

# **TWR Lighting, Inc.** **MARK**

*Enlightened Technology®*

10810 W. LITTLE YORK RD. #130 HOUSTON TX 77041-4051  
VOICE (713) 973-6905 FAX (713) 973-9352  
web: [www.twrlighting.com](http://www.twrlighting.com)

## **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.**

<b>MODEL #</b>	<b>AA0</b>
<b>TYPE</b>	<b>LED</b>
<b>SERIAL #</b>	
<b>PURCHASE DATE</b>	
<b>PURCHASED FROM</b>	



*Enlightened Technology®*

## **AA0 LED CONTROLLER**

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**APPENDIX**

**WARRANTY & RETURN POLICY**

**RETURN MERCHANDISE AUTHORIZATION (RMA) FORM**



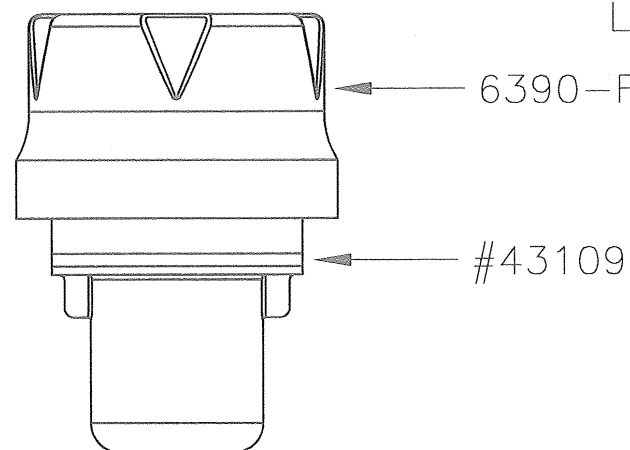
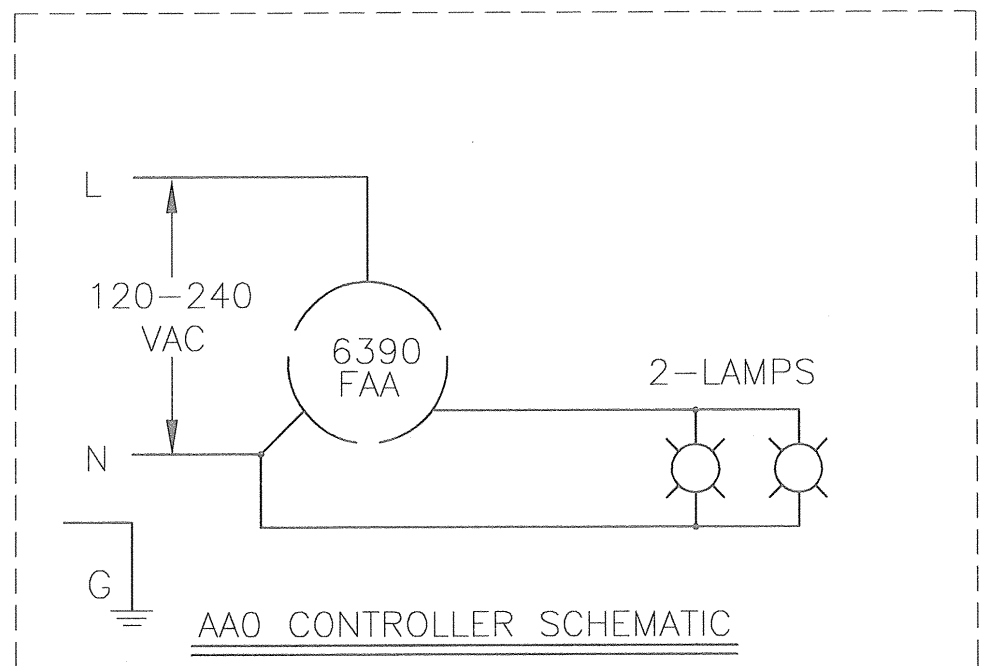
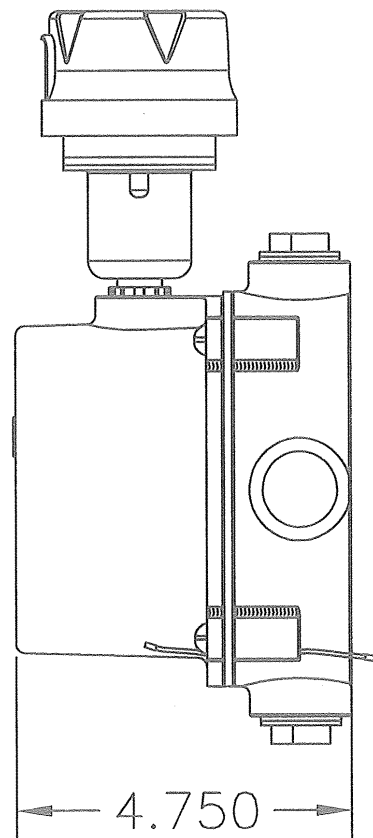
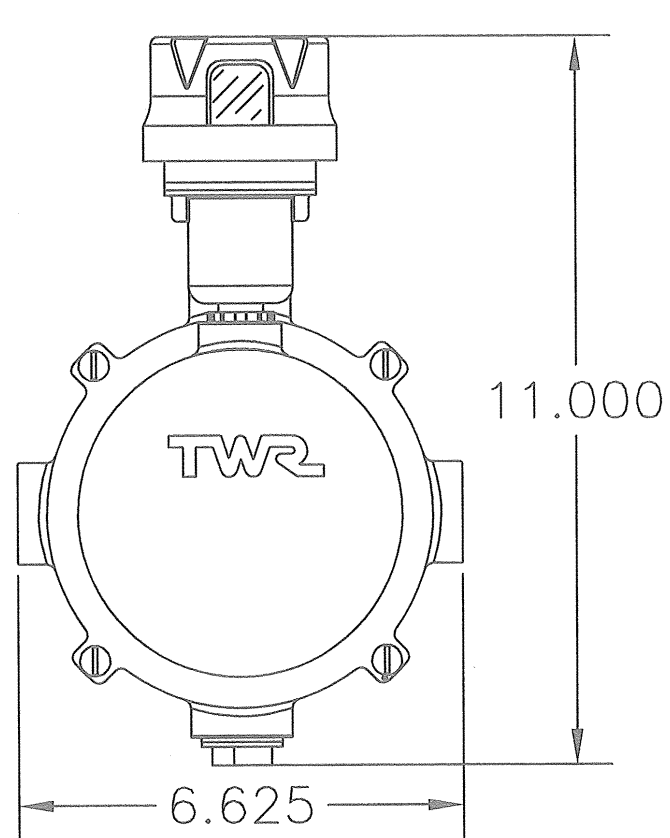
*Enlightened Technology®*

## **AA0 LED CONTROLLER**

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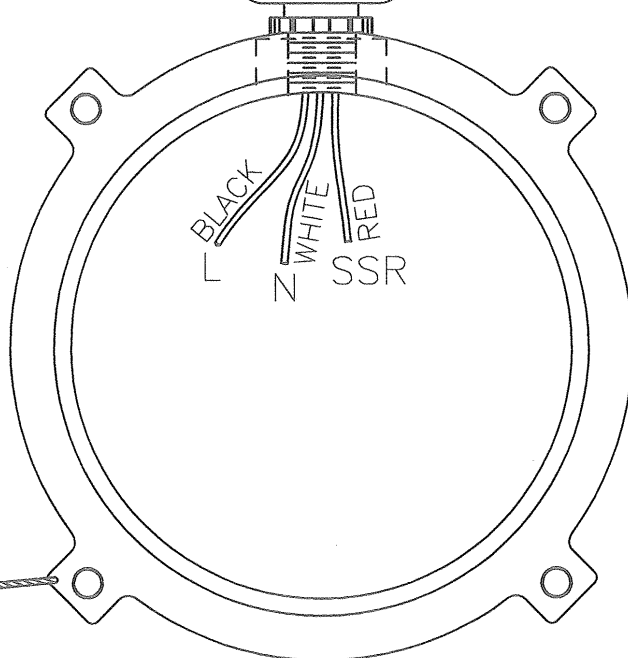
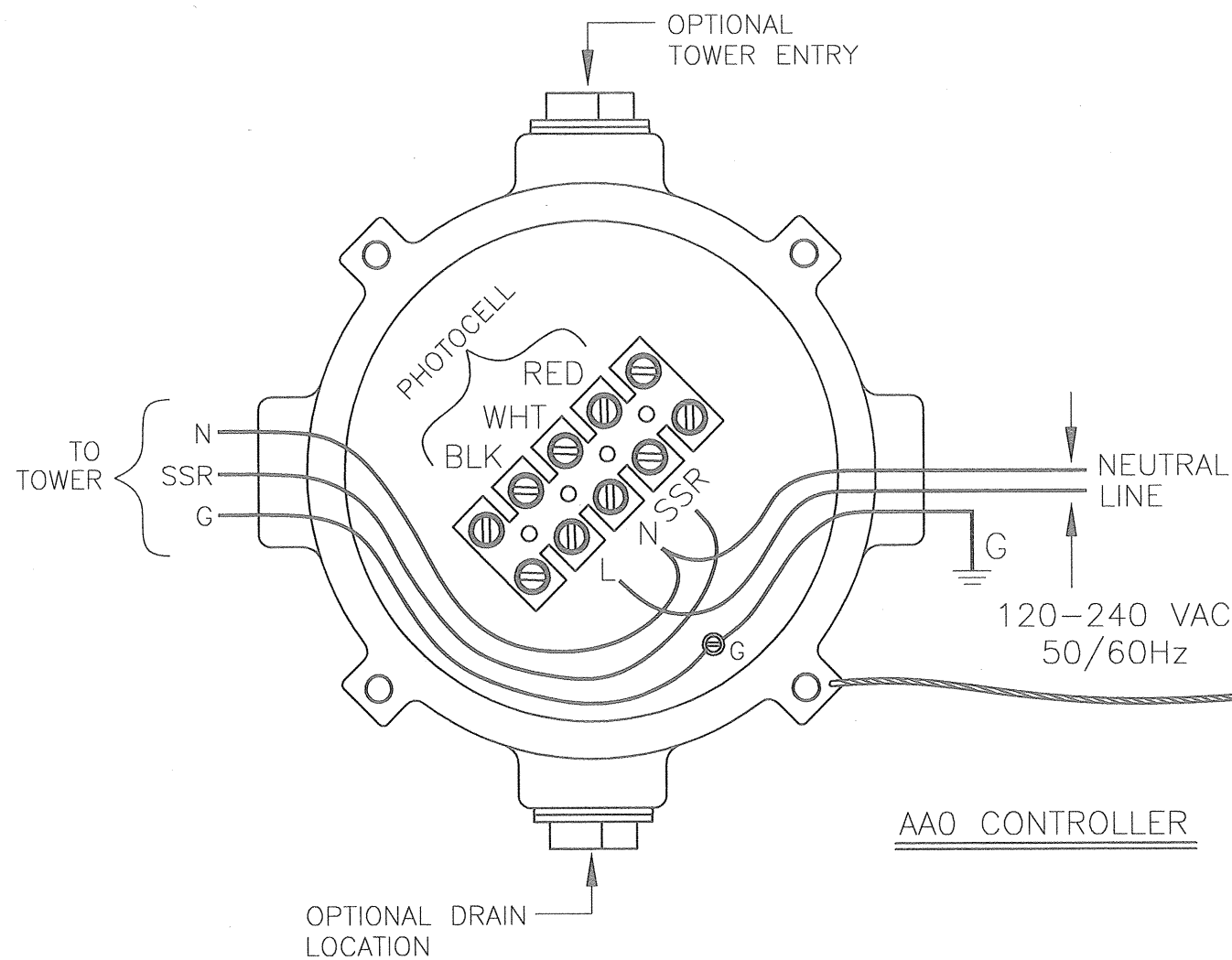
### **APPENDIX**

<b>CHASSIS LAYOUT &amp; SCHEMATIC .....</b>	<b>201-R (REV F)</b>
<b>OL2VLED2 DOUBLE OBSTRUCTION LIGHT .....</b>	<b>100658 (REV F)</b>
<b>OL1VLED2 SINGLE OBSTRUCTION LIGHT .....</b>	<b>100656 (REV E)</b>
<b>OL2CLED2 DOUBLE OBSTRUCTION LIGHT .....</b>	<b>100786 (REV B)</b>
<b>LEDBEACON2T LED BEACON .....</b>	<b>100761 (REV C)</b>
<b>JUNCTION AND STRAIN RELIEF BOXES .....</b>	<b>100089 (REV A)</b>
<b>LK2A0 LED LIGHTING KIT w/CABLE .....</b>	<b>T1127 (REV C)</b>
<b>AA0 LED LIGHTING KIT .....</b>	<b>T1559 (REV B)</b>
<b>LK1A1METKIT-5 RED LED MET TOWER KIT .....</b>	<b>ORG-850-6 (REV B)</b>
<b>AA1LED TOWER LIGHTING KIT CABLE (2-OL1LED) .....</b>	<b>T1287 (REV C)</b>
<b>AA1LED TOWER LIGHTING KIT CABLE (3-OL1LED) .....</b>	<b>T1301 (REV E)</b>
<b>WRAPLOCK FASTENING DETAIL .....</b>	<b>100984</b>



# NOTES:

- 1) PLUG 6390-FAA PHOTOCELL INTO (#43109) TWIST LOCK RECEPTACLE AND TWIST TO LOCK.

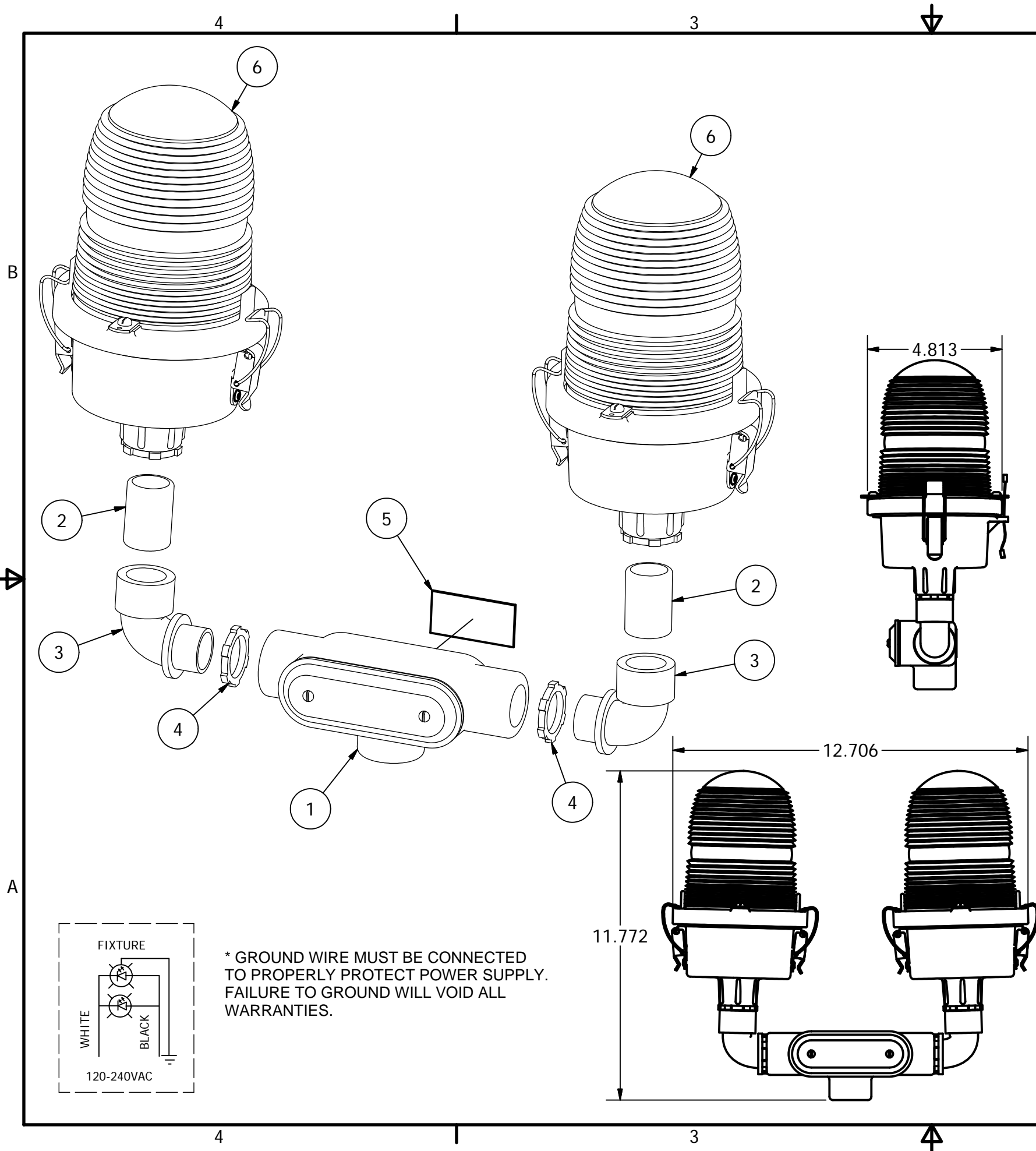


AA0 CONTROLLER			
120-240 VAC 50/60Hz			
PROD. DEPT.	TWR Lighting, Inc. <b>WARK</b>		
SERV. DEPT.	Enlightened Technology		
ENGINEER	G.D. SEBEK		
DRAWN BY	G.D. SEBEK		
DATE	11/13/92	SCALE	N.T.S.
SHEET SIZE		SHEET QTY.	
B		1 OF 1	
DWG. NO.		201-R	

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.

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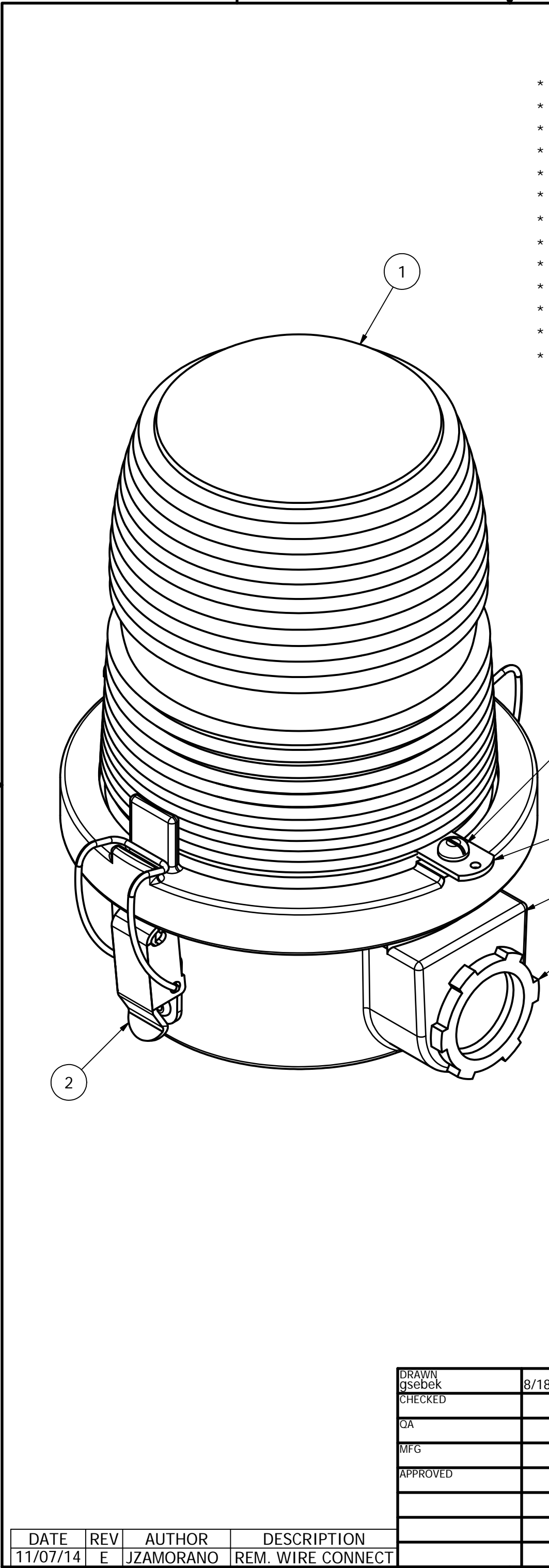
09/17/2015	(F)	ADDED NOTES
DATE:	LTR.	REVISION



Parts List			
ITEM	QTY	STOCK NUMBER	DESCRIPTION
1	1	T27CG	T27 CONDULET W/COVER & GSKT
2	2	34CLNP	3/4" GALV CLOSE NIPPLE
3	2	EL3490	3/4" 90 DEGREE SHORT ELBOW GALV
4	5	A314	3/4" CONDUIT LOCKNUT GALV.
5	1	100680	OL1/2 LED SERIAL # LABEL
6	2	OL1VBH34LED2	FAA OL16LED 120/240VAC VALOX LED BH SL 3/4
* 6.1	1	105RV	VALOX SINGLE SIDELIGHT BODY
* 6.2	1	106V	VALOX LENS HOLDER RING
* 6.3	2	HC255SS	SIDELIGHT LATCH
* 6.4	1	OLG2	OL1 6 LED GASKET
* 6.5	16	18PRSS	1/8 X .45 SS POP RIVET
* 6.6	.5	7X7SS	1/16 HOL 7X7 S.S. WIRE
* 6.7	2	A1A	STAKON CRIMP
* 6.8	1	A314	3/4" CONDUIT LOCKNUT GALV.
* 6.9	2	12V245	OL LENS CLIP
* 6.10	2	832X14PH	8-32 X 1/4" PH SS SLOT SCREW
* 6.11	1	AP100846	SIDELIGHT LENS CLEAR ACYRLIC
* 6.12	1	PS90-260/24	POWER SUPPLY
* 6.13	6	STE01-047	LED VERTICAL PCB
* 6.14	1	100588	OL 6LED BASE PLATE
* 6.15	1	100591	OL 6LED STAR DISK
* 6.16	6	STD05008	LED EMITTER
* 6.17	1	A10290	5/32" X 11/32" RUBBER GROMMET
* 6.18	3	632X14PHH	6-32 X 1/4" PH PH SCREW
* 6.19	.3	20RED	#20AWG RED BELDON WIRE
* 6.20	1	14GREEN	#14AWG GREEN BELDON WIRE
* 6.21	1	14RB6R	RING TERMINAL (GROUND WIRE)
* 6.22	3	WIRENUTRED	RED WIRE NUT FOR #8 TO #12 WIRE

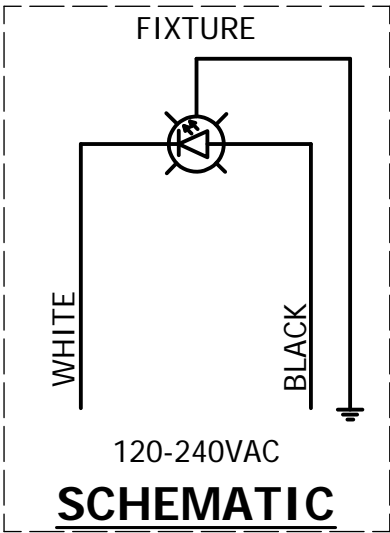
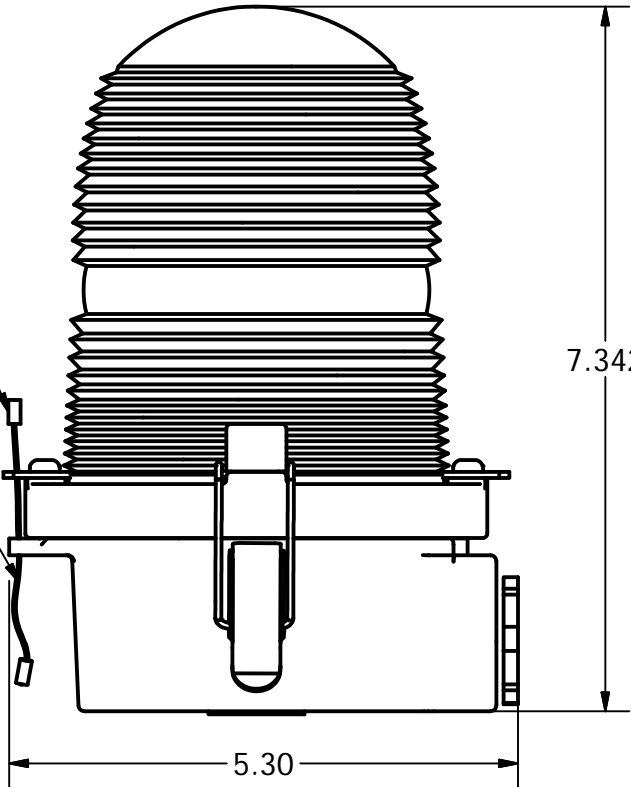
\* = ITEMS NOT SHOWN

DRAWN gsebek	6/9/2005	<b>TWR Lighting, Inc.</b> <b>WARK</b> <i>Enlightened Technology®</i>			
CHECKED					
QA		TITLE			
MFG		OL2VLED2 FAA-OL16LED 120-240VAC DOUBLE VALOX LED SL (L810 LED DOUBLE OBSTRUCTION LIGHT)			
APPROVED		SIZE B	DWG NO 100658	REV F	
REVISION JZAMORANO	11/07/14	SCALE	SHEET 1 OF 1		



Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	OL1VLED2	L810 OBSTRUCTION LIGHT
* 1.1	1	100588_RE	OL 6LED BASE PLATE
* 1.2	1	100591	OL 6LED STAR DISK
* 1.3	1	100680	OL1/2 SERIAL # LABEL
* 1.4	1	A10290	5/32" ID RUBBER GROMMET
* 1.5	6	STD05008	LED EMITTER
* 1.6	1	OLG	OL GASKET
* 1.7	1	AP100846	SIDELIGHT LENS CLEAR ACYRLIC
* 1.8	1	106V	LENS HOLDER RING
* 1.9	6	STE01-047	LED VERTICAL PCB
* 1.10	16	18PRSS	1/8 X .45 SS POP RIVET
* 1.11	1	PS90-260/24	POWER SUPPLY
* 1.12	1	20RED	#20AWG RED BELDON WIRE
* 1.13	2	WIRENUTBLU	BLUE WIRE NUT
2	2	HC255SS	SIDELIGHT LATCH
3	1	7X7SS	1/16 HOL 7X7 S.S. WIRE
4	2	12V245	OL LENS CLIP
5	1	105V	SINGLE SIDELIGHT BODY
6	2	832X14PH	8-32 X 1/4 PH SS SLOT SCREW
7	2	A1A	STAKON CRIMP
8	1	A314	3/4" CONDUIT LOCKNUT GALV.

\* = ITEMS NOT SHOWN



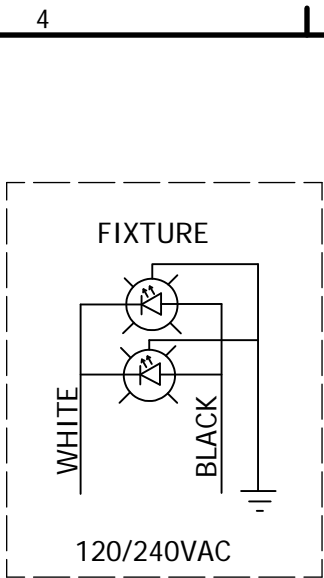
\* GROUND WIRE MUST BE CONNECTED TO PROPERLY PROTECT POWER SUPPLY. FAILURE TO GROUND WILL VOID ALL WARRANTIES.

DRAWN	gsebek	8/18/2004
CHECKED		
QA		
MFG		
APPROVED		

<b>TWR Lighting, Inc.</b> <i>Enlightened Technology®</i> <b>WARK®</b>			
TITLE			
OL1VLED2 120-240VAC FAA-OL16LED (L810 OBSTRUCTION LIGHT)			
SIZE		DWG NO	REV
B		100656i	E
SCALE			
SHEET 1 OF 1			

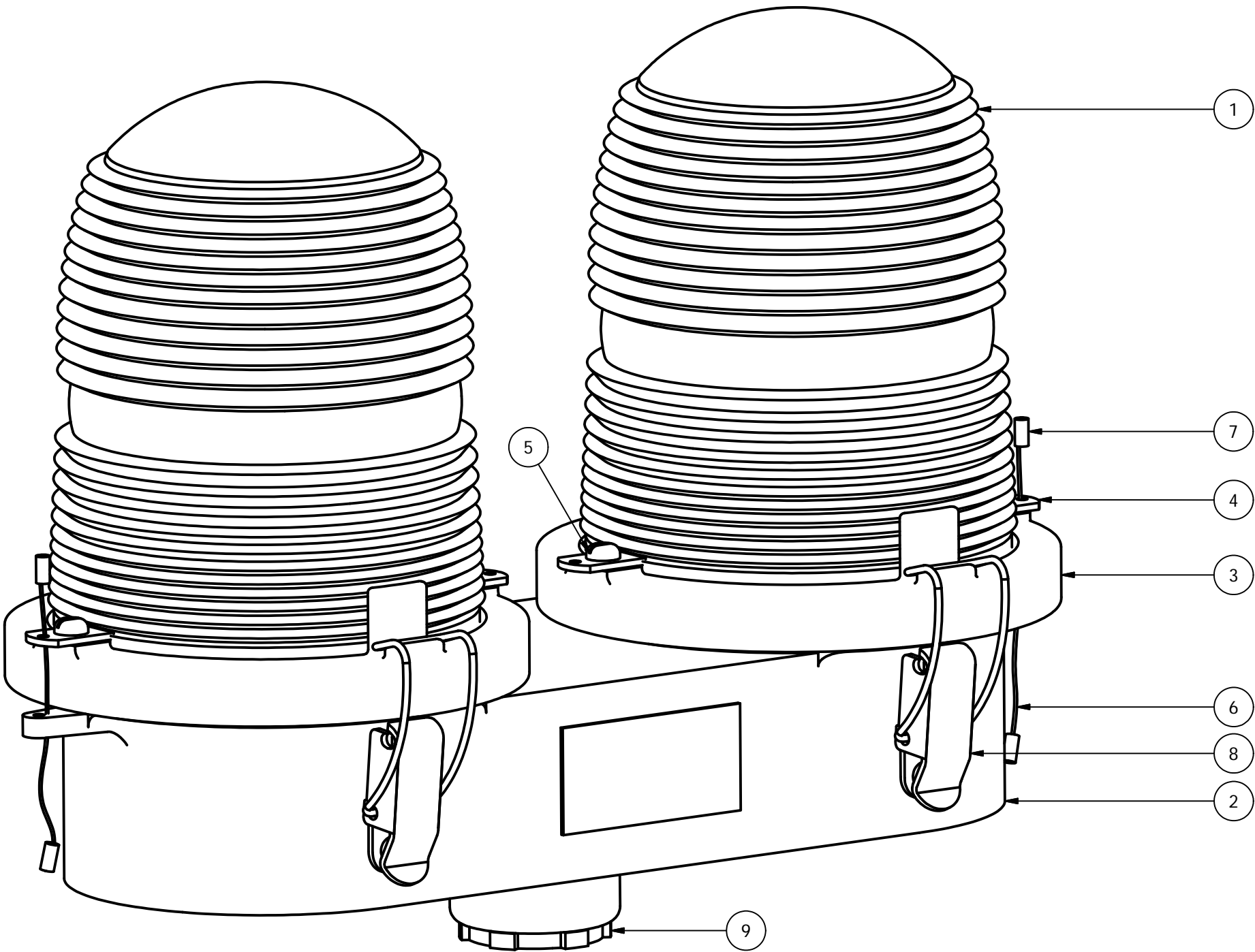
DATE	REV	AUTHOR	DESCRIPTION
11/07/14	E	JZAMORANO	REM. WIRE CONNECT



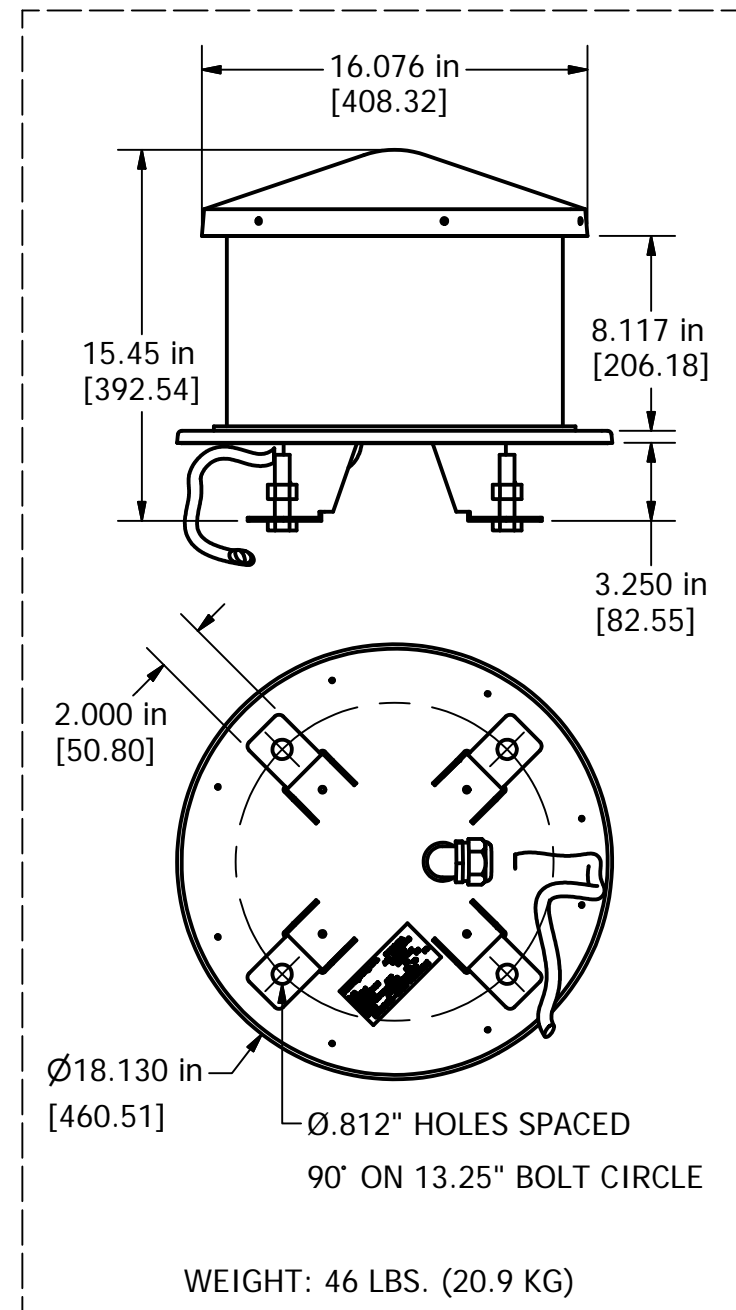
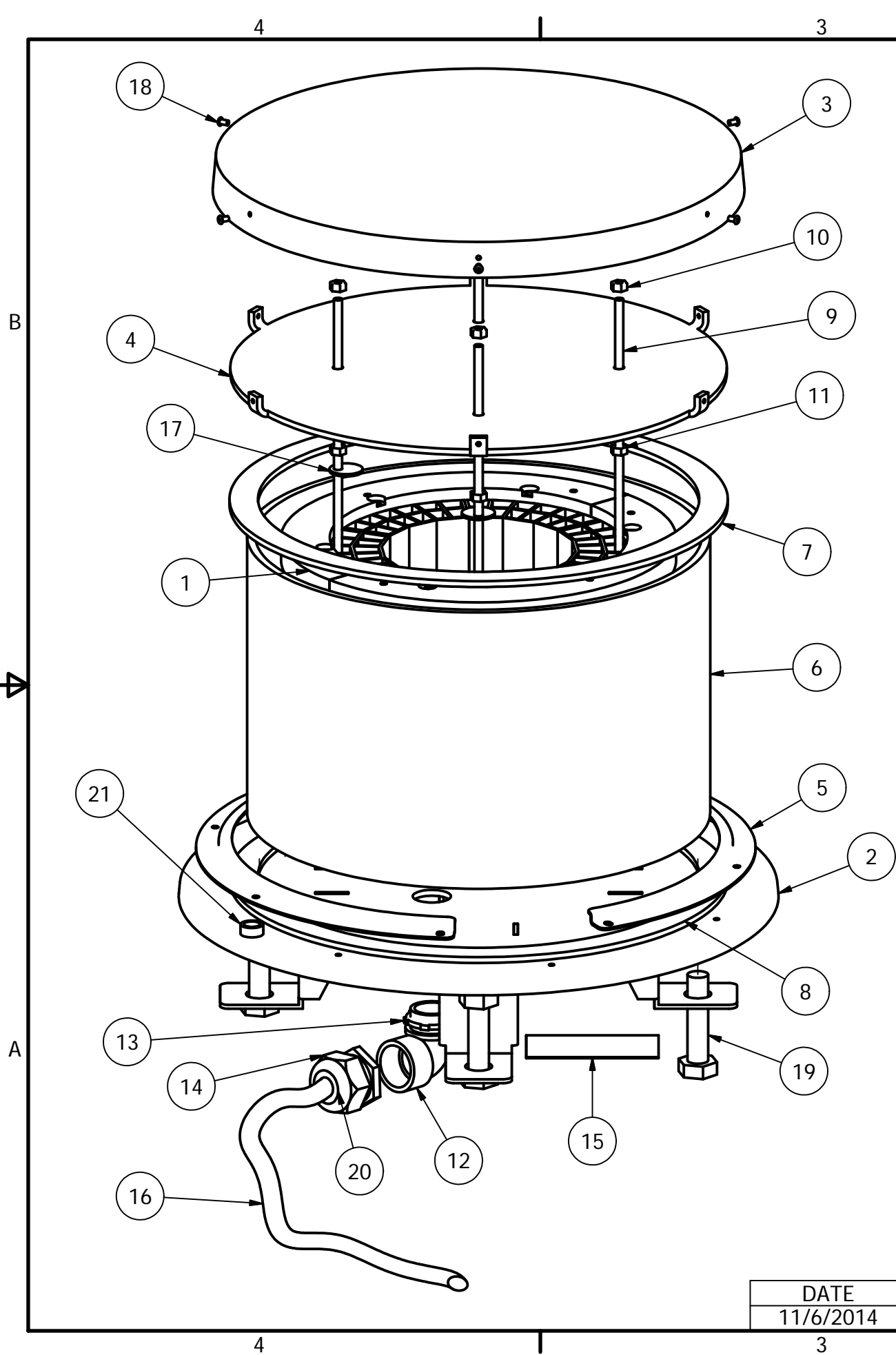


\* GROUND WIRE MUST BE  
CONNECTED  
TO PROPERLY PROTECT  
POWER SUPPLY.  
FAILURE TO GROUND WILL  
VOID ALL  
WARRANTIES.

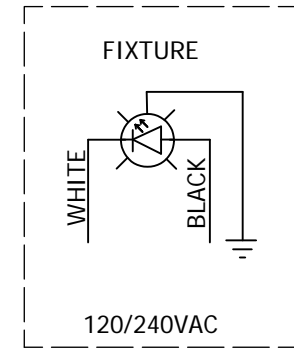
Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	2	AP100846	SIDELIGHT LENS CLEAR ACYRLIC
2	1	OL2CP	OL-2 CASTING BODY PAINT
3	2	106CP	PAINTED LENS HOLDER RING
4	4	12V245	OL LENS CLIP
5	4	832X14PH	8-32 X 1/4 PH SS SLOT SCREW
6	1	7X7SS	1/16 HOL 7X7 S.S. WIRE
7	4	A1A	STAKON
8	4	HC255SS	SIDELIGHT LATCH
9	1	A314	3/4" CONDUIT LOCKNUT



DRAWN E.A.SALAZAR	7/5/2007	<b>TWR Lighting, Inc.</b> <b>WARK</b> <i>Enlightened Technology®</i>		
CHECKED				
QA				
MFG				
APPROVED		TITLE  OL2CLED2		
REVISED J.ZAMORANO	10/22/2014	SIZE B	DWG NO 100786i	REV B
		SCALE	SHEET 1 OF 1	



Parts List			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	LEDLITEENG2	ORGA L-864 LED LIGHT ENGINE 120/240VAC
2	1	100672	LEDBEACON BASE PLATE
3	1	100344	CAP DUAL BEACON
4	1	100673	LEDBEACON LID PLATE
5	2	100337	LENS RETAINER RING
6	1	STLDBCTUBE2	CLEAR ACRYLIC TUBE
7	1	STBEAGSK4	GASKET NEOPRENE 13 1/8 X 15 OD X
8	1	STBEAGSKT	GASKET NEOPRENE 13 1/4 x 15
9	4	100727	14-20 X 9.875\" DE 304 S.S. ORG
10	4	1420SSNUTN	1/4-20 NUT W/NYLON INSERT 304
11	4	1420NUT	1/4-20 NUT 304 S/S
12	1	EL190S	1\" 90 DEGREE SHORT ELBOW GALV.
13	1	A315	1\" CONDUIT LOCKNUT GALV.
14	1	CC-NPT34-G	3/4\" NPT CORD CONNECTOR .500\"
15	1	STCONLAB2	100223 PRODUCT LABEL
16	21'	CSO14-3	S.O. CORD 14AWG/3 CONDUCTOR
17	2	100606M	LED LIGHT ENGINE TIE DOWN WASH
18	6	18PRSS-2	1/8 X .400 SS POP RIVET #44
19	4	58X112	5/8 X 1-1/2 HEX BOLT
20	1	RE32	1\" TO 3/4\" REDUCER, GALV.
21	1	2-10000	CIRCULAR SPIRIT LEVEL
* = ITEMS NOT SHOWN			

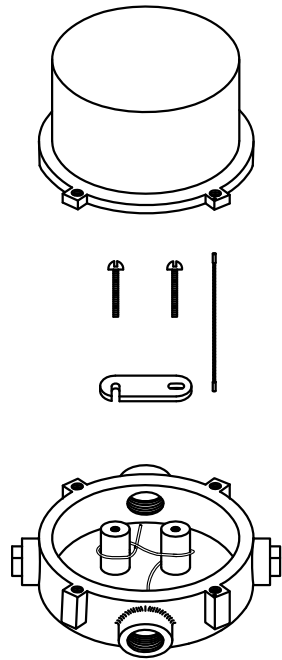
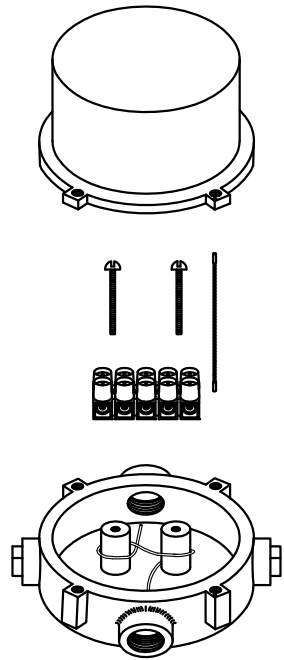


\* GROUND WIRE MUST BE CONNECTED TO PROPERLY PROTECT POWER SUPPLY. FAILURE TO GROUND WILL VOID ALL WARRANTIES.

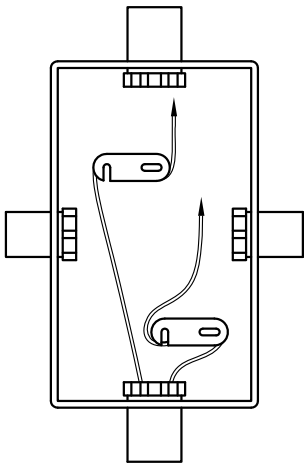
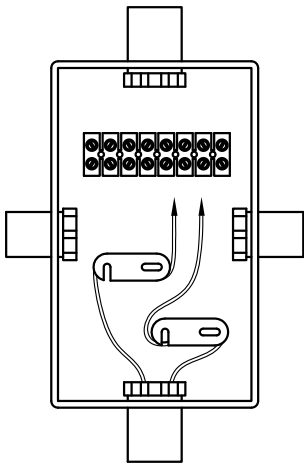
DATE	AUTHOR	REV	DESCRIPTION
11/6/2014	JZamorano	C	UPDATED BOM

DRAWN VHernandez	9/4/2007	<b>TWR Lighting, Inc.</b> <i>Enlightened Technology®</i>		
CHECKED				
QA		TITLE		
MFG		LEDBEACON2 ASSEMBLY		
APPROVED				
		SIZE B	DWG NO 100761	REV C
		SCALE 1/4	SHEET 1 OF 1	





JB-5 AND JB-0  
3/4" JUNCTION BOX



JB-8 AND JB-8SR  
1" JUNCTION BOX

USING THIS JUNCTION BOX METHOD SPACING IS 100 FEET MAXIMUM.

AWG WIRE SIZE	MAX. NUMBER WIRES IN 3/4" CONDUIT	MAX. NUMBER WIRES IN 1" CONDUIT	WIRE AREA SQ. INCHES	WEIGHT PER 100 FEET
12 THHN	16	26	0.0117	2.50
10 THHN	10	17	0.0184	4.10
8 THHN	6	9	0.0373	6.70
6 THHN	4	7	0.0519	10.30
4 THHN	2	4	0.0845	16.20

NOTES:

- 1) DRAWING ILLUSTRATES METHOD OF STRAIN RELIEVING WIRE. USE THIS METHOD ON ALL JUNCTION BOXES.
- 2) THE NATIONAL ELECTRICAL CODE-ARTICLE 300-19-B3 REQUIRES CONDUCTORS IN A VERTICAL CONDUIT BE SUPPORTED TO RELIEVE STRAIN ON TERMINAL BLOCK CONNECTIONS.
- 3) SKETCH ILLUSTRATES METHOD OF STRAIN RELIEVING A SINGLE CONDUCTOR. SEVERAL CONDUCTORS MAY BE GROUPED TOGETHER.
- 4) CONDUCTORS MAY BE MIXED BUT SHOULD NOT TAKE UP MORE THAN 40% OF CONDUIT'S INSIDE AREA.

JUNCTION AND STRAIN RELIEF BOXES

PROD DEPT

SERV DEPT

ENGINEER

**TWR Lighting, Inc.**  
Enlightened Technology®

DRAWN BY  
G.D. SEBEK

DATE  
07/26/93

SCALE  
N.T.S.

SHEET SIZE  
B

SHEET QTY.  
1 OF 1

DWG. NO.  
100089

9/29/00 **(A)** 3 UPDATED NOTES

DATE: LTR. REVISION

The use of non-TWR 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.  
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BILL OF MATERIALS

ITEM NO.	QTY.	TWR PART NO.	DESCRIPTION
1	1	OL2-LED	LED DOUBLE SIDELIGHT 3/4 INCH
2	—	---	---
3	2	CGB295SA	3/4" CORD CONNECTOR .5-.62
4	1	SS5012	WRAPLOCK 50'
5	1	TL27CG	L CONDULET W/COVER & GASKET
6	2	A314	3/4" CONDUIT LOCKNUTS
7	1	OL2PIGTAILG	18" OL2 PIGTAIL WITH GROUND
8	1	N34T12	3/4" X 12" NIPPLE
* 9	6	WIENUTRED	RED WIRE NUT
10	1	AA0	AA0 CONTROLLER
* 11	2'	12THHNGRN	#12 THHN GREEN WIRE
* 12	1	TAPEL1	BLACK ELECTRICAL TAPE
13	--	STCABLTIE	CABLE TIES (TWR. HT. ÷ 5)
14	--	CS012/3	3 - #12 S.O. CORD

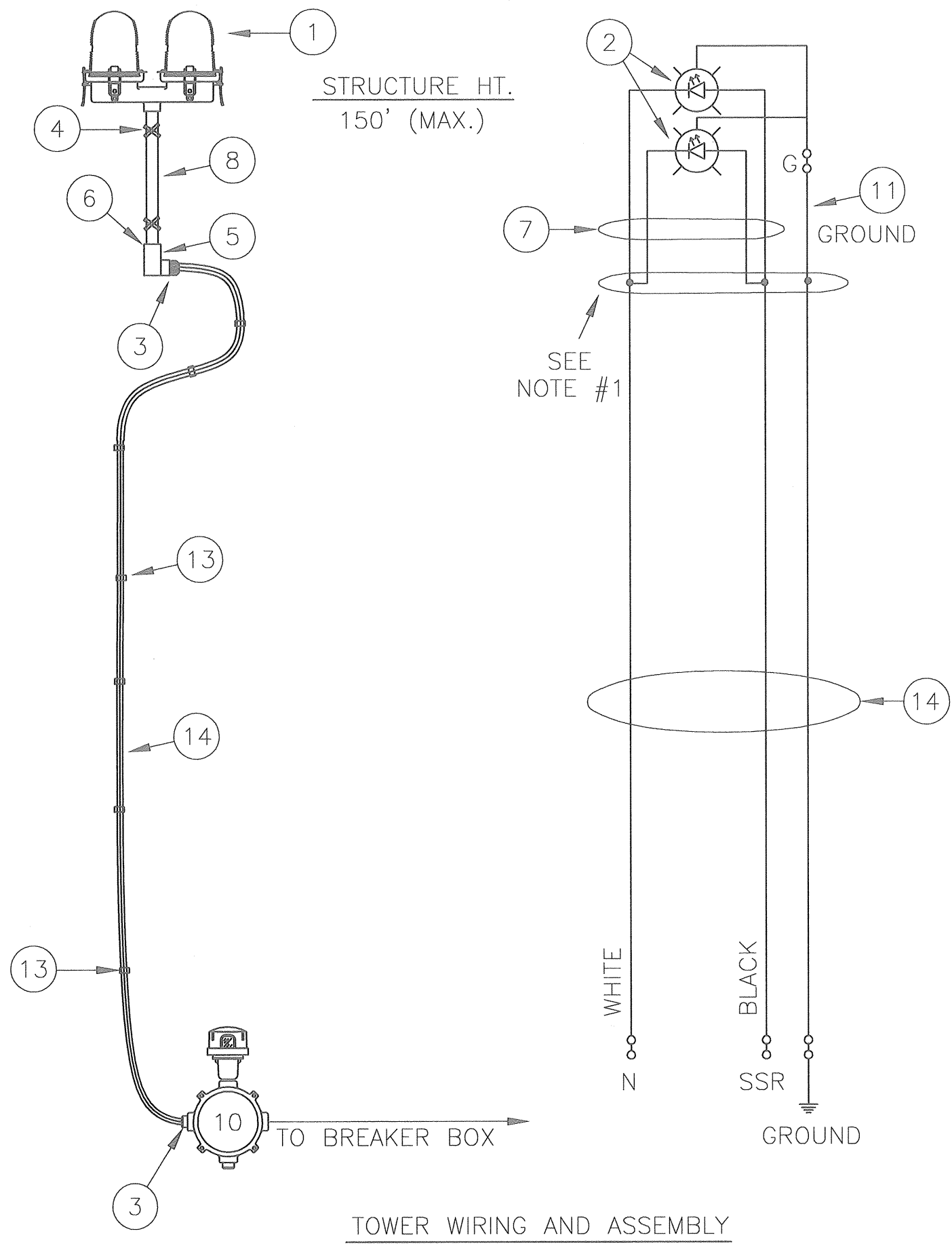
\* = NOT SHOWN

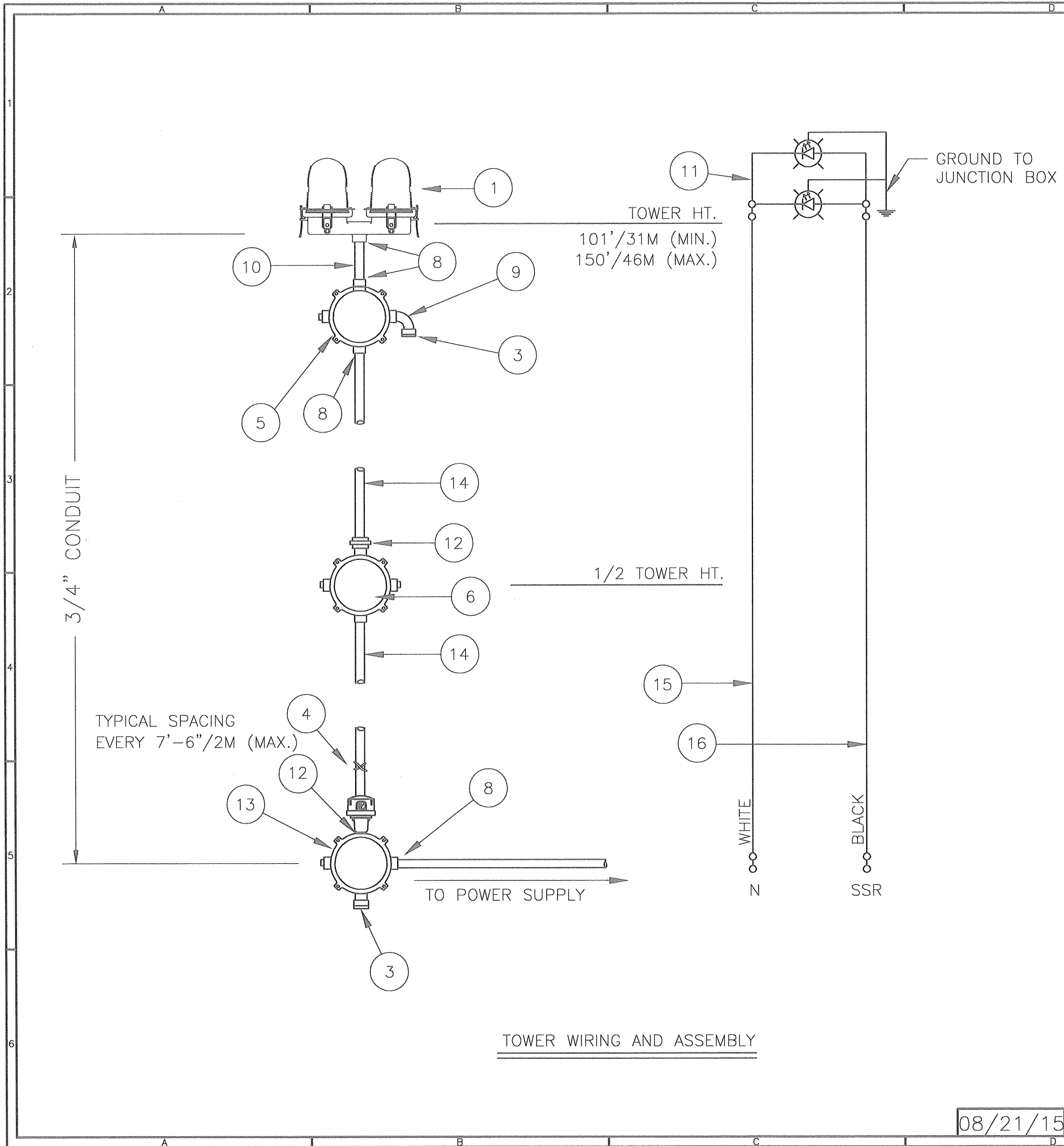
NOTES:

- 1) USE TWR PART #WIENUTRED AND TAPEL1 TO CONNECT CS012/3 WIRE TO OL2PIGTAILG IN THE TL27CG.

LK2A0LED AA0 LIGHTING KIT W/ CABLE			
FOR LED OL2 LIGHT			
PROD DEPT			
SERV DEPT			
ENGINEER			
DRAWN BY	E.A. SALAZAR		
DATE	03/03/03	SCALE	N.T.S.
SHEET SIZE	B	SHEET QTY.	1 OF 1
DWG. NO.	T1127		
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.			
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08/21/2015	(C)	3	UPDATED WIRING
DATE:	LTR.		REVISION





BILL OF MATERIALS			
ITEM NO.	QTY.	TWR PART NO.	DESCRIPTION
1	1	OL2___	DOUBLE OBSTRUCTION LIGHT LED
2	—	---	-----
3	2	5012902	BREATHER
4	1	SS10012	WRAPLOCK
5	1	JB5	3/4" JUNCTION BOX
6	1	JB0	3/4" STRAIN RELIEF BOX
7	1	PIPDOP	4 oz. PIPE DOPE
8	7	A314	3/4" CONDUIT LOCKNUTS
9	2	EL3490	3/4" 90° SHORT ELBOW
10	1	N34T4	3/4" x 4" CONDUIT NIPPLE
11	1	OL2PIGTAILG	18" OL2 PIGTAIL WITH GROUND
12	3	UNY205	3/4" UNION
13	1	AA0_____	AAO CONTROLLER

ITEM NUMBERS #14-#16 ARE NOT INCLUDED IN THE KIT BUT ARE REQUIRED FOR INSTALLATION.

14	—	CONDUIT34	3/4" CONDUIT (TWR HT. + 30'/9M)
15	—	14THHNWHT	#14 THHN WHT. WIRE (TWR HT.+40'/12M)
16	—	14THHNBK	#14 THHN BLK. WIRE (TWR HT.+40'/12M)

\* = ITEMS NOT SHOWN

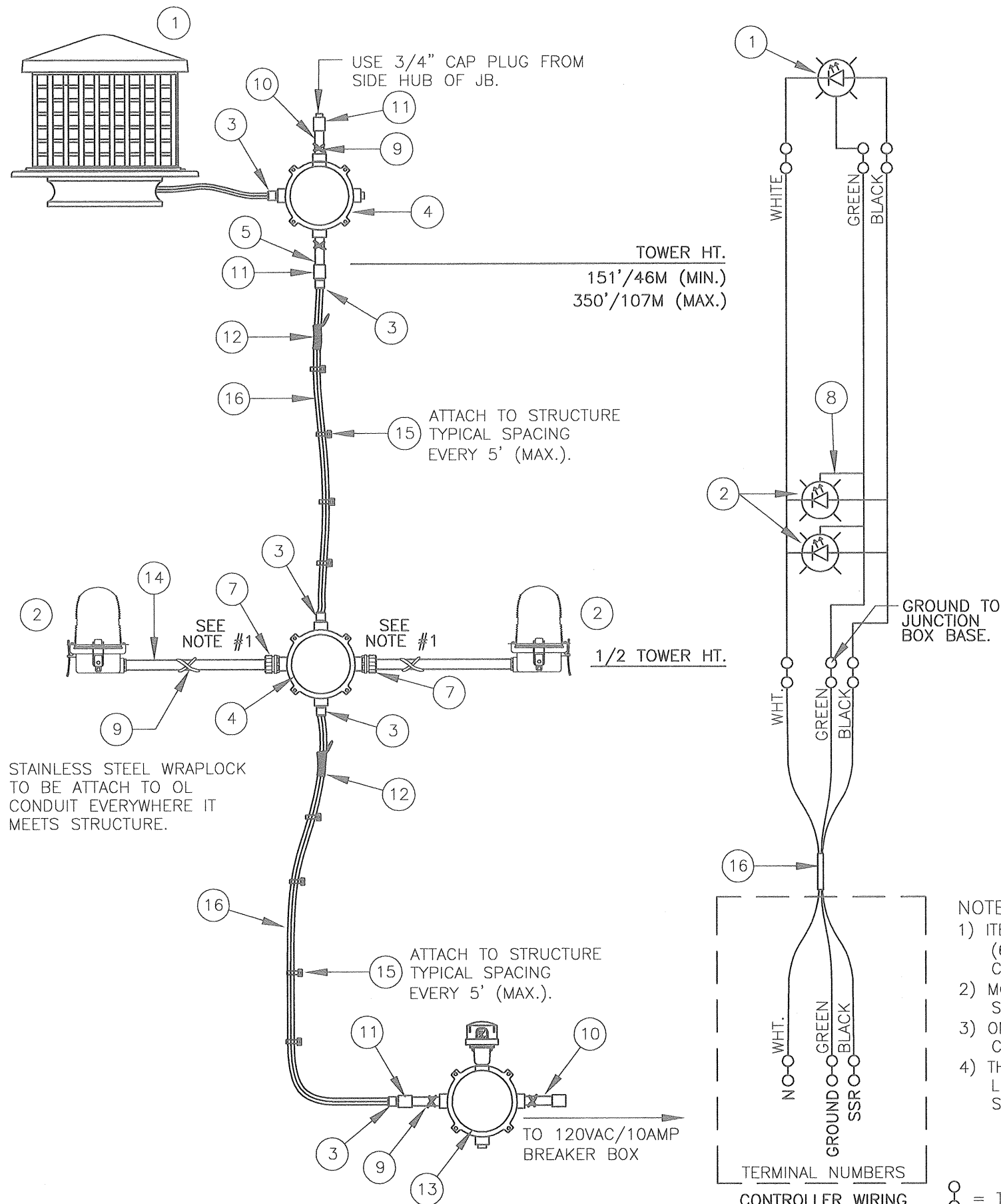
NOTES:

- 1) CONDUIT SIZE BASED ON USING TYPE THHN WIRE.
- 2) USE RIGID GALVANIZED STEEL CONDUIT.
- 3) BREATHERS ALLOW FOR CIRCULATION OF AIR TO PREVENT CONDENSATION.

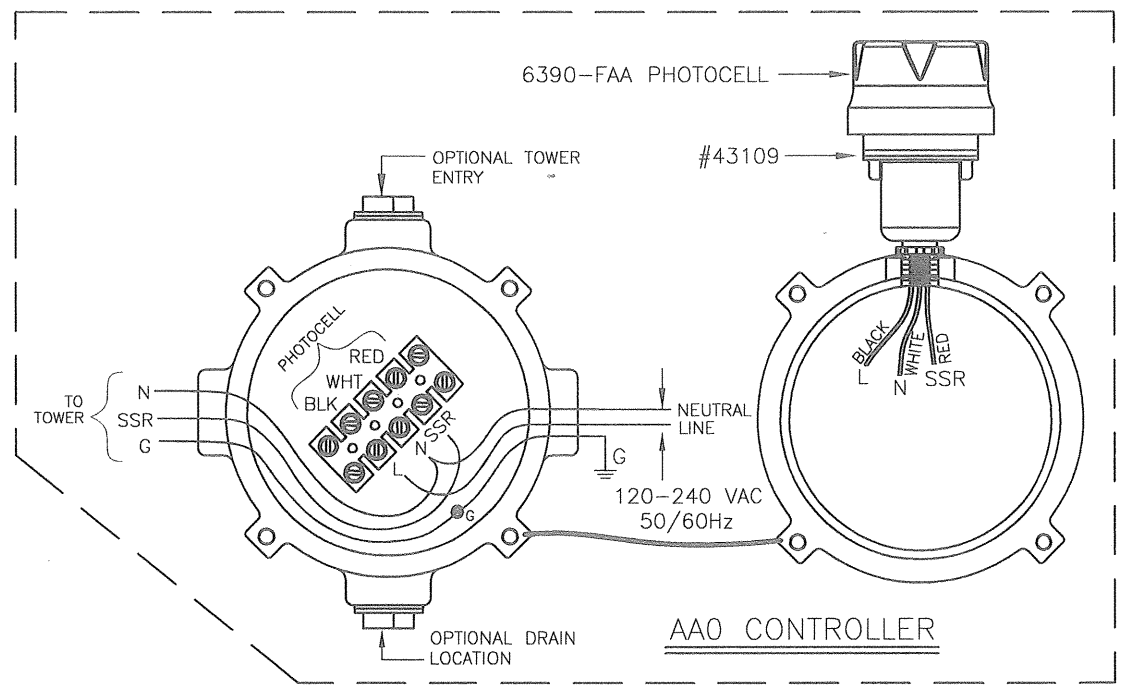
AAO LED LIGHTING KIT			
CONTROLLER (TOWERS 101'/31M TO 150'/46M)			
PROD. DEPT.			
SERV. DEPT.			
ENGINEER			
DRAWN BY	M. PETERMAN		
DATE	07/22/13	SCALE	N.T.S.
SHEET SIZE		SHEET QTY.	1 OF 1
DWG. NO.		T1559	
<small>The use of non-OEM parts or modifications to original equipment design will void the manufacturer warranty and could invalidate the assurance of complying with FAA requirements as published in Advisory Circular 150/5345-43.</small>			
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08/21/15 **B** UPDATED DRAWING





BILL OF MATERIALS			
ITEM NO.	QTY.	TWR PART NO.	DESCRIPTION
1	1	LEDBEACON2	LED BEACON
2	2	OL1LED	LED SIDELIGHT 3/4"
3	5	CGB296SA	3/4" CORD CONNECTOR 0.625 - 0.750
4	2	JB5	3/4" JUNCTION BOX
5	2	A314	3/4" CONDUIT LOCKNUTS
* 6	1	PIPDOP	4 oz. PIPE DOPE
7	2	HC402	3/4" NO THREAD CONNECTOR
8	2	SLPIGTAIL25G	25' SIDELIGHT PIGTAIL WITH GROUND
9	1	SS5012	STAINLESS STEEL WRAPLOCK 50'
10	4	N34T6	3/4" x 6" NIPPLE (FOR JB MOUNTING)
11	4	CPLG34	3/4" CONDUIT COUPLING
12	2	CABLEGRIP3	SINGLE EYE LACE MESH 0.63 - 0.74
13	1	AA0	AA0 CONTROLLER
14	20'	CONDUIT34	3/4" CONDUIT
ITEM NUMBERS #15-#16 ARE NOT INCLUDED IN THE KIT BUT ARE AVAILABLE UPON REQUEST, AND REQUIRED FOR INSTALLATION.			
~ 15	-	STCABLIE	STROBE CABLE TIES (TWR. HEIGHT + 5')
~ 16	-	CS012/4	4 - #12 WIRE CABLE (TWR. HT. + 30')
* = ITEMS NOT SHOWN			
~ = ITEMS QUANTITY CALCULATED ACCORDING TO STRUCTURE HEIGHT.			



- NOTES:
- ITEM #CONDUIT34 CUT TO LENGTH FOR PROPER EXTENSION OF OL1 (6"-12") FROM STRUCTURE. ATTACH ITEM #HC402 TO UNTHREADED CONDUIT TO COMPLETE ASSEMBLY.
  - MOUNT BEACON HINGE SO LENS WILL OPEN UNOBSTRUCTED BY STRUCTURE.
  - ON AM TOWER APPLICATIONS, KEEP GROUND LUG FROM BEING CONNECTED TO EARTH GROUND. GROUND TO THE TOWER ONLY.
  - THIS DRAWING IS PROVIDED AS A GENERAL REFERENCE. TWR LIGHTING, INC. DOCUMENTATION SUPERSEDES THIS DRAWING & SHOULD BE REVIEWED PRIOR TO INSTALLATION OF THIS SYSTEM.

**USING AA0 CONTROLLER**

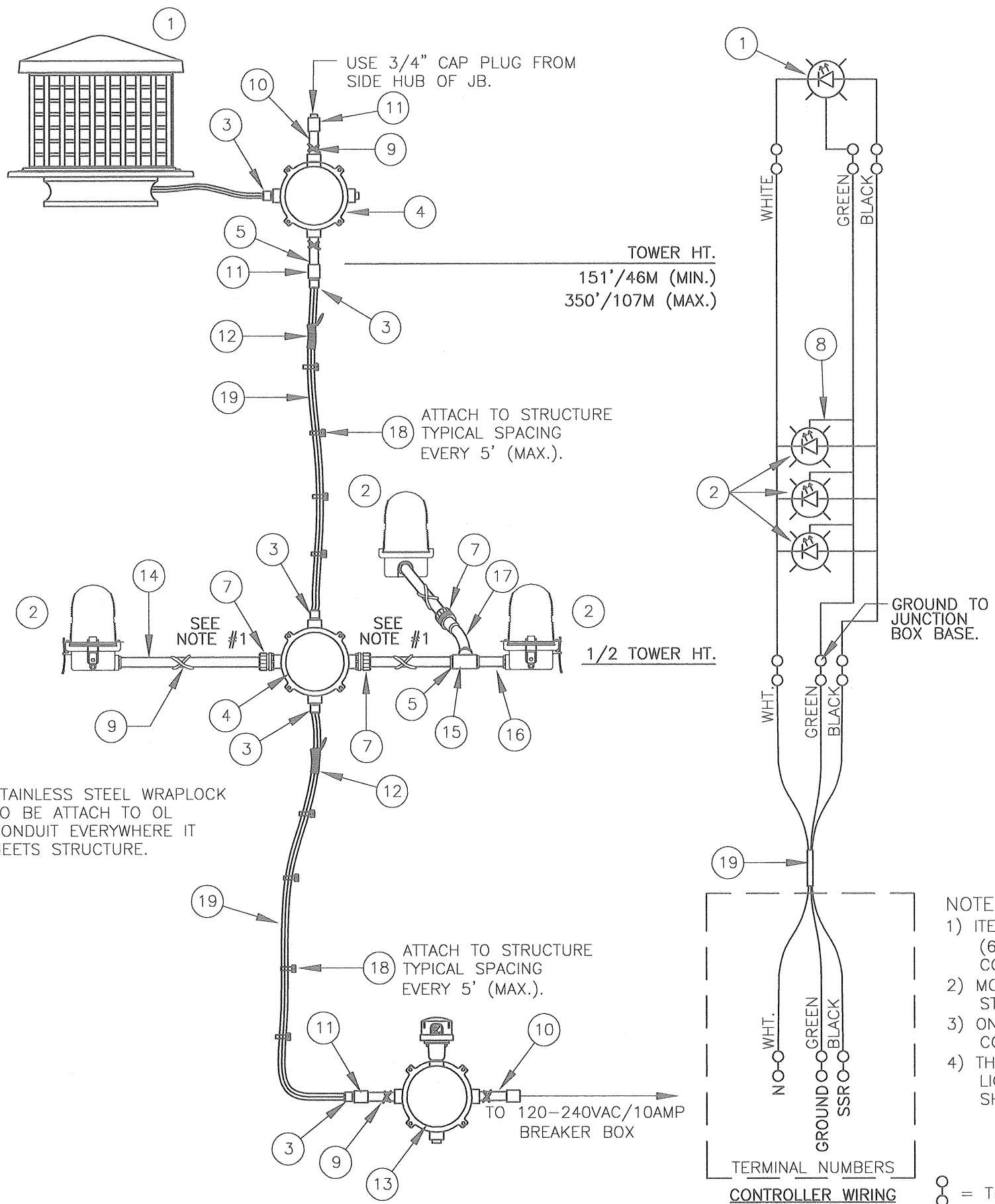
**AA1LED TOWER LIGHTING KIT CABLE RUN**  
(TOWERS 151'/46M TO 350'/107M/10' FACE WIDTH MAX)

PROD. DEPT.	 <b>TWR Lighting, Inc.</b> <i>Enlightened Technology</i>	SHEET SIZE	SHEET QTY.
SERV. DEPT.		B	1 OF 1
ENGINEER			
DRAWN BY	J.L. BUSTAMANTE	DATE	06/14/07
DATE	06/14/07	SCALE	N.T.S.
		DWG. NO.	T1287

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09/17/15 (B) ADDED NOTES





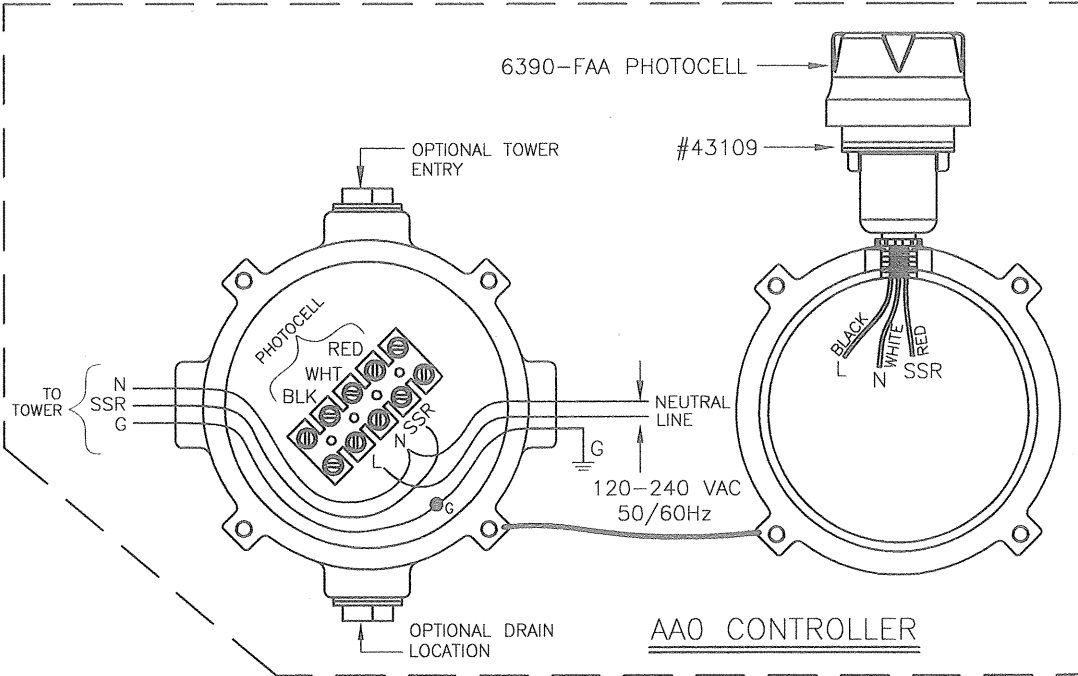
BILL OF MATERIALS

ITEM NO.	QTY.	TWR PART NO.	DESCRIPTION
1	1	LEDBEACON2	LED BEACON
2	3	OL1LED	LED SIDELIGHT 3/4"
3	5	CGB295SA	3/4" CORD CONNECTOR 0.50 - 0.620
4	2	JB5	3/4" JUNCTION BOX
5	7	A314	3/4" CONDUIT LOCKNUTS
6	1	PIPD0P	4 oz. PIPE DOPE
7	3	HC402	3/4" NO THREAD CONNECTOR
8	3	SLPIGTAIL25G	25' SIDELIGHT PIGTAIL WITH GROUND
9	1	SS5012	STAINLESS STEEL WRAPLOCK 50'
10	4	N34T6	3/4" x 6" NIPPLE (FOR JB MOUNTING)
11	4	CPLG34	3/4" CONDUIT COUPLING
12	2	CABLEGRIP1	SINGLE EYE LACE MESH
13	1	AA0	AA0 CONTROLLER
14	30'	CONDUIT34	3/4" CONDUIT
15	1	T27CG	3/4" CONDULET COVER AND GASKET
16	1	N34T3	3/4" X 3" NIPPLE
17	1	EL3430	3/4" 30' ELBOW

ITEM NUMBERS #18-#19 ARE NOT INCLUDED IN THE KIT BUT ARE AVAILABLE UPON REQUEST, AND REQUIRED FOR INSTALLATION.

18	-	STCABLIE	STROBE CABLE TIES (TWR. HEIGHT + 5)
19	-	CSO12/3	3 - #12 WIRE CABLE (TWR. HT. + 30')

\* = ITEMS NOT SHOWN  
~ = ITEMS QUANTITY CALCULATED ACCORDING TO STRUCTURE HEIGHT.



- NOTES:
- ITEM #14 CUT TO LENGTH FOR PROPER EXTENSION OF OL1 (6"-12") FROM STRUCTURE. ATTACH ITEM #7 TO UNTHREADED CONDUIT TO COMPLETE ASSEMBLY.
  - MOUNT BEACON HINGE SO LENS WILL OPEN UNOBSTRUCTED BY STRUCTURE.
  - ON AM TOWER APPLICATIONS, KEEP GROUND LUG FROM BEING CONNECTED TO EARTH GROUND. GROUND TO THE TOWER ONLY.
  - THIS DRAWING IS PROVIDED AS A GENERAL REFERENCE. TWR LIGHTING, INC. DOCUMENTATION SUPERSEDES THIS DRAWING & SHOULD BE REVIEWED PRIOR TO INSTALLATION OF THIS SYSTEM.

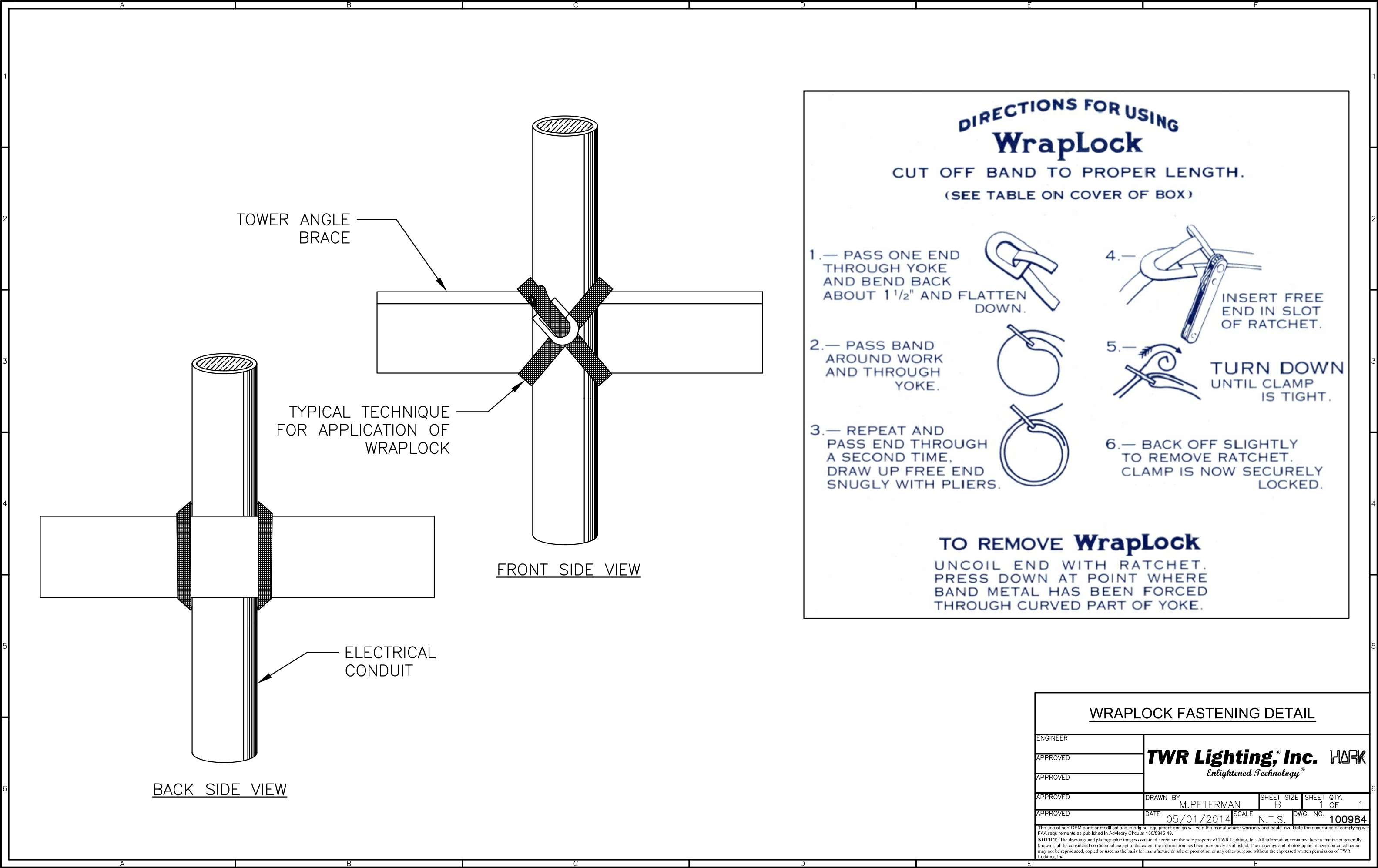
USING AA0 CONTROLLER

AA1LED TOWER LIGHTING KIT CABLE RUN			
(TOWERS 151'/46M TO 350'/107M/10' FACE WIDTH MAX)			
PROD. DEPT.	SERV. DEPT.	ENGINEER	TWR Lighting, Inc. <i>Enlightened Technology</i>
DRAWN BY E.A. SALAZAR			
DATE 08/23/2007	SCALE N.T.S.	SHEET SIZE B	SHEET QTY. 1 OF 1
DWG. NO. T1301			

The use of non OEM parts or modifications to original equipment design void the manufacturer warranty and could invalidate the assurance of compliance with FAA requirements as published in Advisory Circular 150/5345-43.  
NOTICE: The drawings and photographic images contained herein are the sole property of TWR Lighting, Inc. All information contained herein that is not generally known shall be considered confidential except to the extent the information has been previously established. The drawings and photographic images contained herein may not be reproduced, copied or used as the basis for manufacture or sale or promotion or any other purpose without the expressed written permission of TWR Lighting, Inc.

09/17/15 [E] 3 ADDED NOTES







## AA0 LED CONTROLLER

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### 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.**

# **TWR Lighting, Inc.** **MARK**

*Enlightened Technology®*

## **AA0 LED CONTROLLER**

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### **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:

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

# **TWR Lighting, Inc.** **MARK**

*Enlightened Technology®*

## **AA0 LED CONTROLLER**

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### **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.

- x Product(s) that is deemed defective and/or unrepairable and covered under warranty - a credit will be issued to the customer's account.
- x 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.
- x 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.



*Enlightened Technology®*

## AA0 LED CONTROLLER

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### 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 FORGOING, TWR® MAKES NO WARRANTY OF MERCHANTABILITY OR FITNESS OF THE PRODUCT(S) FOR ANY PARTICULAR PURPOSE. TWR® EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES.



*Enlightened Technology®*

## AA0 LED CONTROLLER

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### 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





*Enlightened Technology®*

## AA0 LED CONTROLLER

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### 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