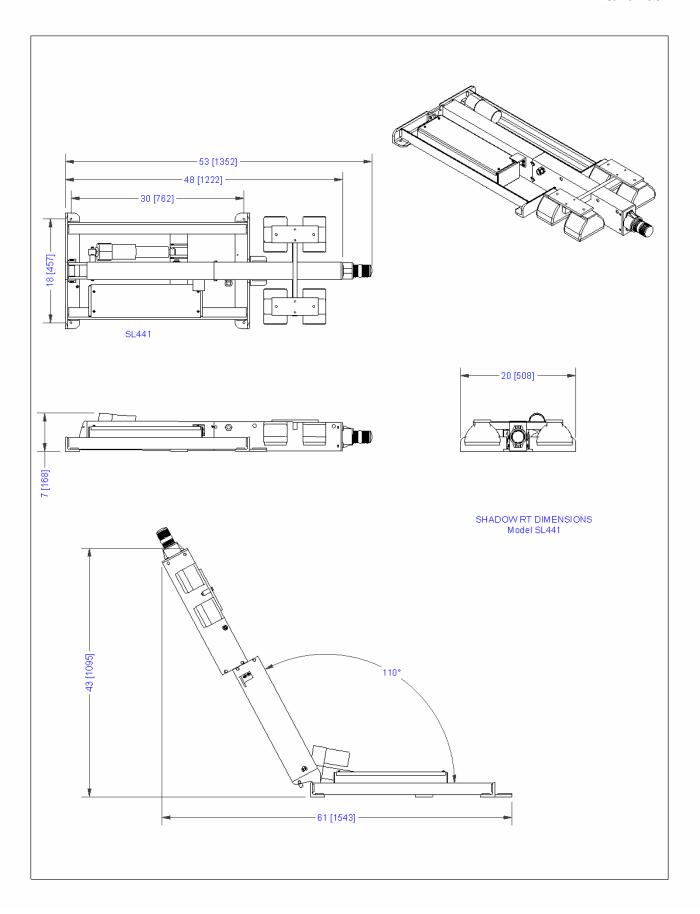
Refer to the drawing below to determine the location of the required (4) mounting hole locations. The *SHADOW RT* weighs a minimum of 70 pounds, depending upon lamp configuration. Use assistance to lift the light into position. Drill (4) 5/16" holes to secure lamp to vehicle.

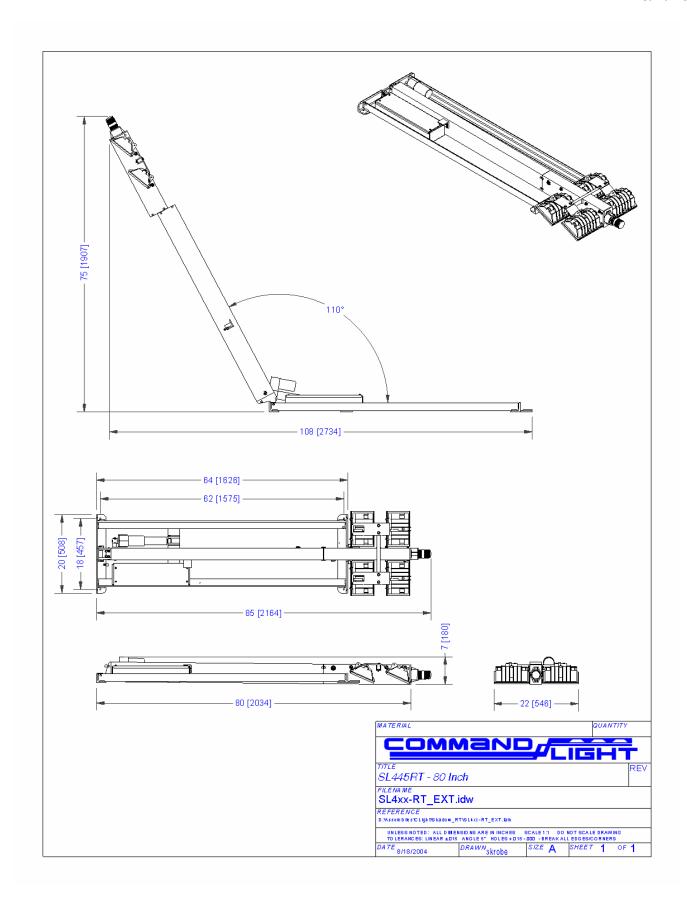
Remove any obstructions below the mounting surface such as headliners. Fasten the light using the provided hardware. When routing the connecting electric wires use care to avoid sharp bends, hot surfaces or other hazards to the wire.

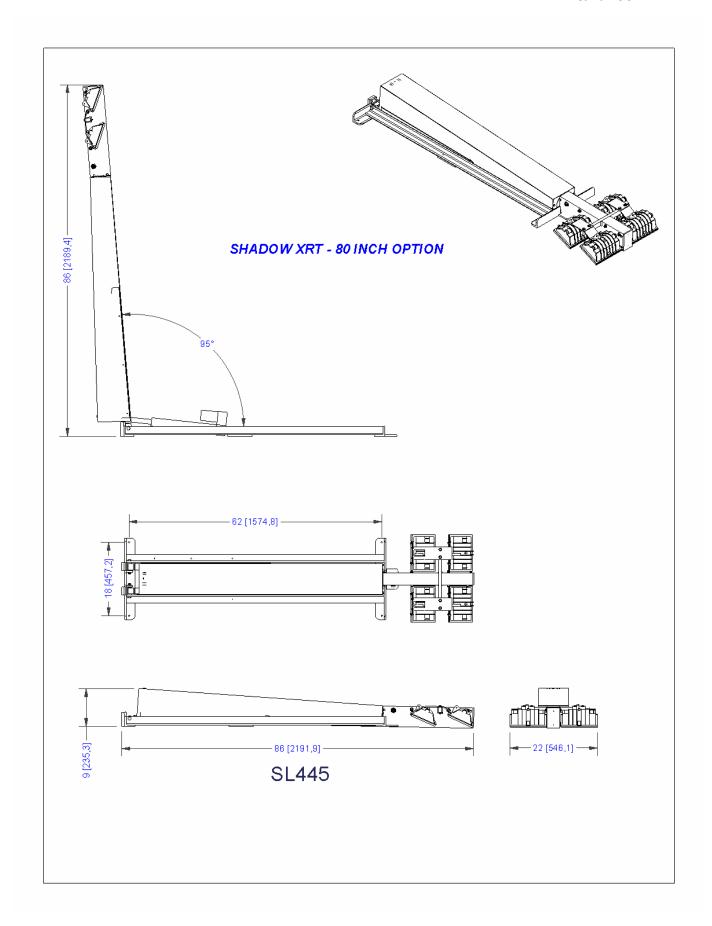
Dimensions depicted below are for a SL445 standard unit.



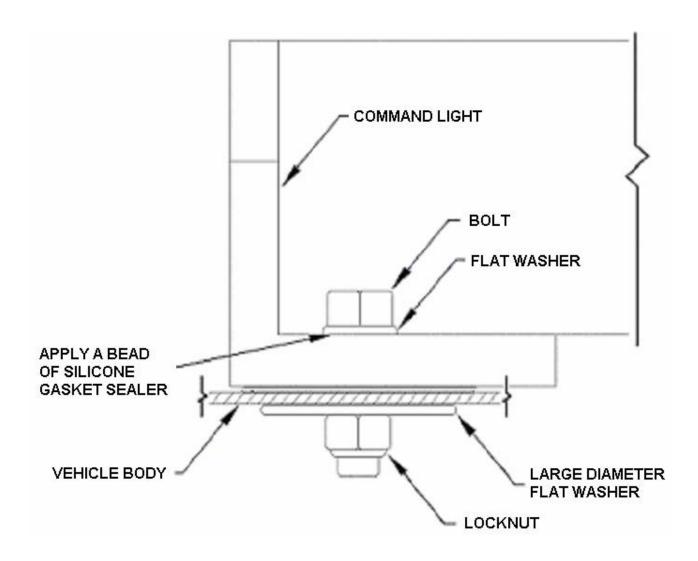








To assure a weather tight installation apply a bead of silicone based gasket sealer to the underside of the mounting holes and bolt heads.

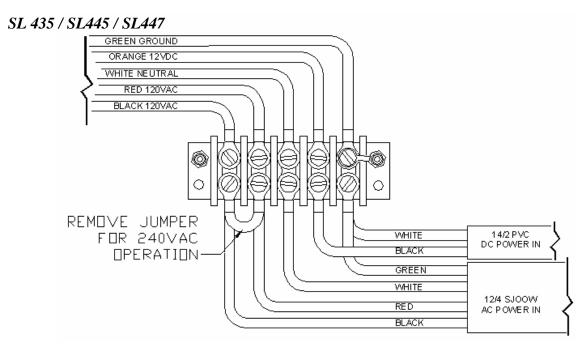


## **Electrical Wiring**

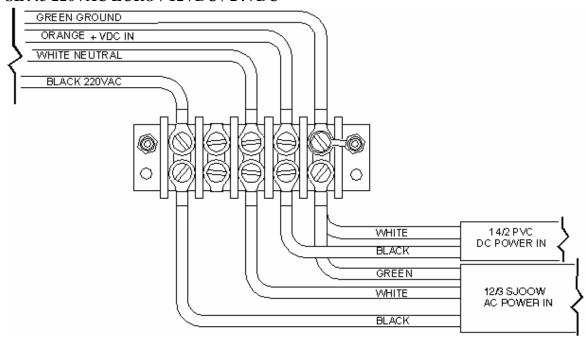
*SHADOW RT* control wires are routed through (2) self-sealing connectors. To install, drill (2) 7/8" diameter holes on 2-1/2" centers. Apply silicone sealer to underside of connector before inserting into hole. Fasten connector securely with nuts. Run the control wires from the *SHADOW RT* through the vehicle and connect to the control box.

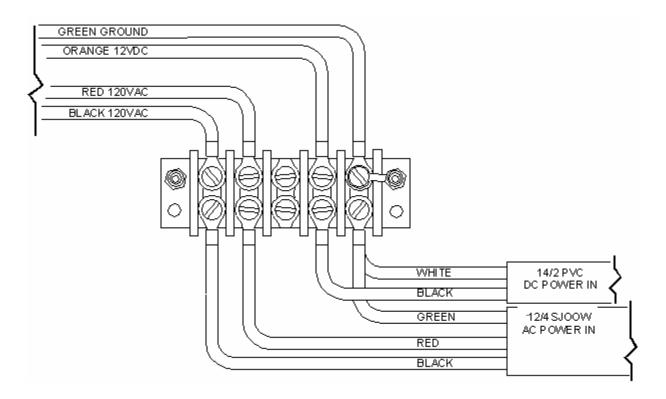
#### **Power Connections**

Make power connections to the control box as illustrated below. Be sure to provide adequate safety fusing for all power connections.

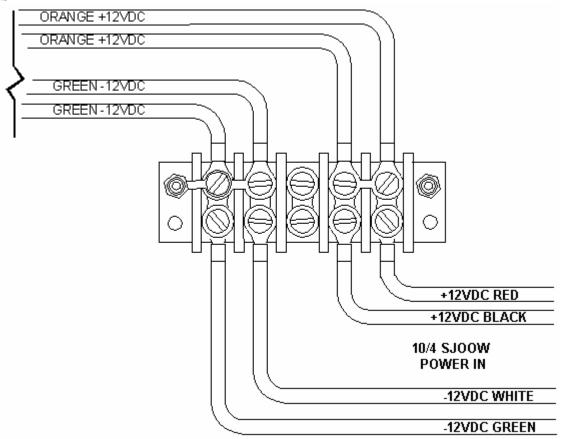


#### SL445 220VAC EURO / 12VDC / 24VDC





#### SL441

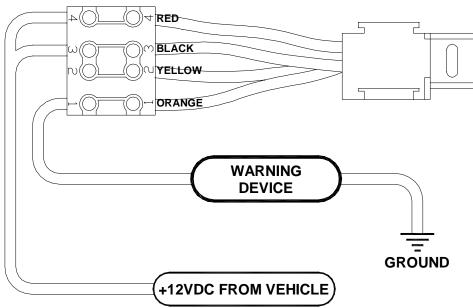


## **Warning Device Installation**

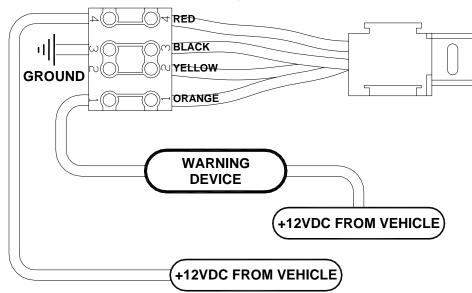
The nest sensor can be used to activate a warning device when the light is extended. Typically, the vehicle will have a light or buzzer that actuates when the compartment doors are open. To connect such a device determine whether it is activated when it receives 12 VDC or when it receives a path to ground.

The connector for hooking up a warning device is located in the holster box that holds the control unit.

#### FOR A DEVICE THAT REQUIRES 12VDC SIGNAL TO ACTIVATE



#### FOR A DEVICE THAT REQUIRES GROUND TO ACTIVATE



#### Maintenance

#### **Lamp Replacement**

SL443/445/428/429
Tools required:
Clean oil-free cloth
Cleaning alcohol
#2 Phillips head screw driver

Position lamp tree so lamps are readily accessible.

Disconnect the power supply from the SHADOW RT.

Caution: Allow sufficient time for bulb to cool. The surrounding metal lamp housings can cause serious burns.

Grasp the lamp lens bezel firmly, release the latch that holds the lamp bezel in place. Model SL428/429 have two latches per lamp unit. Models SL443/445 have one screw latch per lamp unit. Use caution, the lamp bezel and lens may fall if not properly grasped.

Do not touch the lamp directly. Use a clean oil-free towel to handle the lamp. The lamps operate at high temperatures. Handling the lamps directly leaves trace amounts of skin oils that cause localized hot spots that can lead to early lamp failure. Lamp surfaces may be cleaned with alcohol.

The reflector is stamped with instructions indicating which end of the bulb to insert first.

Latch the bezel making sure that the weather stripping is properly fitted.

## Cleaning

The *SHADOW RT* is constructed with corrosion resistant aluminum and stainless steel fasteners. To further enhance corrosion resistance all exposed surfaces receive a powder coated paint finish. To assure years of trouble free service periodically clean all external surfaces with a mild detergent solution and a gentle spray of water. Do not use a high-pressure washer, which will force water into sensitive electric circuitry.

Lamp lenses may be cleaned with any commercially available glass cleaner.

Actuator is a sealed unit and does not require adjustment or lubrication.

Periodic cleaning of all pivot points on the *SHADOW RT* with a moisture displacing cleaner and soft bristle brush, without disassembly, to remove accumulated dirt and debris will minimize wear.

#### **Dimensions:**

	Height	Length	Width
Retracted	7½"	48"	30"
Extended	48"		

## Weight:

70 pounds

## **Lamp Current Draw / Power Requirements:**

	Max @ 240 VAC	Generator Requirement
(2) 900 watt	8 amps	2Kw minimum

## **Actuator Current Draw / Fuse Requirement**

14 amp @ 12 VDC full load 12 seconds to full actuator extension

#### **Relay Protection Requirement**

Protect with a maximum of 240VAC 15 amp 2-pole circuit breaker.

#### **Dimensions:**

	Height	Length	Width
Retracted	7½"	48"	30"
Extended	48"		

#### Weight:

70 pounds

## **Lamp Current Draw / Power Requirements:**

	Max @ 240 VAC	Generator Requirement
(2) 1000 watt	9 amps	2Kw minimum

## **Actuator Current Draw / Fuse Requirement**

14 amp @ 12 VDC full load 12 seconds to full actuator extension

#### **Relay Protection Requirement**

Protect with a maximum of 240VAC 15 amp 2-pole circuit breaker.

#### **Dimensions:**

	Height	Length	Width
Retracted	7½"	48"	30"
Extended	48"		

## Weight:

70 pounds

## **Lamp Current Draw / Power Requirements:**

	Max @ 240 VAC	Generator Requirement
(2) 1500 watt bulbs	14 amps	3Kw minimum

## **Actuator Current Draw / Fuse Requirement**

14 amp @ 12 VDC full load 12 seconds to full actuator extension

#### **Relay Protection Requirement**

Protect with a maximum of 240VAC 15 amp 2-pole circuit breaker.

#### **Dimensions:**

	Height	Length	Width
Retracted	7½"	48"	22"
Extended	48"		

#### Weight:

70 pounds

## **Lamp Current Draw / Power Requirements:**

	Max @ 110 VAC	Generator
		Requirement
(4) 350 watt bulbs	13 amps	2Kw minimum

#### **Actuator Current Draw / Fuse Requirement**

14 amp @ 12 VDC full load 12 seconds to full actuator extension

#### **Relay Protection Requirement**

Protect with a maximum of 110VAC 15 amp 2-pole circuit breaker.

## **Dimensions:**

	Height	Length	Width
Retracted	7½"	48"	22"
Extended	48"		

## Weight:

70 pounds

## **Lamp Current Draw / Power Requirements:**

	Max @ 12 VDC
(8) 55 watt bulbs	36 amps
2 per lamp head	

## **Actuator Current Draw / Fuse Requirement**

14 amp @ 12 VDC full load 12 seconds to full actuator extension

#### **Dimensions:**

	Height	Length	Width
Retracted	7½"	48"	22"
Extended	48"		

#### Weight:

70 pounds

## **Lamp Current Draw / Power Requirements:**

	Max @ 110 VAC	Generator
		Requirement
(4) <b>500</b> watt bulbs	18 amps	2Kw minimum

#### **Actuator Current Draw / Fuse Requirement**

14 amp @ 12 VDC full load 12 seconds to full actuator extension

#### **Relay Protection Requirement**

Protect with a maximum of 110VAC 15 amp 2-pole circuit breaker.

#### **Dimensions:**

	Height	Length	Width
Retracted	7½"	48"	22"
Extended	48"		

#### Weight:

70 pounds

## **Lamp Current Draw / Power Requirements:**

	Max @ 110 VAC	Generator Requirement
(4) 750 watt bulbs	25 amps	3 Kw minimum

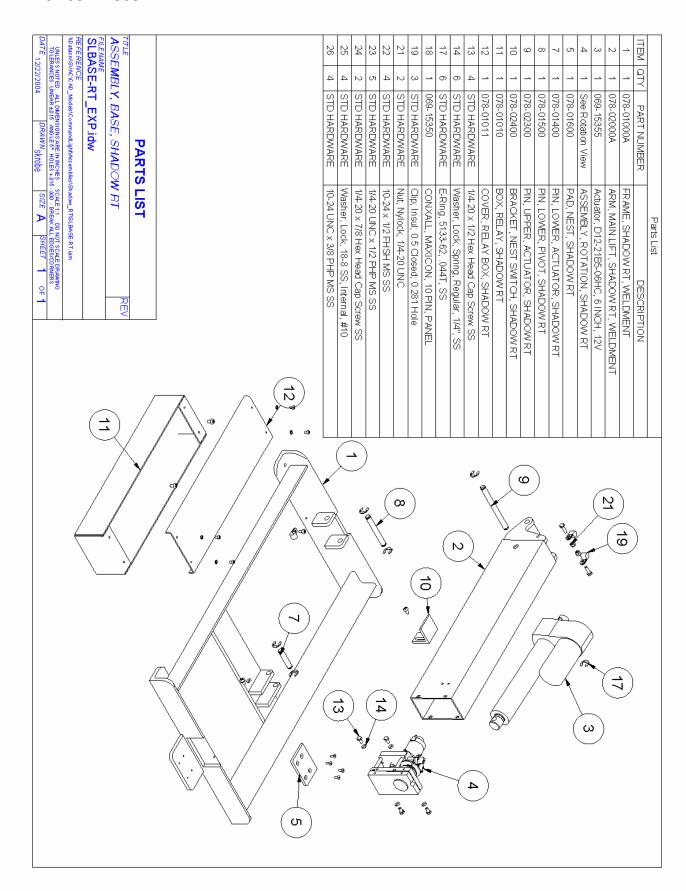
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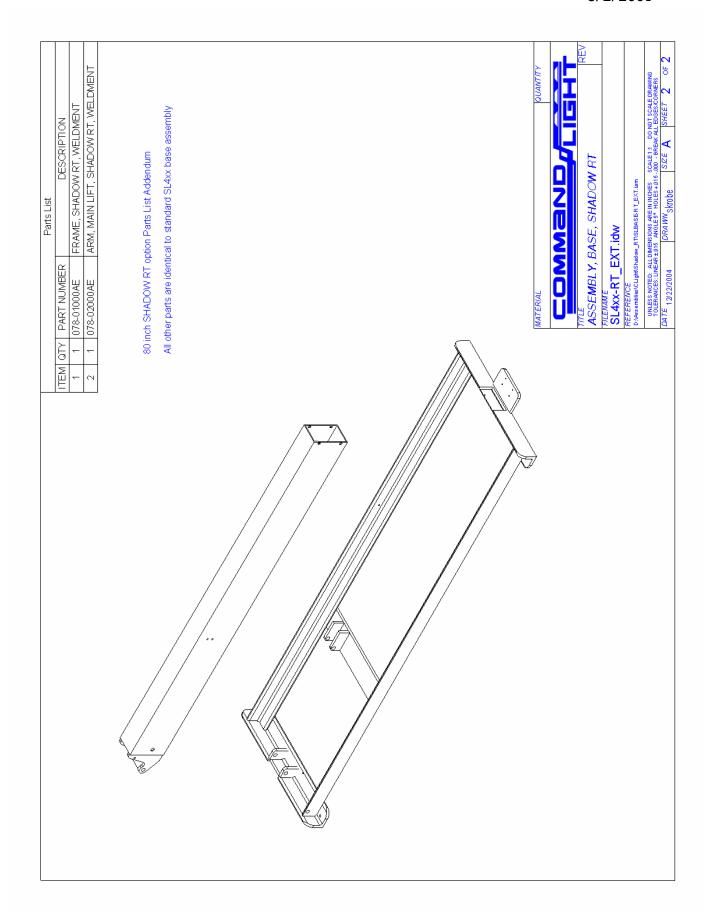
14 amp @ 12 VDC full load 12 seconds to full actuator extension

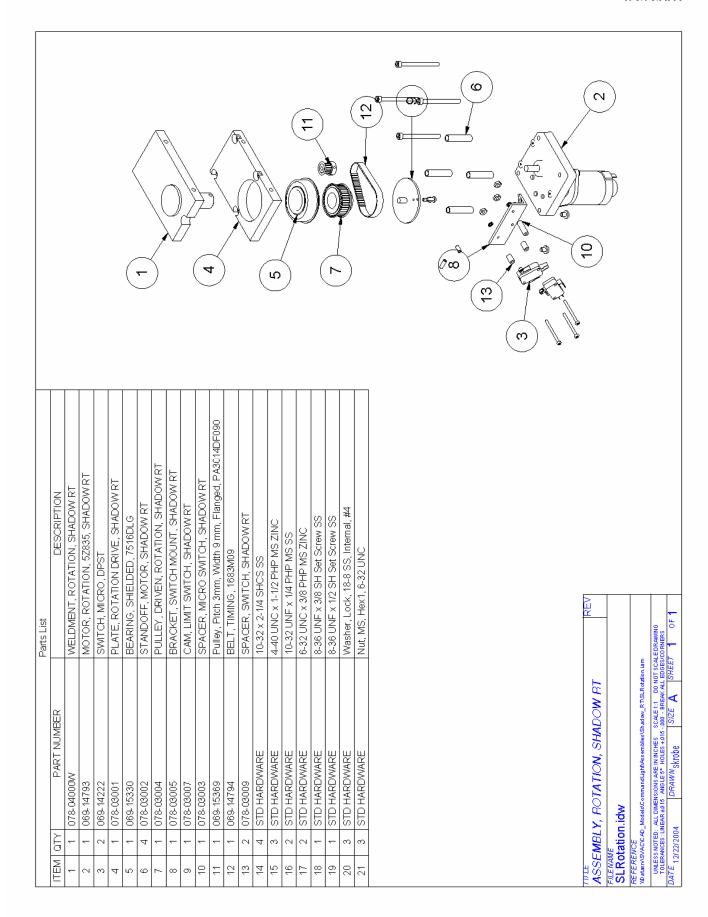
#### **Relay Protection Requirement**

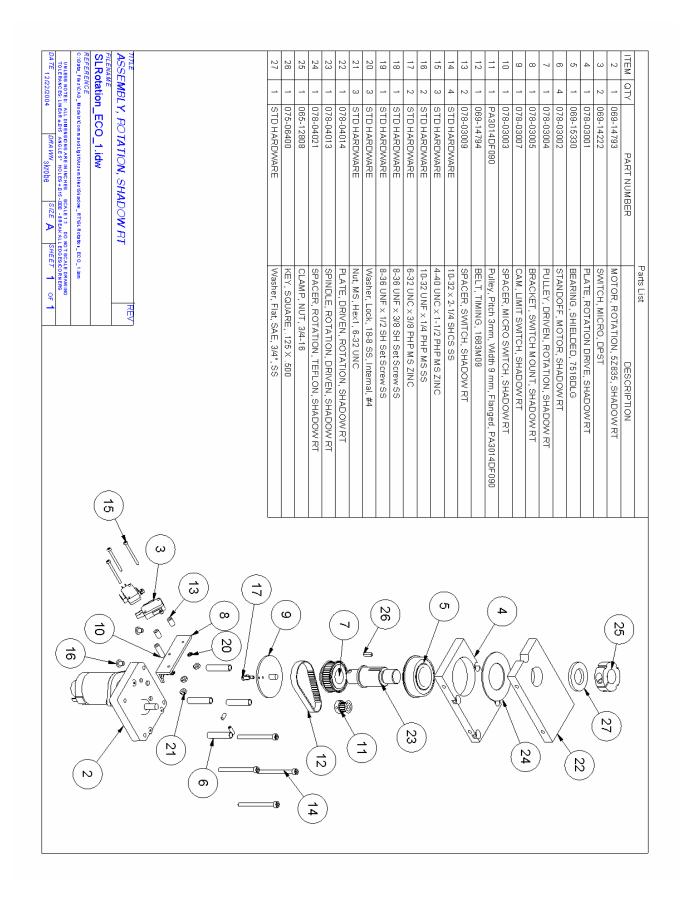
Protect with a maximum of 110VAC 15 amp 2-pole circuit breaker.

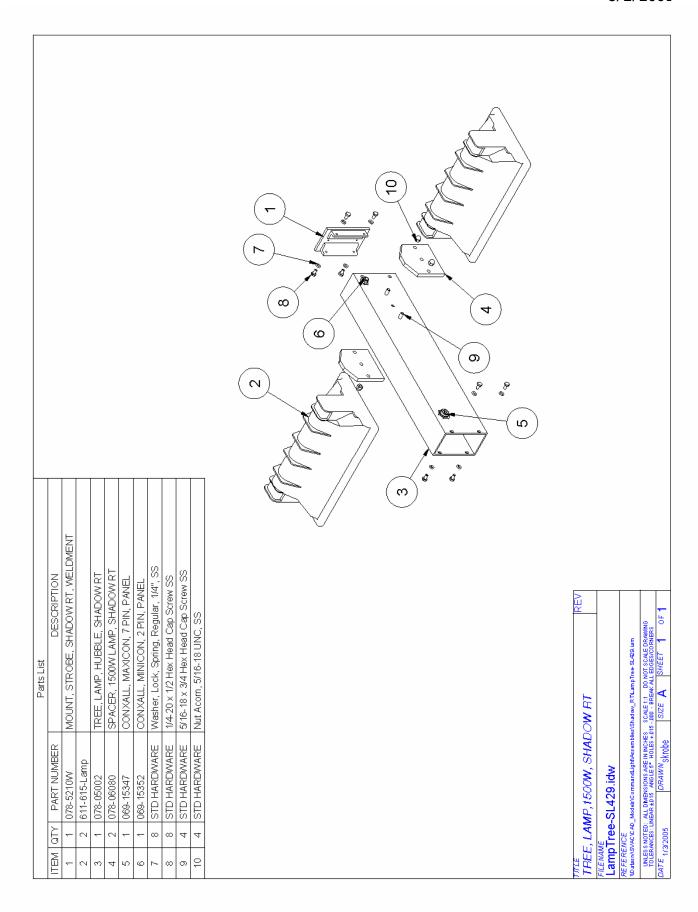
## **Parts Lists**

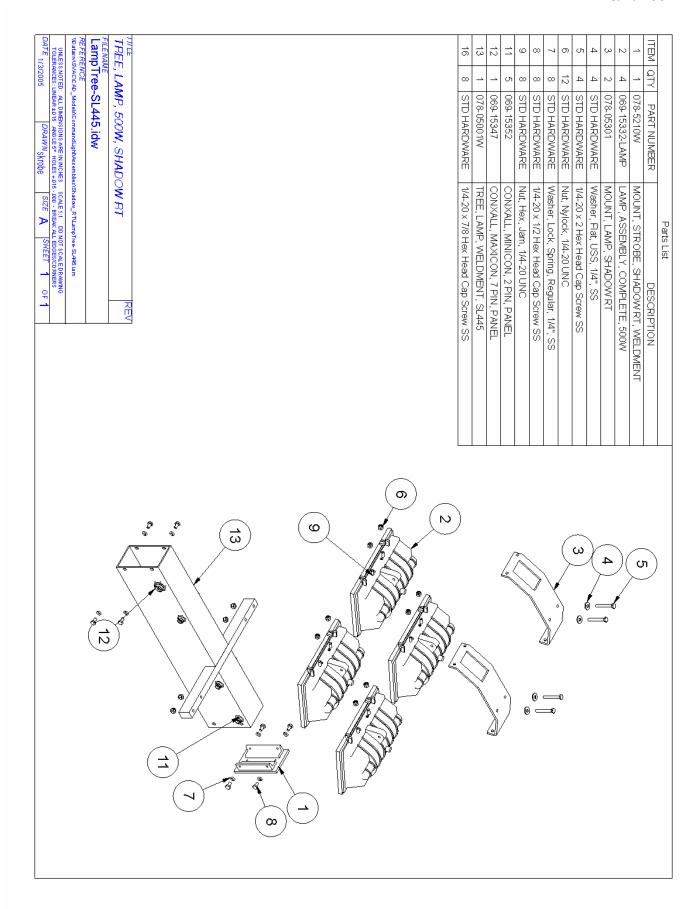


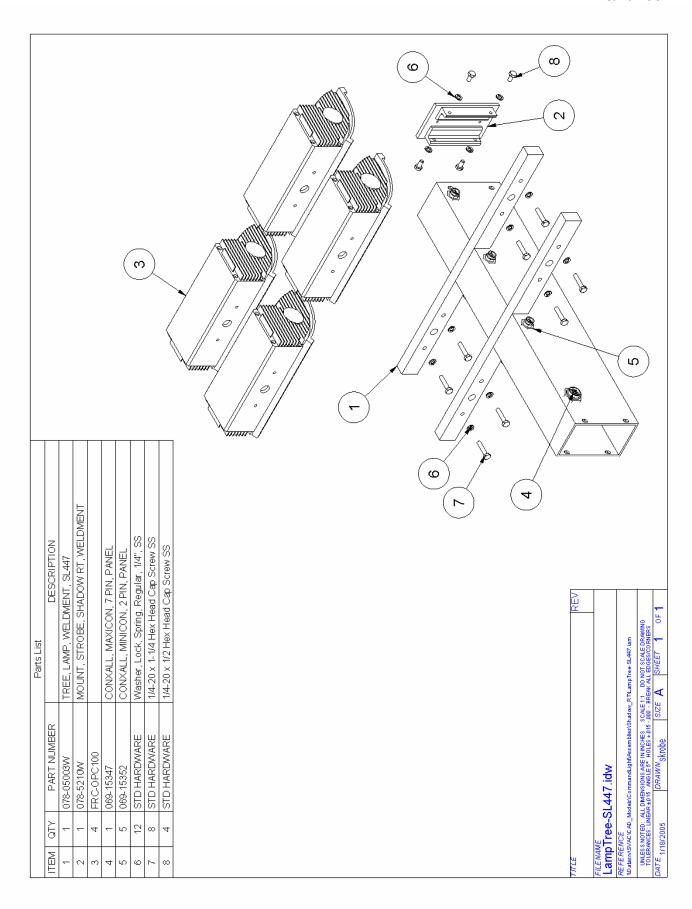


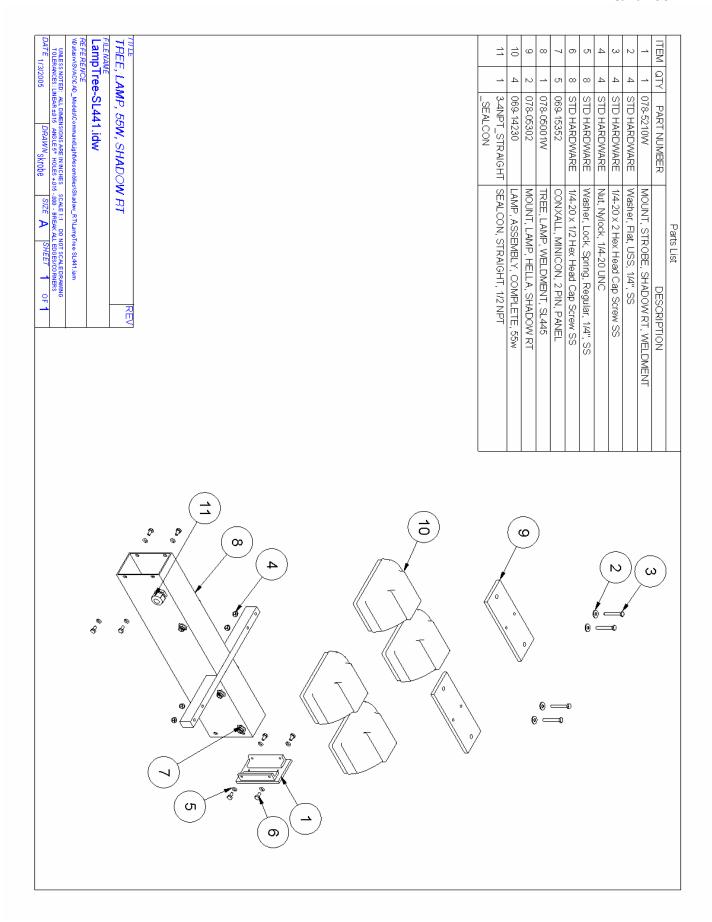


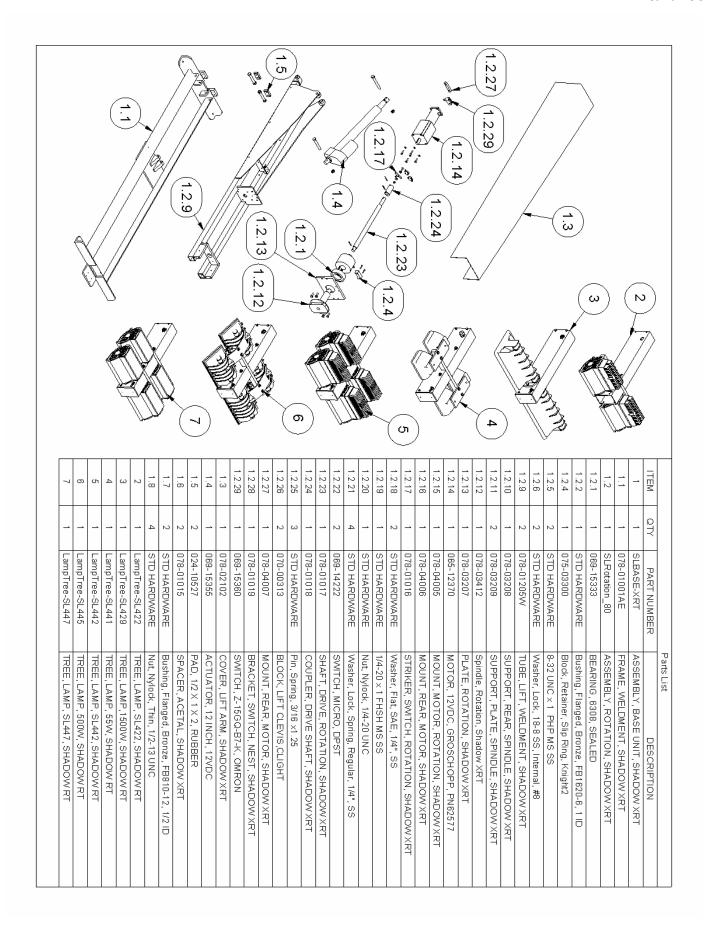


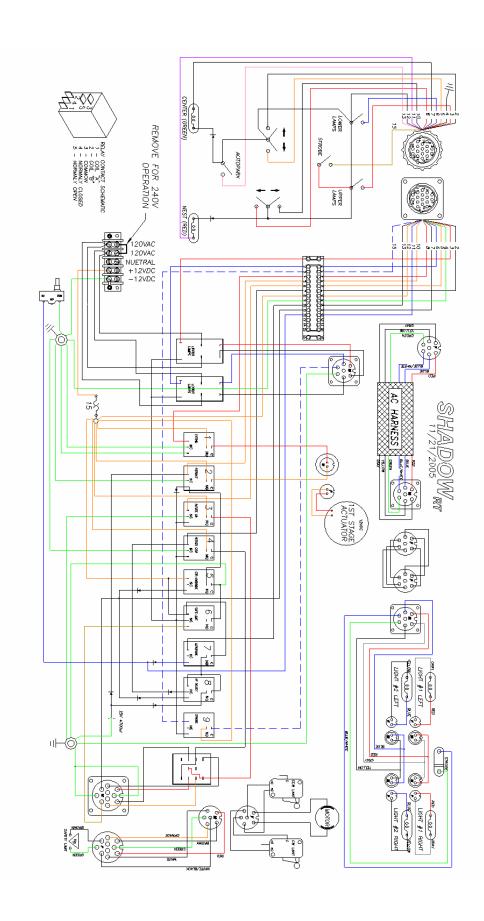


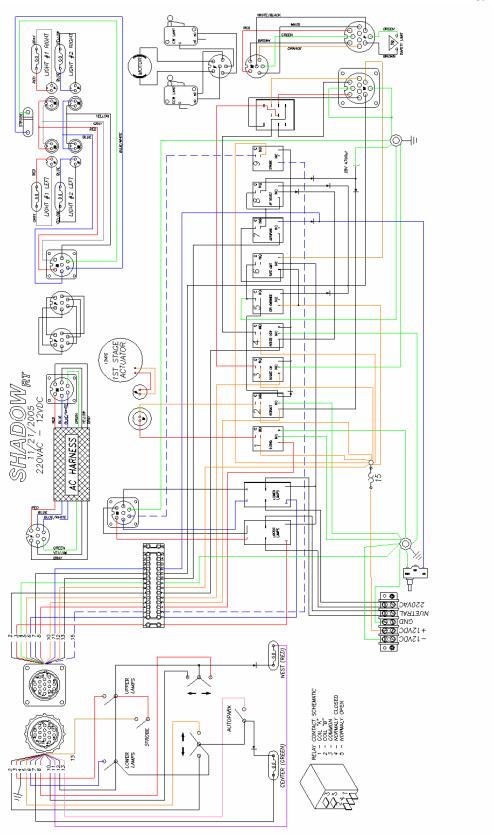


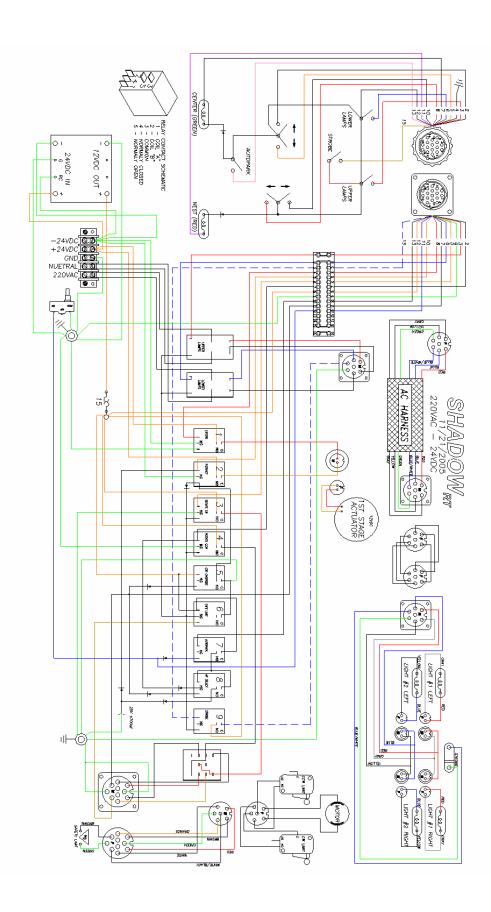


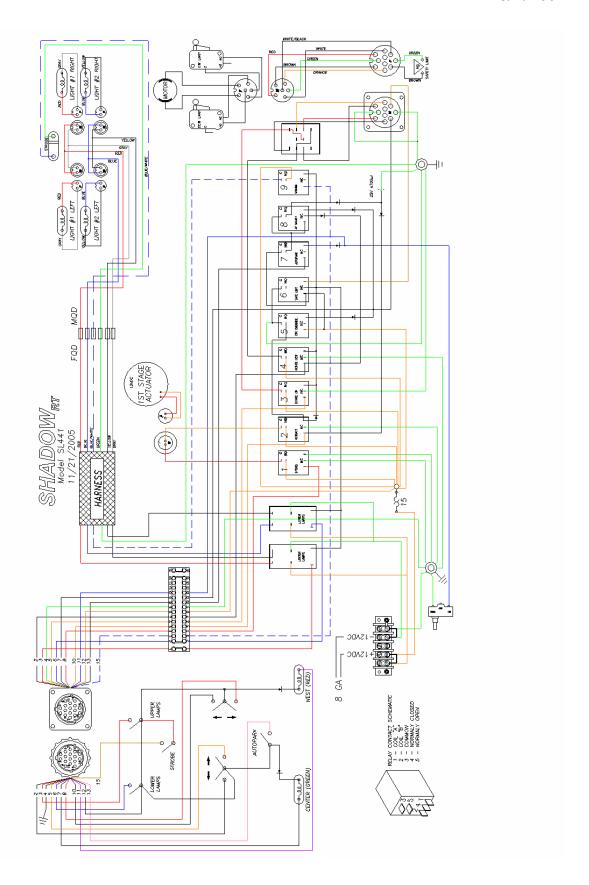


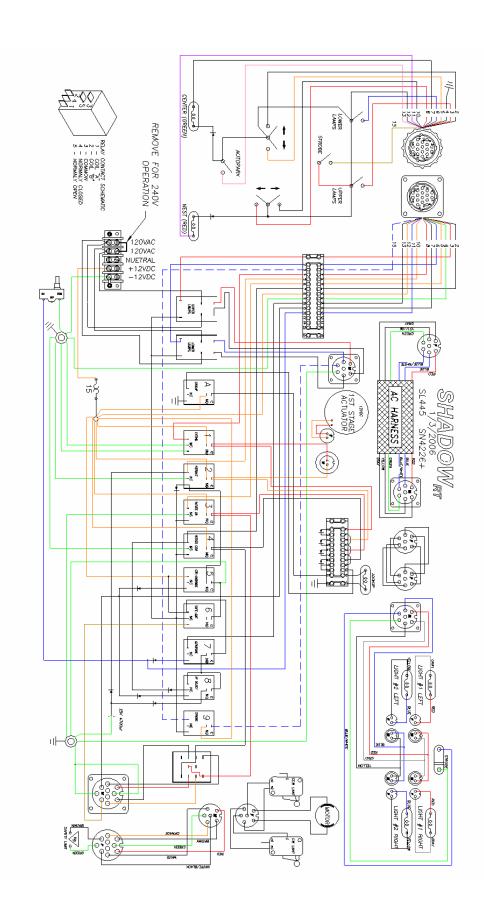


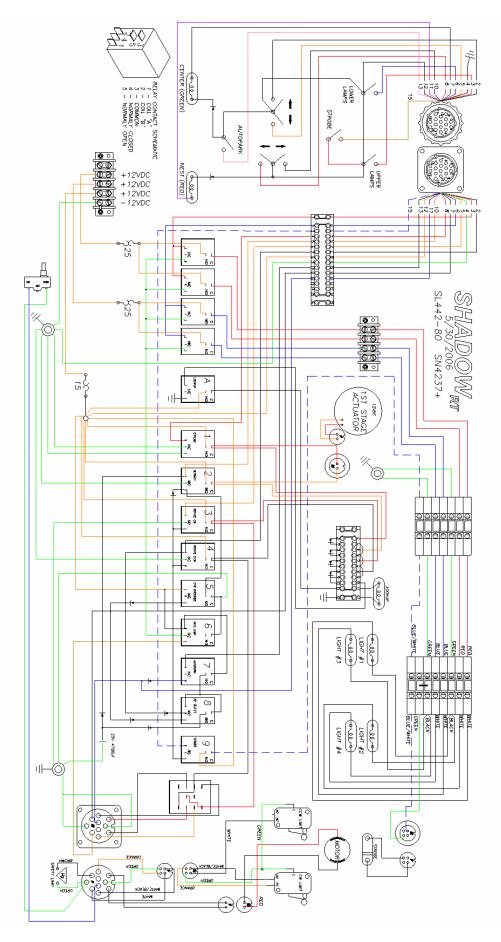












## **Limited Warranty**

#### Five Year

COMMAND LIGHT warrants that the equipment is free from defects in materials and workmanship when used and operated for a period of five years. The responsibility of COMMAND LIGHT under this limited warranty is limited to the repair and replacement of any parts found defective. Parts must be returned to COMMAND LIGHT at 1303 East 11th Street, Loveland, Colorado 80537 with transportation charges prepaid (C.O.D. shipments will not be accepted).

Prior to returning defective parts to COMMAND LIGHT, the original purchaser shall make a claim by contacting COMMAND LIGHT at 1(800)797-4296 to obtain an RMA number, or in writing to at the above address indicating the model number, serial number and type of defect. No parts or equipment will be received by COMMAND LIGHT for repair or replacement under this warranty without specific authority in advance.

Any part damaged by improper installation, overloading, abuse or accident of any type or cause is not covered by this warranty.

All equipment manufactured by us is tested before leaving our plant, and is shipped in good working order and condition. We therefore extend to the original purchasers the following Limited Warranty for the period of five years from the original date of purchase:

- 1. This warranty does not apply to defects caused by accident, misuse, neglect, or wear and tear. Nor can we be held responsible for incidental and consequential expense and loss, nor does this warranty apply to equipment where alterations have been executed without our knowledge or consent. These conditions are readily discernable when the equipment is returned to us for inspection.
- 2. On all component parts not manufactured by COMMAND LIGHT, their warranty is to the extent that the manufacturer of such component warrants them to COMMAND LIGHT, if at all. Look in your local business telephone directory for the nearest repair station for the brand of parts you have or write to us for the address.
- 3. If equipment received has been damaged in transit, a claim should be made against the carrier within three days, as we assume no responsibility for such damage.
- 4. Any service other than our Authorized Service voids this warranty.
- 5. This warranty is in lieu of and is intended to exclude all other warranties, express or implied, oral or written, including any warranties of <u>MERCHANTIBILITY</u> or <u>FITNESS</u> for a particular purpose.