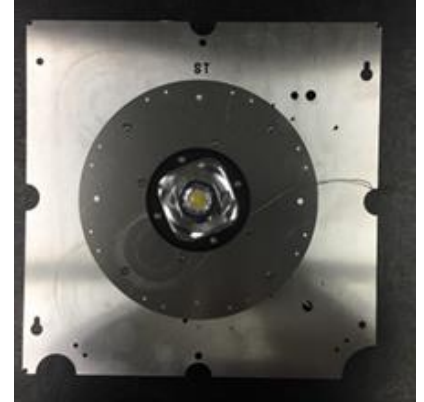


### The C5 Colonial Post Top Retrofit Kit from Vega Light Control Systems

- Designed as an easy and reliable way to convert existing fixtures
- Converts AEL®, Cooper®, & GE® Colonial Fixtures
- Alternative to HID lamps, up to 250W MH and 150W HPS
- Eliminates mercury & lead
- Reduce carbon footprint & light pollution.
- Tested to the most demanding industry standards:
  - LM-79, LM-80, In-Situ, TM-21 (pending)
  - surge testing to UL 1449 3rd edition, and DLC (pending)
  - Designed to meet UL 1598C 1st Ed. and , CSA TIL B-79A



### PLEASE READ ALL INSTRUCTIONS BEFORE ATTEMPTING INSTALLATION

#### **WARNING**

- RISK OF FIRE OR ELECTRIC SHOCK. INSTALLATION OF THIS RETROFIT ASSEMBLY REQUIRES A PERSON FAMILIAR WITH THE CONSTRUCTION AND OPERATION OF THE LUMINAIRE'S ELECTRICAL SYSTEM AND THE HAZARD INVOLVED. IF NOT QUALIFIED, DO NOT ATTEMPT INSTALLATION. CONTACT A QUALIFIED PERSON.
- RISK OF FIRE OR ELECTRIC SHOCK. INSTALL THIS KIT ONLY IN THE LUMINAIRES THAT HAS THE CONSTRUCTION FEATURES AND DIMENSIONS SHOWN IN THE PHOTOGRAPHS AND/OR DRAWINGS AND WHERE THE INPUT RATING OF THE RETROFIT KIT DOES NOT EXCEED THE INPUT RATING OF THE LUMINAIRE.
- DO NOT MAKE OR ALTER ANY OPEN HOLES IN AN ENCLOSURE OF WIRING OR ELECTRICAL COMPONENTS DURING KIT INSTALLATION.
- TO PREVENT WIRING DAMAGE OR ABRASION, DO NOT EXPOSE WIRING TO EDGES OF SHEET METAL OR OTHER SHARP OBJECTS.
- THIS RETROFIT KIT IS ACCEPTED AS A COMPONENT OF A LUMINAIRE WHERE THE SUITABILITY OF THE COMBINATION SHALL BE DETERMINED BY AUTHORITIES HAVING JURISDICTION.

#### **AVERTISSEMENT**

- RISQUE D'INCENDIE OU DE CHOC ÉLECTRIQUE. L'INSTALLATION DE CE NÉCESSAIRE DE MODERNISATION EXIGE UNE PERSONNE FAMILIÈRE AVEC LA CONSTRUCTION ET LE FONCTIONNEMENT DU SYSTÈME ÉLECTRIQUE DU LUMINAIRE ET DES RISQUES ASSOCIÉS. TOUTE PERSONNE QUI N'EST PAS QUALIFIÉE NE DOIT FAIRE AUCUNE TENTATIVE D'INSTALLATION ET DOIT CONTACTER UNE PERSONNE QUALIFIÉE.
- RISQUE D'INCENDIE OU DE CHOC ÉLECTRIQUE. N'INSTALLER CE NÉCESSAIRE QUE DANS LES LUMINAIRES DONT LES CARACTÉRISTIQUES DE CONSTRUCTION ET LES DIMENSIONS SONT CONFORME À CELLES ILLUSTRÉES DANS LES PHOTOS ET/OU LES DESSINS ET DONT LA PUISSANCE D'ENTRÉE NOMINALE DU NÉCESSAIRE DE MODERNISATION NE DÉPASSE PAS CELLE DU LUMINAIRE.
- IL EST INTERDIT DE FAIRE OU DE MODIFIER UNE OUVERTURE DANS UN BOÎTIER DE CÂBLAGE OU DE COMPOSANTS ÉLECTRIQUES AU COURS DE L'INSTALLATION DU NÉCESSAIRE.
- AFIN DE PRÉVENIR L'ENDOMMAGEMENT OU L'ABRASION DES CÂBLES, ÉVITER TOUT CONTACT ENTRE CES DERNIERS ET LE BORD D'UN OBJET TRANCHANT TEL QU'UNE TÔLE.
- LE NÉCESSAIRE DE MODERNISATION EST ACCEPTÉ À TITRE DE COMPOSANT D'UN LUMINAIRE LORSQUE LA PERTINENCE DE LA COMBINAISON DOIT ÊTRE DÉTERMINÉE PAR LES AUTORITÉS COMPÉTENTES

## NOTICE

- TO AVOID ELECTRIC SHOCK DISCONNECT POWER BEFORE ATTEMPTING INSTALLATION OR SERVICING.
- TO PREVENT PRODUCT MALFUNCTION AND / OR ELECTRICAL SHOCK THIS PRODUCT MUST BE PROPERLY GROUNDED.
- INSTALLATION MUST BE STRUCTURALLY SOUND TO PREVENT DAMAGE OR PERSONAL INJURY DUE TO FIXTURE COLLAPSE.
- USE CAUTION WHEN HANDLING THIS PRODUCT DURING OR AFTER OPERATION AS IT MAY BECOME HOT AND CAUSE BURNS.
- FAILURE TO INSTALL THIS PRODUCT IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE (NEC), OR THE CANADIAN ELECTRICAL CODE (CSA 22.1), ALL APPLICABLE FEDERAL, STATE AND LOCAL ELECTRIC CODES AS WELL AS THE SPECIFIC UNDERWRITERS LABORATORIES (UL) SAFETY STANDARDS FOR THE INSTALLATION, LOCATION AND APPLICATION MAY CAUSE UNSAFE SITUATIONS LEADING TO SERIOUS PERSONAL INJURY, DEATH, PROPERTY DAMAGE AND/OR PRODUCT MALFUNCTION.
- THIS DEVICE COMPLIES WITH PART 15 OF THE FCC RULES. OPERATION IS SUBJECT TO THE FOLLOWING TWO CONDITIONS: (1) THIS DEVICE MAY NOT CAUSE HARMFUL INTERFERENCE, AND (2) THIS DEVICE MUST ACCEPT ANY INTERFERENCE RECEIVED, INCLUDING INTERFERENCE THAT MAY CAUSE UNDESIRE OPERATION.
- FAILURE OF FIXTURE TO PROVIDE SUFFICIENT WEATHER PROTECTION VOIDS WARRANTY.
- TO PREVENT EARLY PRODUCT FAILURE, THIS PRODUCT SHOULD BE INSTALLED IN OPERATING ENVIRONMENTS WITH MAXIMUM MEAN FIXTURE AMBIENT OPERATING TEMPERATURE FOR LED RETROFIT MODULE: 104°F (40°C); MAXIMUM AMBIENT OPERATING TEMPERATURE CANNOT EXCEED 140°F (60°C).
- INSTALLATION REQUIREMENTS MAY VARY DEPENDING ON THE LUMINAIRE RETROFITTED.
- IF INSTALLED IN FIXTURE OTHER THAN DESCRIBED, CONTACT VEGA CUSTOMER SERVICE TO EVALUATE APPLICABILITY TO FIXTURE. SUPPORT@VEGALIGHTCONTROL.COM, PHONE: 616-259-0700

## 1. PRODUCT OVERVIEW

### 1.1. Colonial Post Top Retrofit Specifications

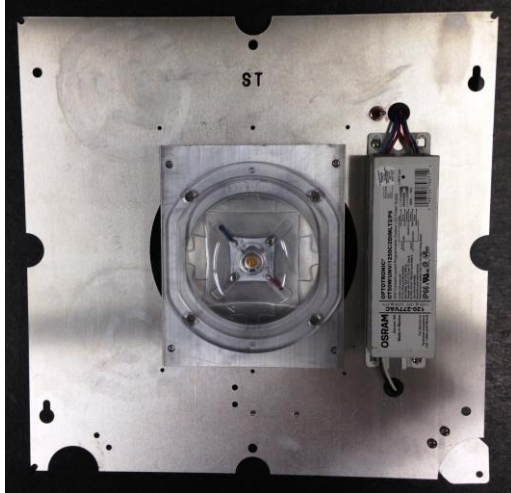
- LED Light on 13" plate fits AEL®, Cooper®, & GE® Colonial Fixtures
- One piece unit – simple to install
- 36 kV series surge suppression designed to UL1449 3rd edition
- Wet location rated
- 5 Year replacement warranty, extended warranties available
- 30W, 40W, 60W, and Combination Versions
- 2200K, 3000K, 4000K and 5000K CCT Available
- Type 3 and Type 5 Available
- True photometric performance through Silicone optics
- 0-10vdc dimming available

### 1.2. Products Covered

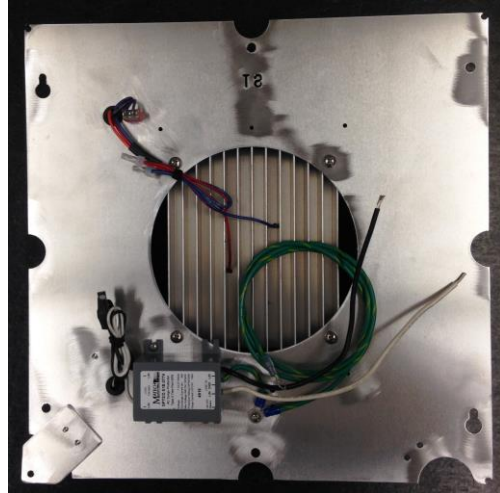
Part Number	Watts	Input Voltage	LED Color	Distribution	Control
C5-U30-40K-T5M-STD	30	120-277VAC	4000K	Type 5	None
C5-U40-40K-T5M-STD	40	120-277VAC	4000K	Type 5	None
C5-U60-40K-T5M-STD	60	120-277VAC	4000K	Type 5	None
Option Encoding			Color	Distribution	Control
C5-UXX-22K-TXX-XX			2200K	Type 3	
C5-UXX-30K-TXX-XX			3000K		
C5-UXX-50K-TXX-XX			5000K		
C5-UXX-XXK-T3M-XX				Type 3	
C5-UXX-XXK-TXX- DIM					0-10V

### 1.3. Colonial LED Retrofit Kit Product Description

#### LED Light Assembly



Front Side



Back Side

#### Parts Kit

3 ft White Wire with  
1/4" & 3/16"  
QC terminals

3 ft Green Wire with  
#10 Ring Terminal

#### Required Tools (Not provided)

- Flat and Phillips Head Screwdriver
- Pliers
- Wire cutters and strippers



Wire Ties (3)

Wire Loom

#10-32 x 3/4"  
screws (2)

Wire Nuts (3)

#10-32 x 3/8"  
GND Screw

#8-32 x 3/8"  
screws (3)

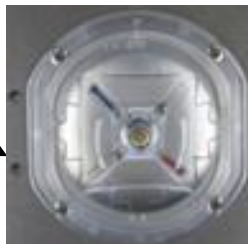
#10-16 x 3/4"  
screws (2)

#### Notes:

- Product has been properly packed to the protect during transit. Inspect and notify the distributor or shipping agent of any damage found.
- For additional information visit [vegallightcontrolsystems.com](http://vegallightcontrolsystems.com), email [support@vegallightcontrol.com](mailto:support@vegallightcontrol.com) or call 616-259-0700

### 1.4. Fixture Considerations

LED Light Engine  
Tc Point < 90°C



Power Supply Assembly  
Tc Point < 85°C



## 2. INSTALLATION INSTRUCTIONS

- Refer to original fixture installation manual for fixture mounting procedures
- Please refer to [vegilightcontrols.com](http://vegilightcontrols.com) for additional install instructions

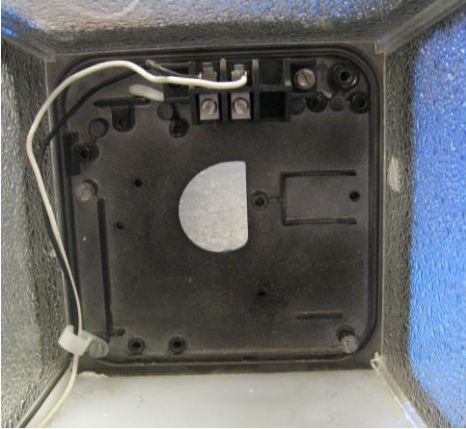


### 2.1. STEP 1: Prepare fixture for installation

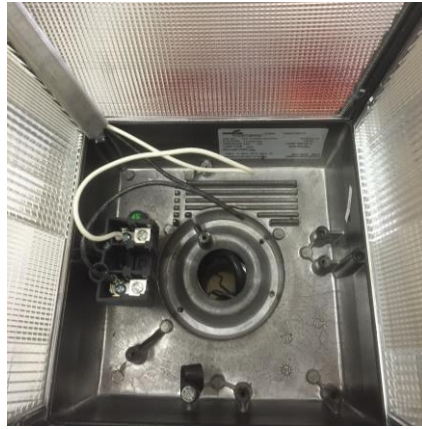
- Turn power off before attempting installation
- Remove lamp, original optical components, socket, and ballast



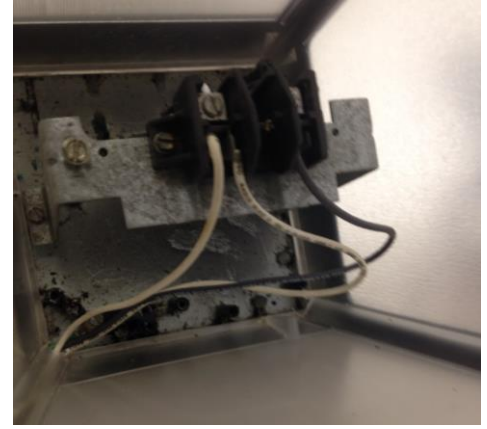
AEL® FIXTURE



COOPER® FIXTURE



GE® FIXTURE



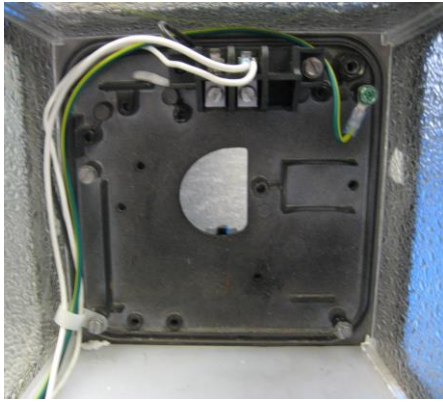
- After removing the socket, starter, and ballast the fixture should look like the pictures above.
- White or black wires may be relocated from ballast to terminal block as needed.
- Pull the red photo cell socket wire up in to the hood for direct attachment to the LED Retrofit Kit.
- The remaining wiring coming from the terminal block should be the black and white wires leading to the photocell socket.
- The GE fixtures do have a green wire grounding the hood to the base, leave it in place.



## 2.2. STEP 2: Make electrical connections

- Connect the white, black, and green wires per pictures below and notes below. See also the wiring diagram in Section 3
  - Strip wires appropriately for the wire nuts utilized, 3/8" for those included in the kit.
  - The surge protector and power supply are universal voltage. The white wire may be either Neutral or Line.
  - Green/Yellow is tied to the fixture by an existing grounding screw or screw provided.
- All fixtures shown are photocell-controlled.
- Review the various mounting configurations on the following pages and select the parts needed.

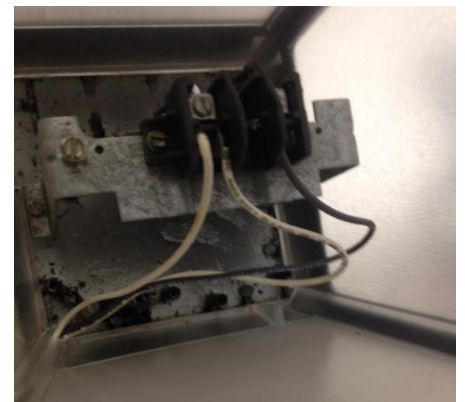
AEL® FIXTURE



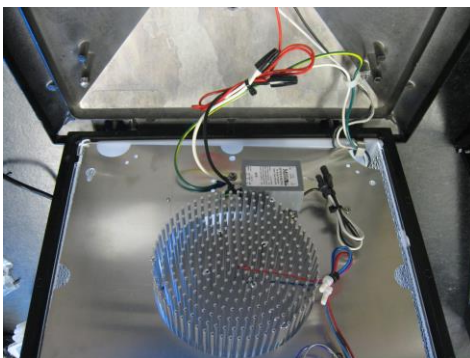
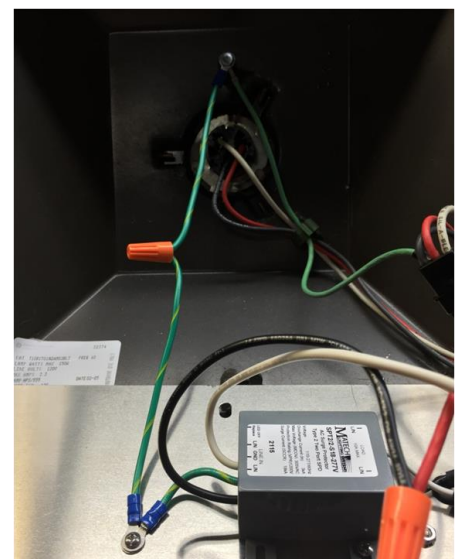
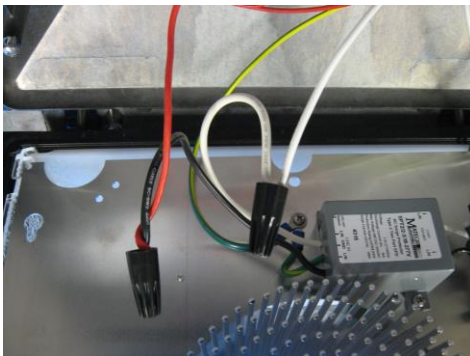
COOPER® FIXTURE



GE® FIXTURE



- The 3 foot White wire in the kit has a 1/4" quick connect on one end and 3/16" on the other. Connect the correct size to the terminal block section for the white wire and route the route the wire along the other wires.
- Attach the Green Ground wire from the LED Retrofit Kit to the base by connecting the #10 Ring terminal on the Green wire to the existing grounding screw or use the green grounding screw from the kit.
- The GE fixtures do have a green wire grounding the hood to the base, leave that in place. Connect the kit's green wire onto any of those ground screws.

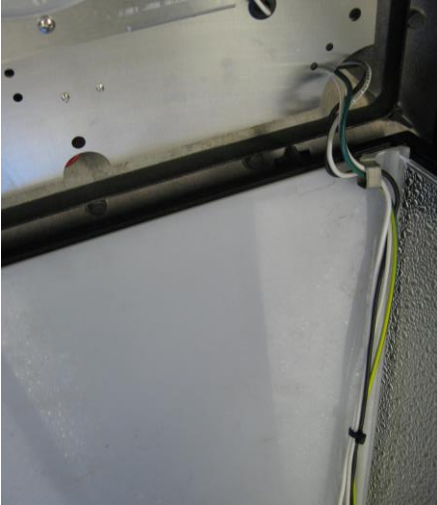


- Lay the LED Light plate on top of the fixture opening to connect the rest of the wiring.
- On the kit's White wire coming from the terminal block, cut off the extra quick connect and strip the wire 1/2". Connect that wire to the White stripped wire on the Surge Protector with a wire nut.
- The Red socket wire must be cut to length and stripped 1/2". Connect it to the surge protector Black stripped wire with a wire nut.
- Connect the Green grounding wires by a wire nut.
- Bundle the excess wire to lay in the hood and secure with a wire tie as shown.
- Wire loom is provided to slide around the wires where they pass from the base to the hood if needed by sharp edges.

### 2.3. STEP 5: Secure fixture components

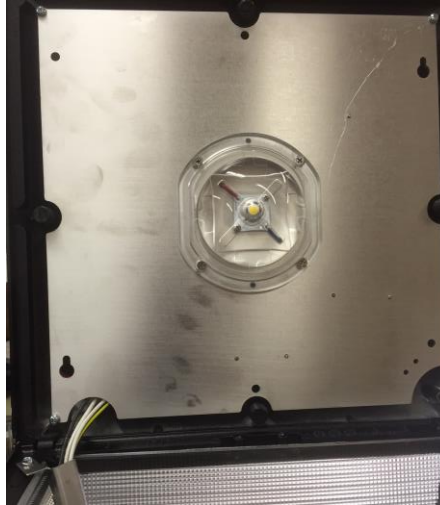
- Secure mounting plate to hood with screws provided or re-use the existing screws from fixture.
- For Type-III, ensure "Street Side" label on light engine faces the street side
- Clean the fixture lenses if needed to get the most light output.
- Utilize the original light fixture closure screw or latch.

AEL® FIXTURE



- Bundle and tie wire along side
- Use #10-32 x 3/4" screws (2) in key hole slots

COOPER® FIXTURE

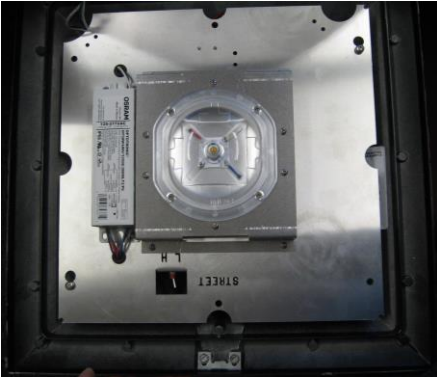


- Bundle wires to fit in opening
- Use #8-32 x 3/8" screws (3) in the 3 corner slots

GE® FIXTURE

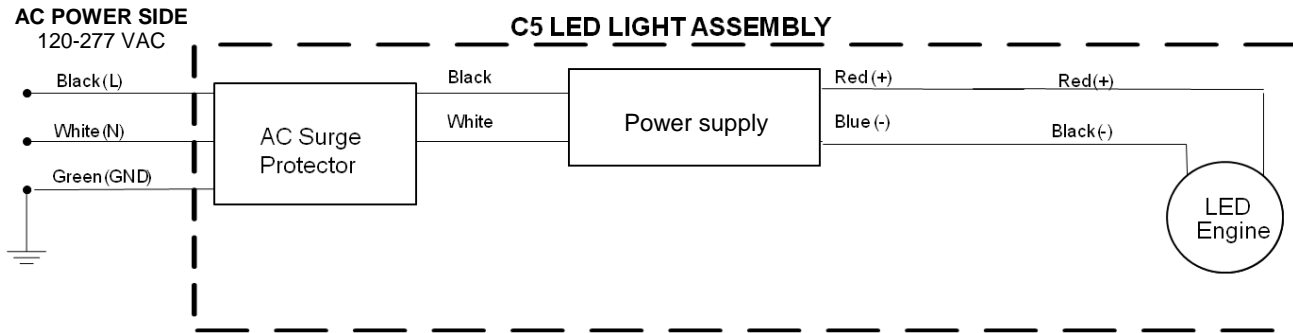


- Route wire to fit in opening along lens
- Use ##10-12 x 3/4" screws (2) in the 2 centered holes



### 3. ELECTRICAL INSTRUCTIONS

#### 3.1. Wiring diagram after installation



Note:

- AC surge protector, and power supply(s) are prewired

## 4. RELATED INFORMATION

### 4.1. Maintenance and Cleaning

- Periodic cleaning of fixture will ensure operation at maximum optical efficiency
- Refer to fixture installation instructions for maintenance and cleaning guidelines
- Even though LED Retrofit Kit may continue to light after the specified lifetime has passed, it must be replaced in order to maintain appropriate light levels

### 4.2. List of applicable and related Documents

- CR5 LED Retrofit Kit Product Information Brochure

## 5. Troubleshooting

Condition	Possible Reason(s)	Recommended Action
Green LED out on AC surge protector	Surge protector unable to protect unit	<ol style="list-style-type: none"><li>1. If within warranty period, contact VEGA sales representative for RMA.</li><li>2. If out of warranty period, contact VEGA sales representative for information to replace surge protector.</li></ol>
LEDs are dim or not lit	<ol style="list-style-type: none"><li>1. Wiring connectors failed.</li><li>2. Power supply has failed</li><li>3. LED board is damaged</li></ol>	<ol style="list-style-type: none"><li>1. Pull test wires in connectors to see if any are loose.</li><li>2. Use clamp meter (tongs) to measure output current. Replace if below rated current. Before replacing power supply, verify the green LED on surge protector is lit.</li><li>3. If within warranty period, contact VEGA sales representative for RMA. If not within warranty period, LED Light Engine should be replaced as it is not user serviceable.</li></ol>
Difficulty experienced during mounting	---	Contact VEGA representative for recommended action support@vegalightcontrol.com 616-259-0700 OR visit <a href="http://vegalightcontrolsystems.com">vegalightcontrolsystems.com</a> for additional reference designs.