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Revision G



Title:

INSTRUCTION MANUAL
TAXIWAY OMNIDIRECTIONAL LIGHT
(TOL)
L-852

**INSTRUCTION MANUAL
TAXIWAY OMNIDIRECTIONAL LIGHT (TOL) L-852E**

REVISIONS

REVISION NUMBER	ISSUE/REISSUE LTR NUMBER	DESCRIPTION	CHKD	APPROVED
A	A92-399	1) Added (O-ring is only required in sealed shallow bases) to para. 2.3, Page 4	1/8/93	DCW
B	A93-191	Pg. 17; 823KS-OPS6 was 10047-308	6/15/93	RBM
C	A98-309	REVISED AND REDRAWN	9/1/98	KWF
D	A201-135	Changed picture and related data of 20552 Assy. To be compatible with 20510 Assy.	9/7/01	DCW
E	A201-270	Added "the Company" to the warranty; added Items 22 & 23 to the Parts List, pg. 20 and Figure 8 for -3 & -4 version	1/4/02	GFR
F	A202-051	Item 21 in Parts Lists for 20510 and 21078 was 20801-2; Item 20 in same was 20801-1; Adjusted Figure 6 to show revised item 20	3/15/02	GFR
G	A203-065	Pg 1, 20510 was 21510	3/27/03	GFR

INSTRUCTION MANUAL
TAXIWAY OMNIDIRECTIONAL LIGHT (TOL) L-852E**LIMITED PRODUCT WARRANTY**

THE FOLLOWING WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING, BUT NOT BY WAY OF LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.

Crouse-Hinds Airport Lighting Products (the "Company") warrants to each original Buyer of Products manufactured by the Company that such Products are, at the time of delivery to the Buyer, free of material and workmanship defects, provided that no warranty is made with respect to:

- (a) any Product which has been repaired or altered in such a way, in Company's judgment, as to affect the Product adversely;*
- (b) any Product which has, in Company's judgment, been subject to negligence, accident or improper storage;*
- (c) any Product which has not been operated and maintained in accordance with normal practice and in conformity with recommendations and published specification of Company; and,*
- (d) any Products, component parts or accessories manufactured by others but supplied by Company (any claims should be submitted directly to the manufacturer thereof).*

Crouse-Hinds Airport Lighting Product's obligation under this warranty is limited to use reasonable effects to repair or, at its option, replace, during normal business hours at any authorized service facility of Company, any Products which in its judgment proved not to be as warranted within the applicable warranty period. All costs of transportation of Products claimed not to be as warranted and of repaired or replacement Products to or from such service facility shall be borne by Purchaser. Company may require the return of any Product claimed not to be as warranted to one of its facilities as designed by Company, transportation prepaid by Purchaser, to establish a claim under this warranty. The cost of labor for installing a repaired or replacement product shall be borne by Purchaser. Replacement parts provided under the terms of this warranty are warranted for the remainder of the warranty period of the Products upon which they are installed to the same extent as if such parts were original components thereof. Warranty services provided under the Agreement do not assure uninterrupted operations of Products; Company does not assume any liability for damages caused by any delays involving warranty service. The warranty period for the Products is 24 months from date of shipment or 12 months from date of first use whichever occurs first.

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SAFETY NOTICES

This equipment is normally used or connected to circuits that may employ voltages which are dangerous and may be fatal if accidentally contacted by operating or maintenance personnel. Extreme caution should be exercised when working with this equipment. While practical safety precautions have been incorporated in this equipment, the following rules must be strictly observed:

KEEP AWAY FROM LIVE CIRCUITS

Operating and maintenance personnel must at all times observe all safety regulations. Do not perform maintenance on internal components or re-lamp with power ON.

RESUSCITATION

Maintenance personnel should familiarize themselves with the technique for resuscitation found in widely published manuals of first aid instructions.

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PART NUMBER EXPLANATION

XXXXX - X - X - XXX - XX

Basic

Number:

21078 = 11.25 Inch

Bolt Circle

20510 = 10.25 Inch

Bolt Circle

TYPE OF LEADS:

P = Lead with L823 Plug

(Blank) = Leads with Spades

Color:

B = Blue

C = Clear

G = Green

R = Red

Y = Yellow

Lamp Wattage:

40 = 40W 120V 10047-612

45 = 45W 6.6A 20553

115 = 115W 6.6A 20496

Options:

NM = High Strength Castings: Nickel-Molybdenum Alloy

CR = Corrosion Resistant Coating

**INSTRUCTION MANUAL
TAXIWAY OMNIDIRECTIONAL LIGHT (TOL) L-852E****1.0 GENERAL DESCRIPTION**

- 1.1 The Crouse-Hinds Taxiway Omnidirectional Light (TOL) light is an inset fixture designed for use as a taxiway intersection light, taxiway edge light, apron edge light, heliport perimeter light, and heliport touchdown zone light. It is weatherproof and is designed to withstand roll-over loads without damage. The light fixture is omnidirectional. The fixture is interchangeable in any shallow Base Receptacle per paragraph 3.4 of Advisory Circular AC 150/5345-46B or Type L-868 Size B Bases per AC 150/5345-42B, thereby permitting replacement of any light fixture without the necessity of removing the Base Receptacle from the pavement. The light fixture is 12 inches in diameter and 4.20 inches deep overall.
- 1.2 The Optical Assembly consists of an O-Ring sealed unit, containing a lamp, reflector, lens and inner cover assembly. The Optical Assembly is housed in a ductile iron casting which is fastened to the Base Receptacle by six bolts. Fixture Part Number 21078P-Y-115 is FAA approved as a type L-852E taxiway light fixture. (See Part Number Explanation.)

**INSTRUCTION MANUAL
TAXIWAY OMNIDIRECTIONAL LIGHT (TOL) L-852E****2.0 INSTALLATION INSTRUCTIONS****2.1 Pavement Recess and Wireways' Shallow Base Receptacle**

NOTE: CONTACT CROUSE-HINDS AVIATION LIGHTING FOR INSTRUCTIONS IF THE BASE RECEPTACLE IS TO BE INSTALLED SEPARATELY FROM THE OPTICAL ASSEMBLY.

Drill recess in pavement as illustrated in Figure 3. Be sure that the recess size and depth are maintained within the specified limits. The recess side walls must be perpendicular to the pavement surface. The bottom surface must be flat or slightly concave to assure the Base Receptacle rests securely and in true position. The recess can best be drilled using a 12 1/2 inch diameter diamond faced core drill in a sturdy, stable drill rig.

- 2.1.1 The branch wireways should be sawed, using a diamond faced saw as shown in Figures 2 and 3. When wireways cross construction joints, the sawcuts should extend 1 inch below the existing joint for a distance of six inches each side of the joint.
- 2.1.2 Prior to installation of the Light Assembly or wires be sure that all surfaces of the recess and the wireways are clean and dry. If any of these surfaces are damp, it is desirable that they be dried and blown clean with a compressed air blast.
- 2.1.3 It is recommended that the Light Assembly, recess and the wireways in the pavement be at a temperature of not less than 50 degrees F (10 degrees C) before starting installation (unless the adhesive compounds used are designed for curing at a lower temperature).

2.2 Light Assembly Installation

CAUTION - NEVER HANDLE THE LIGHT ASSEMBLY BY THE LEADS AS THIS CAN BREAK THE WATERPROOF SEAL.

- 2.2.1 The Light Assembly is supplied as a completely assembled unit with one bolt sealed to prevent tampering without detection. The required three bolts can be removed to accommodate the 19583 installation fixture.

**INSTRUCTION MANUAL
TAXIWAY OMNIDIRECTIONAL LIGHT (TOL) L-852E****2.2.2 Connection and Installation of Light Assemblies**

Splice the Light Assembly leads to the power cables using solderless squeeze connectors crimped with the proper tool. The splices to the fixture leads should be made at staggered locations. Insulate each splice carefully using either heat shrinkable insulating tubing (ScotchTite Heat Tubing or equal) properly applied or three layers of plastic electrical insulating tape applied with half overlap.

2.2.3 Prior to placing the light assembly in the drilled hole, all external surfaces which will be bonded to the runway (except the feed-thru seal) should be slightly sandblasted and must be cleaned with a solvent to insure an adequate bond between the receptacle and sealer. Do not handle the fixture by the lead wires. An alignment jig (Crouse-Hinds Part Number 19583) should be used to align the light assembly. The jig has 3 positioning tubes which sit over 3 bolt holes in the light assembly (See Figure 4). After the jig is positioned on the light it is secured with the three bolts supplied with the jig. The "V" notches in the jig are then used to align the fixture with the surveyor's marks on the runway. Use of this jig with properly surveyed markings will locate the light channels parallel with the runway centerline. After the fixture leads are properly arranged in the wireway, it may be necessary to place a temporary plug at the wireway entrance to the cored hole. The plug will retain the sealer as it cures.

2.2.4 With the jig attached to the light assembly, completely cover the bottom of the base with a paste type adhesive that complies with Item P-606 of the FAA Standard of Specifications for the Construction of Airports. A layer 1/4" thick of the paste adhesive should be applied to the bottom of the cored hole. When the light assembly is placed in the hole, adhesive should be forced up the side of the base at least 1/8 of an inch. Use the jig to position and align the light assembly. A weight may be placed on the fixture to hold it in position. The space between the side of the base and the recess walls can now be filled with a liquid sealer per Item P-606 of the FAA Standard mentioned above. Fill to a level even with the top of the base or as shown in FAA AC 150/5340-4 (latest revision). The jig should be left in place until the sealer reaches its initial set. If any voids are present in the sealer after the initial set, they should be filled and any excess sealer removed. The jig may be removed for complete visibility.

2.2.5 After the jig is removed and all sealing is complete, coat the three 3/8-16 x 7/8 bolts with Loctite 242. Reinstall them with lockwashers and tighten to 18 foot pounds (225 +0-10 in. lbs).

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- 2.2.6 Fill the wireways completely with an approved polyester compound per Item P-605 of the FAA Standard of Specifications for the Construction of Airports. Cure for at least 24 hours before disturbing, unless otherwise specified. See FAA AC 150/5340-4 (latest revision) for construction and sealing instructions for wireways.

2.3 Optical Assembly Installation on a Shallow Base Receptacle

The Optical Assembly is shipped complete, including the lamp(s) and is ready for installation as received. Be sure that the inside of the base receptacle is dry and clean. Coat a new o-ring with Dow Corning FS 1292 grease and place in the groove of the base receptacle flange. Installation tool Crouse-Hinds P/N 19999 will make lowering the housing into the base easier (See Figure 5). Connect the wire leads from the Optical Assembly to the base receptacle. Lower the housing straight down into the base. Press the Optical Assembly firmly and evenly by hand onto the base receptacle flange. The Optical Assembly is subject to mechanical damage or optical misalignment if not properly seated on the base flange. Failure may also occur due to electrical shorting from wet contacts.

- 2.3.1 Coat the bolt threads with Loctite 242 before installation. Tighten the six bolts with lockwashers at 18 foot pounds (225 +0-10 inch pounds) using a torque wrench.

2.4 Optical Assembly Installation on a Deep Can L-868 Size B Light Base

Install L-868 Light Base per FAA AC 150/5340-4 (latest revision). The Optical Assembly is shipped complete including the lamp(s) and is ready for installation as received. Be sure that the flange on the transformer housing is clean and the o-ring (optional on deep cans) is coated with Dow Corning FS 1292 grease and is in place on the transformer housing flange. Installation tool, Crouse-Hinds P/N 19999 will make lowering the light fixture onto the base easier (See Figure 5). Connect the plug from the optical assembly to the secondary of the previously installed isolation transformer. Lower the optical assembly straight down. Press it firmly and evenly by hand onto the base flange. The optical assembly is subject to optical misalignment or mechanical damage if not properly seated.

- 2.4.1 Install six bolts per paragraph 2.3.1

**INSTRUCTION MANUAL
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The preferred method of maintaining these lights is to periodically and systematically replace the Optical Assembly and return the replaced assembly to the maintenance shop for renovation. As an alternative, the Optical Assembly can be serviced in the field, but it is recommended that field servicing be limited to cleaning the lens as described in paragraph 3.1 below and to lamp replacements as described in paragraph 3.2.1.

3.1 Cleaning Reflector and Lens

Remove the Optical Assembly from the Base Receptacle by loosening the six bolts and gently lifting the assembly out of the Base Receptacle. Place Optical Assembly upside down on ground and disconnect electrical connection between Optical Assembly and Base Receptacle. Separate Inner Cover Assembly from Optical Assembly by removing four screws, thereby giving access to lamp mounting bracket, lens and reflector assembly in Optical Housing. Remove the two screws holding lamp mounting bracket in place being careful not to lose parts (spacers and grommets). Remove the remaining four screws holding reflector mounting bracket in place. Gently remove Reflector Assembly and lens. Clean outer surface of lens with a mild detergent solution. If the lens is coated with a substance impervious to the detergent, a suitable solvent should be sparingly applied with a wad of cotton or soft cloth. The lens should be subjected to a gently air blast to evaporate or remove all remaining solvent. Clean the reflector in a similar fashion as was used for the lens. Replace the lens in the Optical Housing. Install the lens o-ring per paragraph 3.3. Assemble the reflector bracket and lamp mounting bracket using Loctite 242 on the six (6) screws. Torque the screws to 30 inch pounds.

3.2 Relamping

Remove the inner cover assembly from the housing. Clean the lens and reflector as necessary, see paragraph 3.1.

- 3.2.1 The bulb can easily be removed by gently twisting the socket in a counterclockwise direction. This will remove the bulb and contact from the mounting bracket. The bulb can then be removed from the socket by twisting as noted above.
- 3.2.2 For -40 lamp versions, (see Part Number Explanation), unscrew the lamp from the socket attached to the inner cover.

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CAUTION

TOUCHING THE QUARTZ BULB WITH YOUR BARE FINGERS MAY SERIOUSLY SHORTEN THE LAMP LIFE. IF THE QUARTZ BULB HAS BEEN TOUCHED, WIPE IT CAREFULLY WITH A PIECE OF LENS CLEANING TISSUE OR SIMILAR MATERIAL MOISTENED WITH ISOPROPYL ALCOHOL.

- 3.2.3 Inspect lamp socket contact for signs of corrosion. Replace socket if necessary.
- 3.2.4 Install o-ring in housing flange groove per paragraph 3.3. Assemble Inner Cover Assembly to housing, using Loctite 242 on the four (4) mounting screws. Return light fixture to runway per Installation Instructions 2.3 or 2.4.

3.3 O-Rings**3.3.1 O-Ring Examination**

Every time an o-ring sealed assembly is taken apart, the o-ring must be closely examined and replaced if necessary. Any o-ring that is stretched, torn, has a permanent set or some other defect, which would prevent it from forming a watertight seal must be replaced with a new o-ring.

NOTE: A BAD O-RING SEAL IS THE MOST COMMON CAUSE OF INSET FIXTURE LEAKS. IT IS STRONGLY RECOMMENDED THAT A NEW O-RING IS INSTALLED EVERY TIME THE INNER COVER IS REMOVED.

3.3.2 O-Ring Replacement

Remove the old o-ring from the groove and carefully clean the flange mating surfaces and the groove. This can be done by carefully scraping. Take care not to damage the mating surface and the bottom and sides of the groove. Coat a new o-ring with a thin layer of Dow Corning FS 1292 Lubricating Grease.

Position the new o-ring in the center of the groove and press in into place.

NOTE: The groove is designed to be wider than the o-ring. This provides room for displacement of the o-ring when compressed between the housing and mating surface. Properly tightened screws are important in obtaining a complete seal. Torque the Inner Cover screws to 30 in-lbs.

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If lens is broken or its surface is badly pitted or scarred, the lens and the lens cushion must be replaced.

- 3.4.1 Remove the lens per paragraph 3.1. Remove the old cushion from the Optical Housing. Thoroughly clean the area where the cushion mounts, scrape away all old cushion material and/or RTV.
- 3.4.2 Place a small amount of RTV 106 in the center of the cushion mounting area on the Optical Housing. Immediately after, place a new cushion in position, be sure it is properly centered.
- 3.4.3 Place the new lens in the Optical Housing. Install a new o-ring per paragraph 3.3. Assemble the reflector bracket and lamp mounting bracket using Loctite 242 on the six (6) screws. Torque the screws to 30 inch pounds.

3.5 Pressure Test

The assembly should be give a 10 psi air pressure test. This can be done by fitting a Crouse-Hinds P/N 20512 inner cover with an air line. Be sure the cover is air tight and use an o-ring with a coating of Dow Corning FS 1292 Grease on the cover flange. Fasten the cover to the housing an apply the internal air pressure. A soap solution can be used to locate escaping air bubbles around the lens.

3.6 Cleanliness and Workmanship

Service life depends upon the entire assembly being waterproof. All surfaces must be clean, dry and free of all foreign matter if the light fixture is to operate for extended periods without requiring maintenance.

NOTE: See Part Lists and Figures 6, 7, and 8 for location of parts.

3.7 Maintenance Program

In order to insure maximum light fixture life, the installed units should be subject to a maintenance program in accordance with the following:

- 3.7.1 A daily operation check should be made of the lighting fixture. The lights should be energized and visually inspected. If any lamps are out, the location of the fixture should be recorded and the lamps replaced at a time when the circuit is de-energized. (See section 3.2).

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- 3.7.2 Regular cleaning is necessary in order to insure that in-runway lighting fixtures operate at maximum efficiency. The lens and channel in front of the lens should be cleaned periodically with a soft cloth and solvent. The regularity and type of cleaning will be dictated by the weather and the location of the fixtures.
- 3.7.3 Snowplow operators should exercise extra care not to strike the light fixtures with snow plow blades. After snow plow removal operations, inspect all light fixtures to locate and replace if necessary, any damaged Light Assemblies. Passes over the light rows should be made with a power broom only if practical. Whenever snowplows must traverse in-pavement light fixtures, they should be either traveling at less than 5 mph or have the blades lifted clear of the fixtures. Recommended snow removal techniques are described in AC 150/5200-23.
- 3.7.4 The light is designed to exclude both ground and surface water from entering. If the lights are not properly maintained (i.e., bolts tightened and seals in good condition) water may enter the fixture and become a serious problem. To prevent this from occurring, it is recommended that each fixture be inspected for the presence of water at least once a month. More frequent inspection is desirable during and following rainy seasons.
- 3.7.5 Optical Assembly hold-down bolts should be checked for proper torque in accordance with paragraph 2.3.1 at least once every three months or whenever a fixture is serviced regardless of the season.
- 3.7.6 If any fixture contains water, the water should be removed and the entire fixture cleaned and dried. Inspect the o-ring groove and clean. The o-rings should be replaced, the fixture repaired and reinstalled as specified herein.

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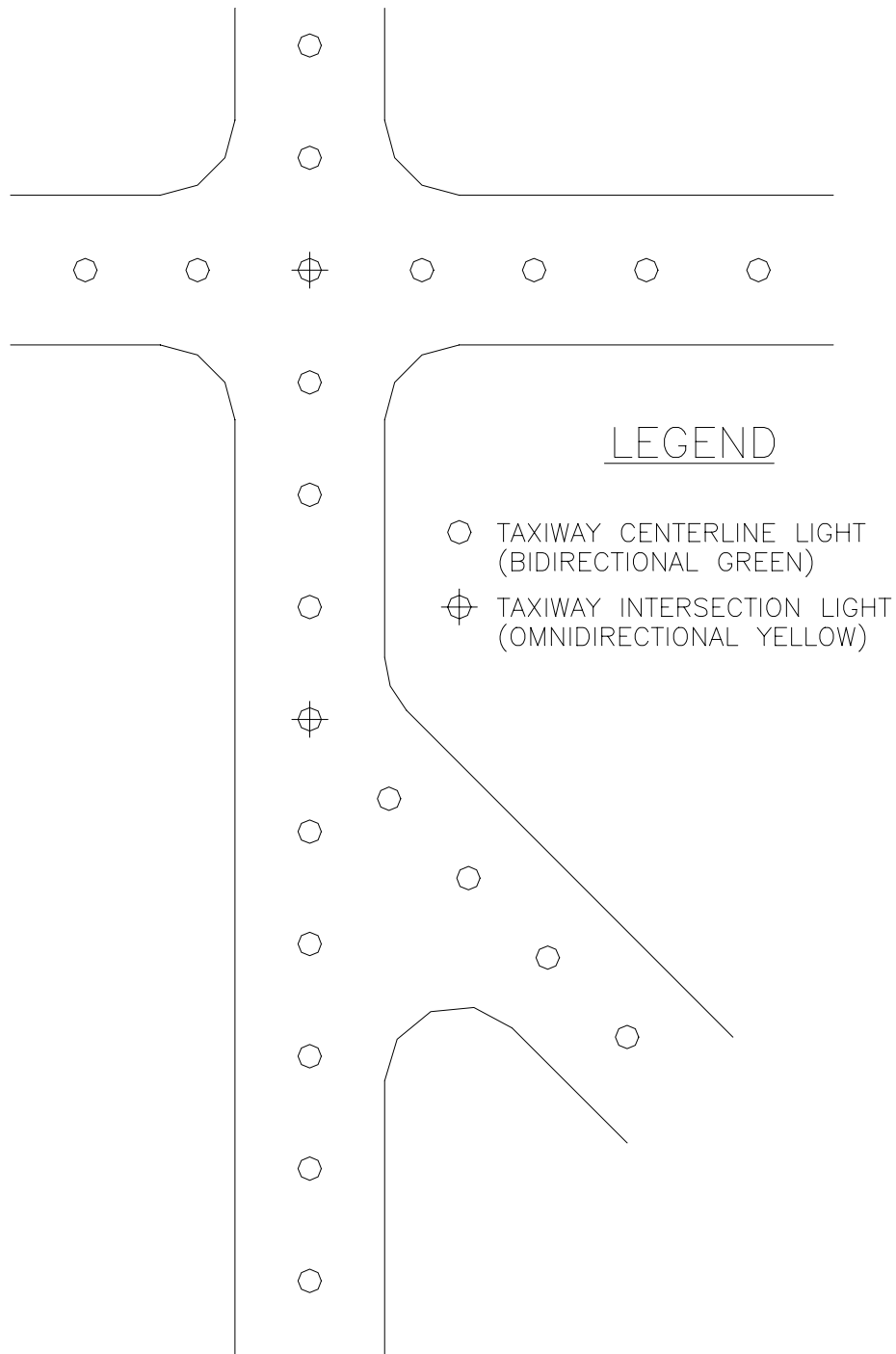


FIGURE 1
TYPICAL TAXIWAY LIGHT PLACEMENT

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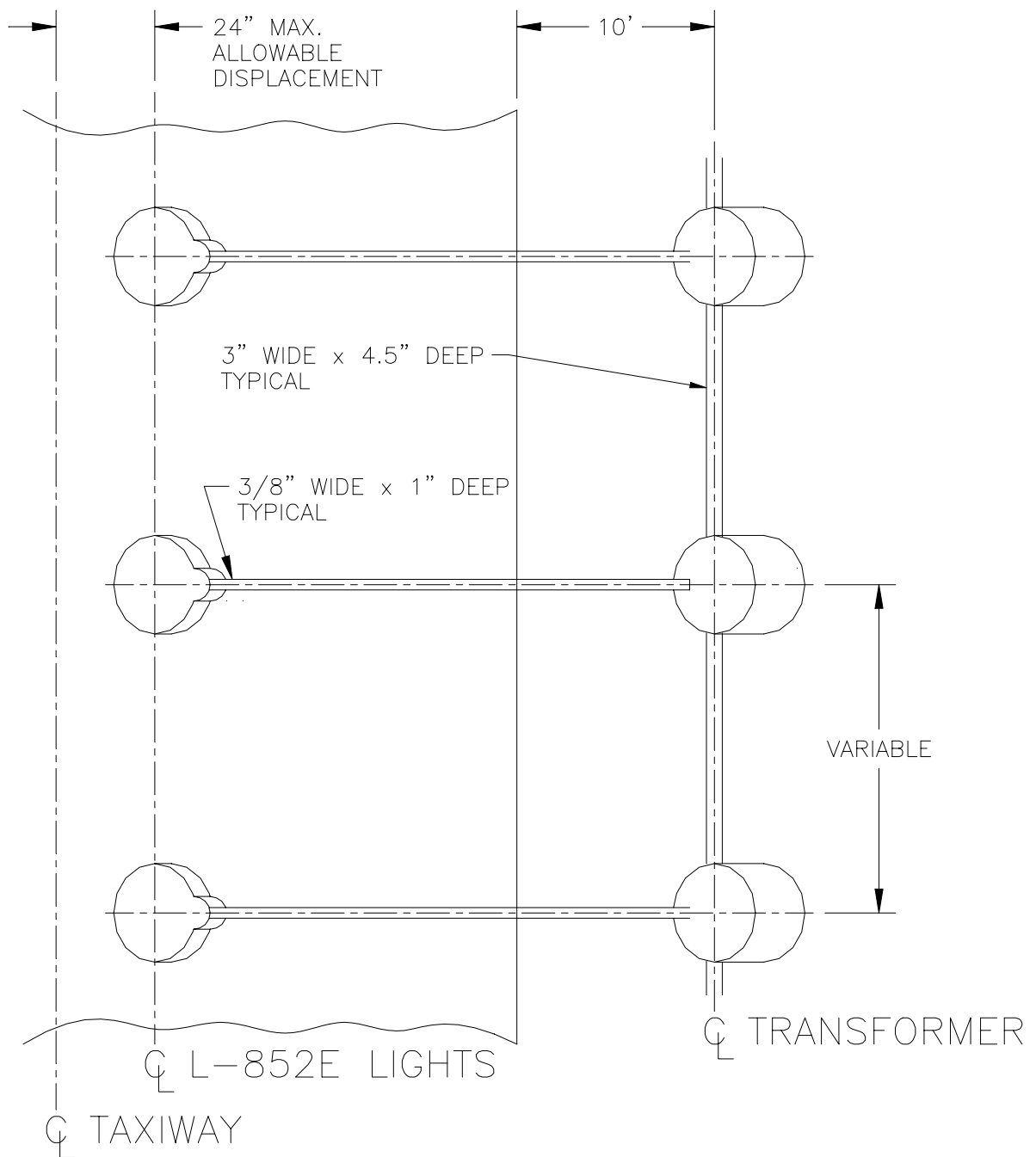


FIGURE 2
JOINT INTERCONNECTION & SAWING DETAILS

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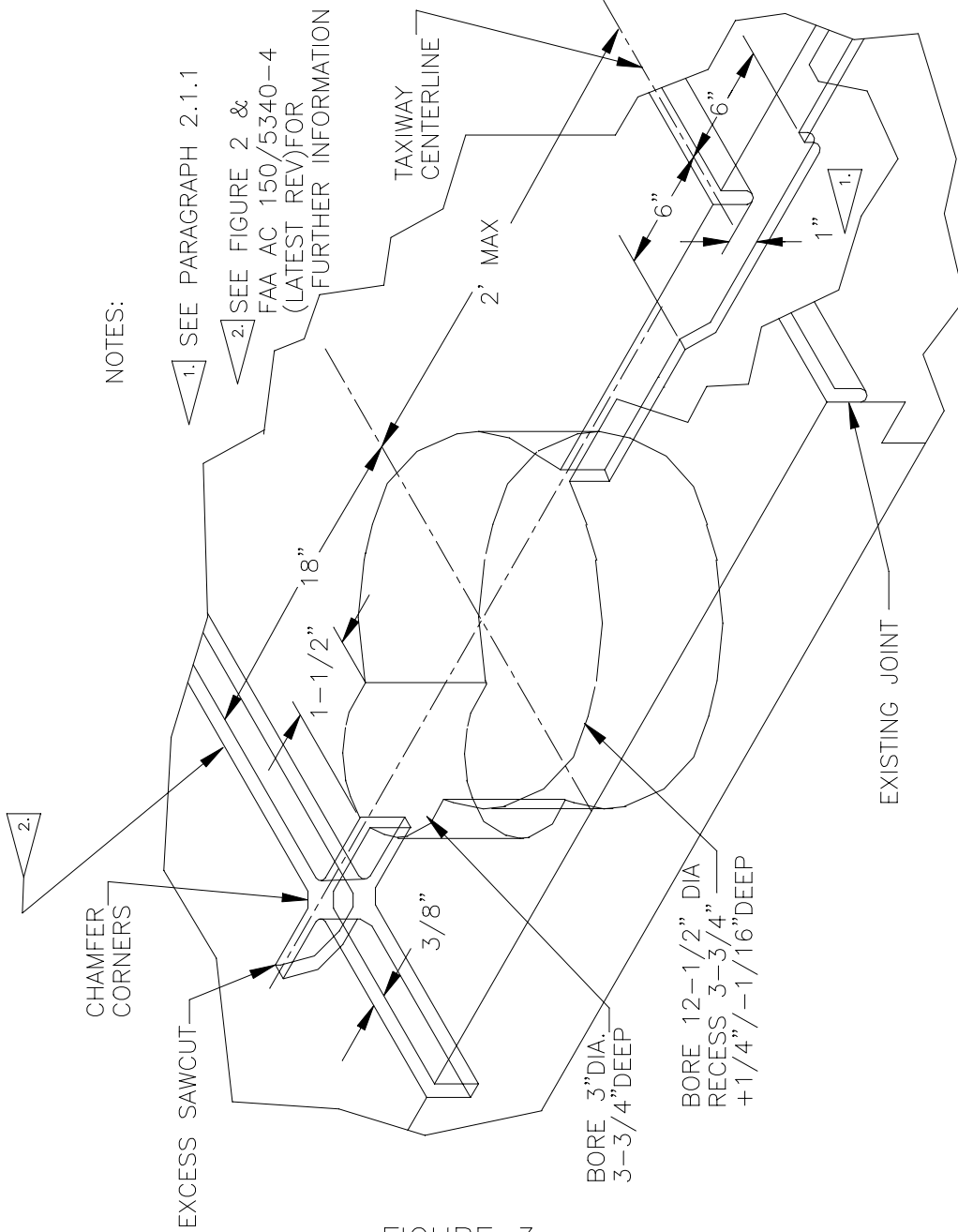
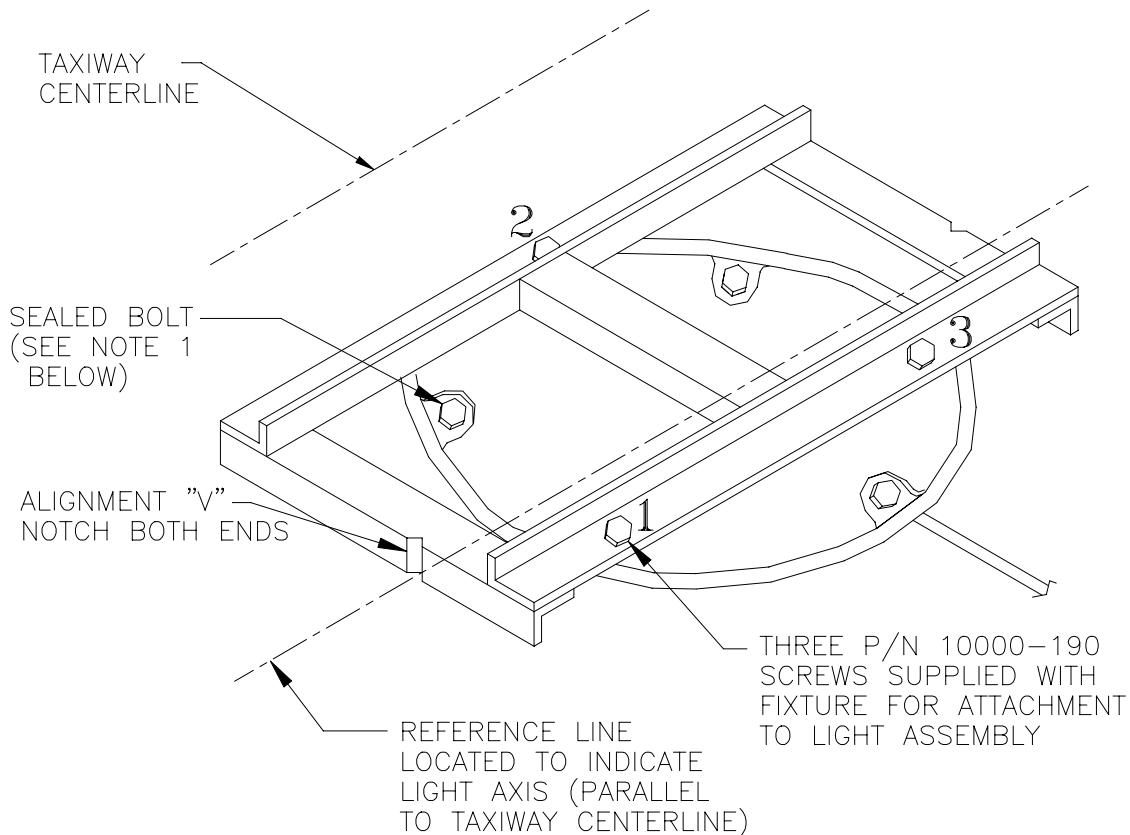


FIGURE 3
PAVEMENT BORING, SAW CUTTING & EXISTING
JOINT INTERSECTION DETAILS

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NOTES:

1. BOLTS NO. 1, 2 & 3 MAY BE REMOVED TO ATTACH C19583 FIXTURE. REMOVAL OF THE SEALED BOLT PRIOR TO INSTALLATION ACCEPTANCE WILL VOID THE WARRANTY ON THAT LIGHT ASSEMBLY.
2. COPIES OF DRAWING C19583 ARE AVAILABLE ON REQUEST.
3. WIREWAY SAWCUT AS SPECIFIED BY AC 150/5340-4C AND TO CONFORM TO FIXTURE LEAD LOCATIONS.

FIGURE 4
INSTALLATION AND ALIGNMENT OF L-852E
TYPE IV INSET LIGHT (FOR 21078 ONLY)

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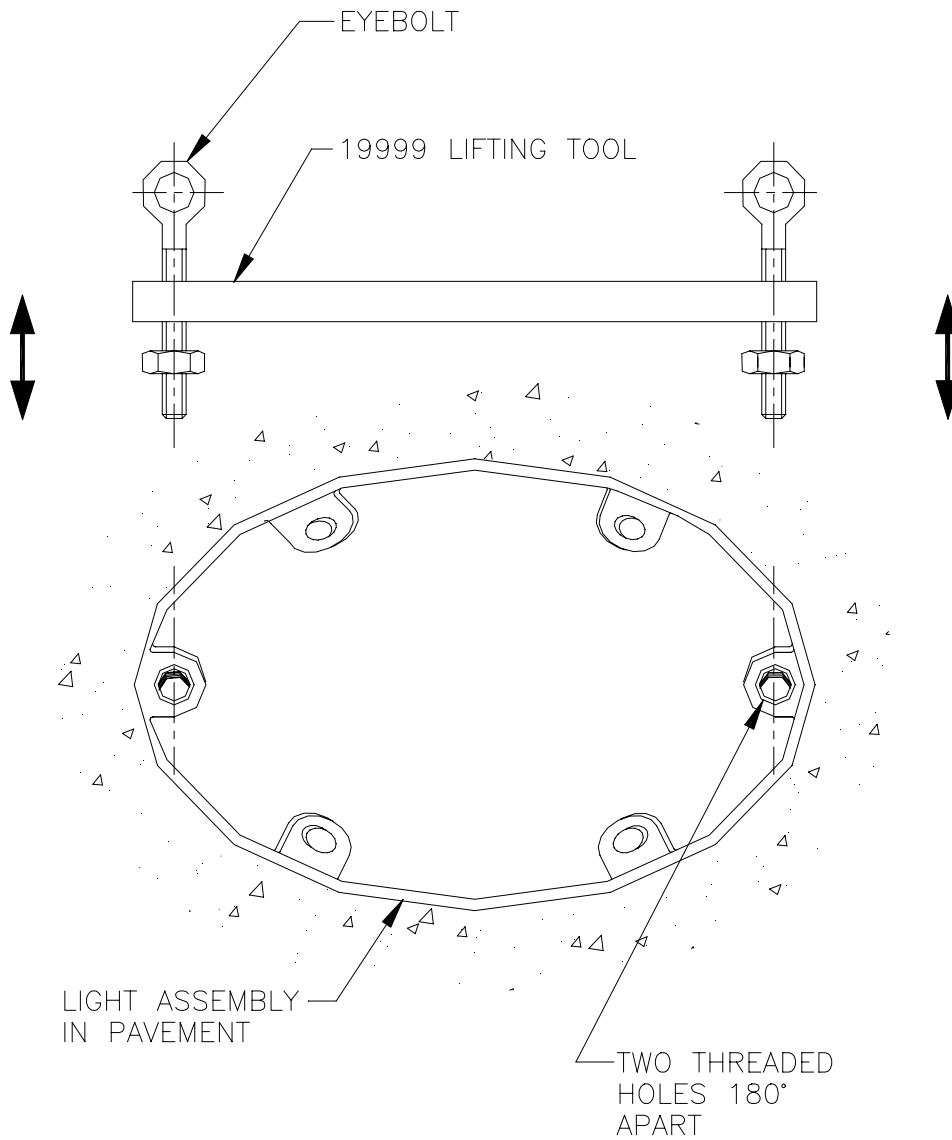


FIGURE 5
19999 INSTALLATION (LIFTING) TOOL
(FOR 21078 ONLY)

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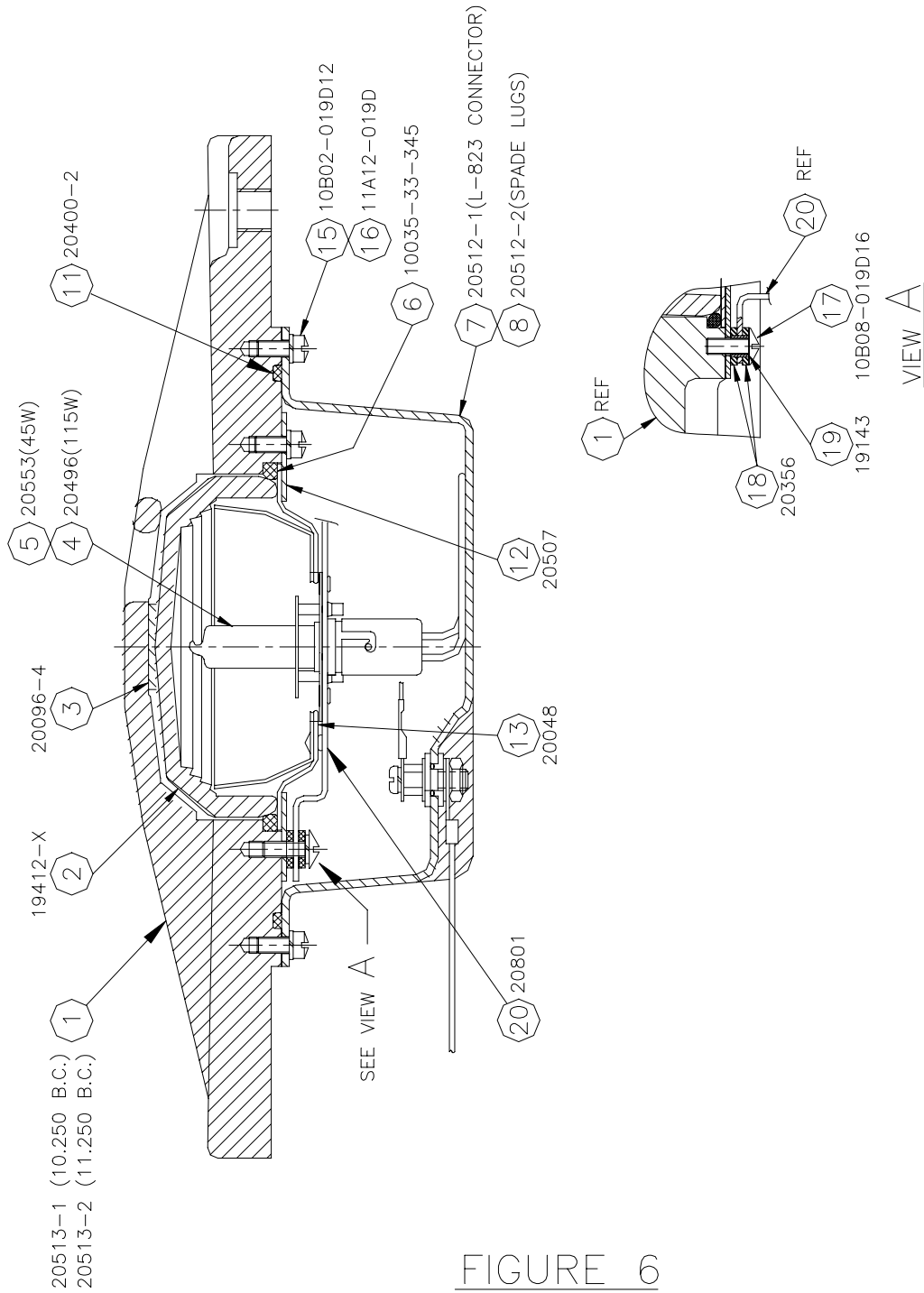
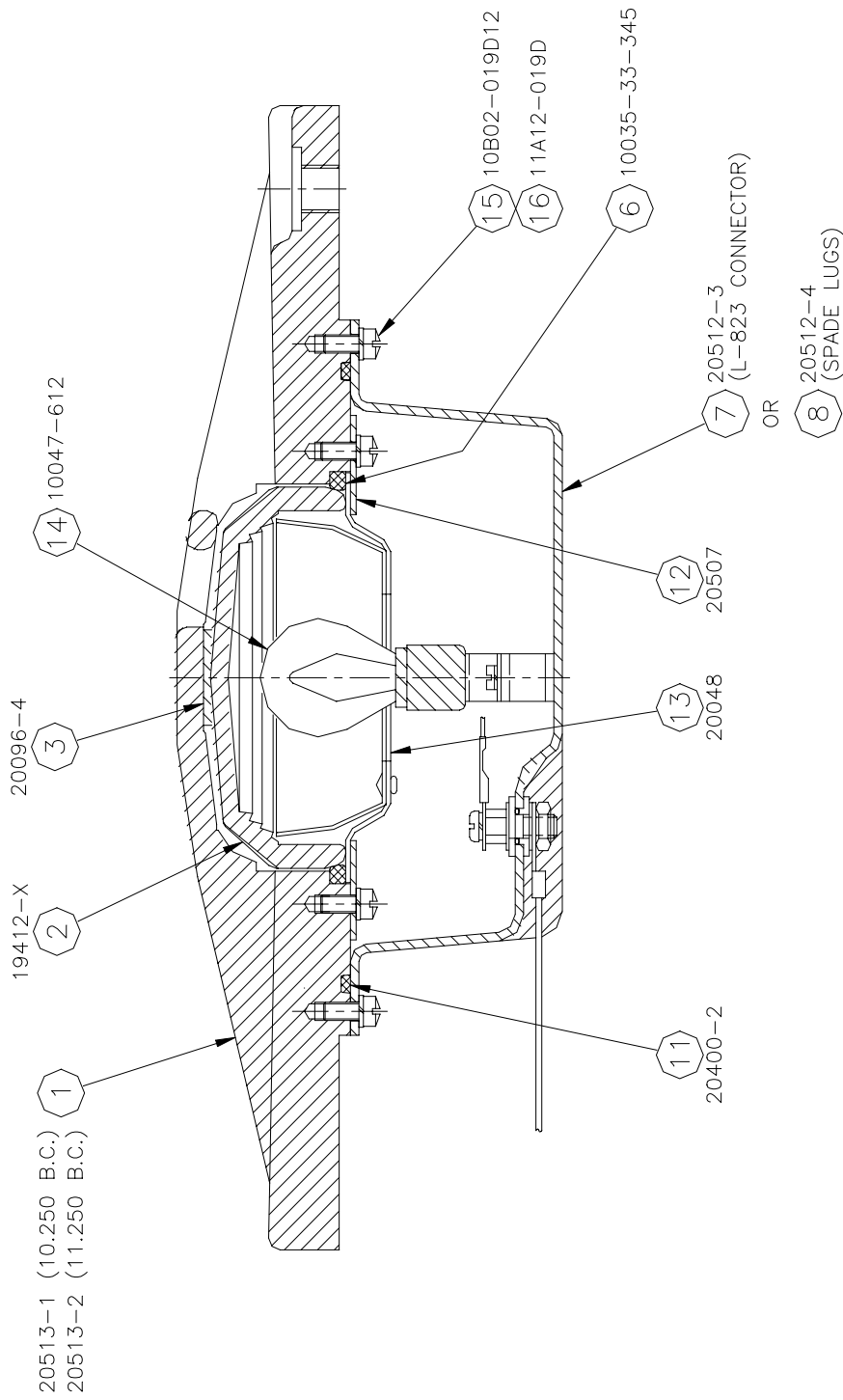


FIGURE 6

TOL ASSEMBLY P/N 20510 (10.250 B.C.)
OR 21078 (11.250 B.C.) 6.6 AMP VERSION

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TOL ASSEMBLY P/N 20510 (10.250 B.C.)
OR 21078 (11.250 B.C.), 120 VOLT VERSION

FIGURE 7

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PARTS LIST

CATALOG NUMBER 21078

PART NUMBER	ITEM NUMBER	QUANTITY	DESCRIPTION
20513-2	1	1	Optical Housing
19412-Y	2	A/R	Lens, Yellow
19412-G	2	A/R	Lens, Green
19412-R	2	A/R	Lens, Red
19412-B	2	A/R	Lens, Blue
19412-C	2	A/R	Lens, Clear
20096-4	3	1	Lens Cushion
20496	4	A/R	115 Watt, Bi-Pin Lamp
20553	5	A/R	45 Watt, DCR Lamp
10035-33-345	6	1	O-Ring, Lens
20512-1	7	A/R	Inner Cover Assy with L-823 Connector
20512-2	8	A/R	Inner Cover Assy with Spade Lugs
20512-3	9	A/R	Inner Cover Assy (120V) with L-823 Connector
20512-4	10	A/R	Inner Cover Assy (120V) with Spade Lugs
20400-2	11	1	O-Ring Inner Cover
20507	12	1	Bracket, Reflector Mounting
20048	13	1	Reflector Assembly
10047-612	14	A/R	40W, 120 Volt Lamp
10B02-019D12	15	4	Screw, Fillister Hd, #10-32x3/8 Long
11A12-019D	16	4	Lockwasher, Split, #10
10B08-019D16	17	2	Screw, Truss Head #10-32x1/2 Long
20356	18	4	Grommet
19143	19	2	Spacer
20801	20	1	Bracket Assy
	21		Not Used
10048-30	22	A/R	Loctite 242

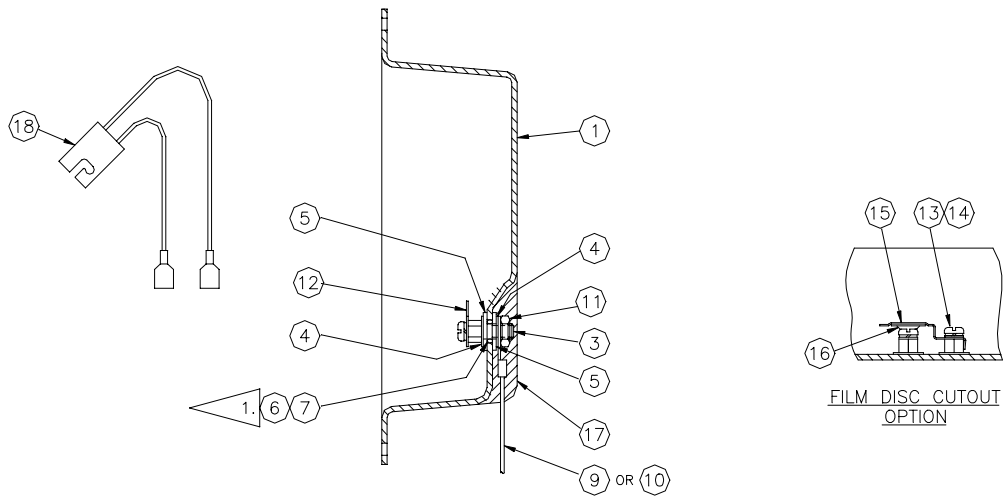
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PARTS LIST

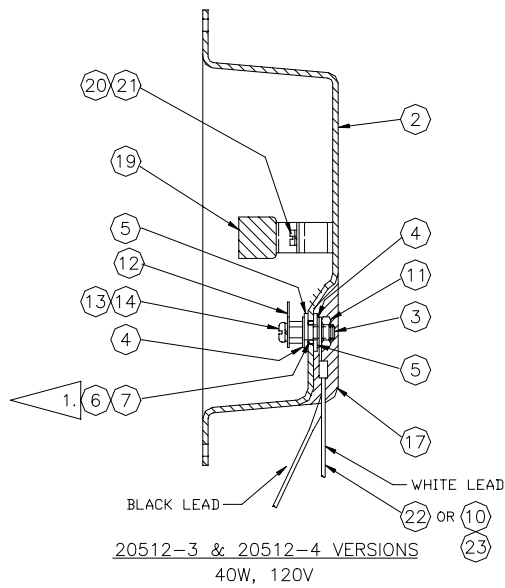
CATALOG NUMBER 20510

PART NUMBER	ITEM NUMBER	QUANTITY	DESCRIPTION
20513-1	1	1	Optical Housing
19412-Y	2	A/R	Lens, Yellow
19412-G	2	A/R	Lens, Green
19412-R	2	A/R	Lens, Red
19412-B	2	A/R	Lens, Blue
19412-C	2	A/R	Lens, Clear
20096-4	3	1	Lens Cushion
20496	4	A/R	115 Watt, Bi-Pin Lamp
20553	5	A/R	45 Watt, DCR Lamp
10035-33-345	6	1	O-Ring, Lens
20512-1	7	A/R	Inner Cover Assy with L-823 Connector
20512-2	8	A/R	Inner Cover Assy with Spade Lugs
20512-3	9	A/R	Inner Cover Assy (120V) with L-823 Connector
20512-4	10	A/R	Inner Cover Assy (120V) with Spade Lugs
20400-2	11	1	O-Ring Inner Cover
20507	12	1	Bracket, Reflector Mounting
20048	13	1	Reflector Assembly
10047-612	14	A/R	40W, 120 Volt Lamp
10B02-019D12	15	4	Screw, Fillister Hd, #10-32x3/8 Long
11A12-019D	16	4	Lockwasher, Split, #10
10B08-019D16	17	2	Screw, Truss Head #10-32x1/2 Long
20356	18	4	Grommet
19143	19	2	Spacer
20801	20	1	Bracket Assy
	21		Not Used
10048-30	22	A/R	Loctite 242

**INSTRUCTION MANUAL
TAXIWAY OMNIDIRECTIONAL LIGHT (TOL) L-852E**



20512-1 & 20512-2 VERSIONS
45W AND 115W, 6.6A



20512-3 & 20512-4 VERSIONS
40W, 120V

NOTE:
 COAT ITEM 6 WITH ITEM 7 BEFORE ASSEMBLY.

FIGURE 8
INNER COVER ASSEMBLY

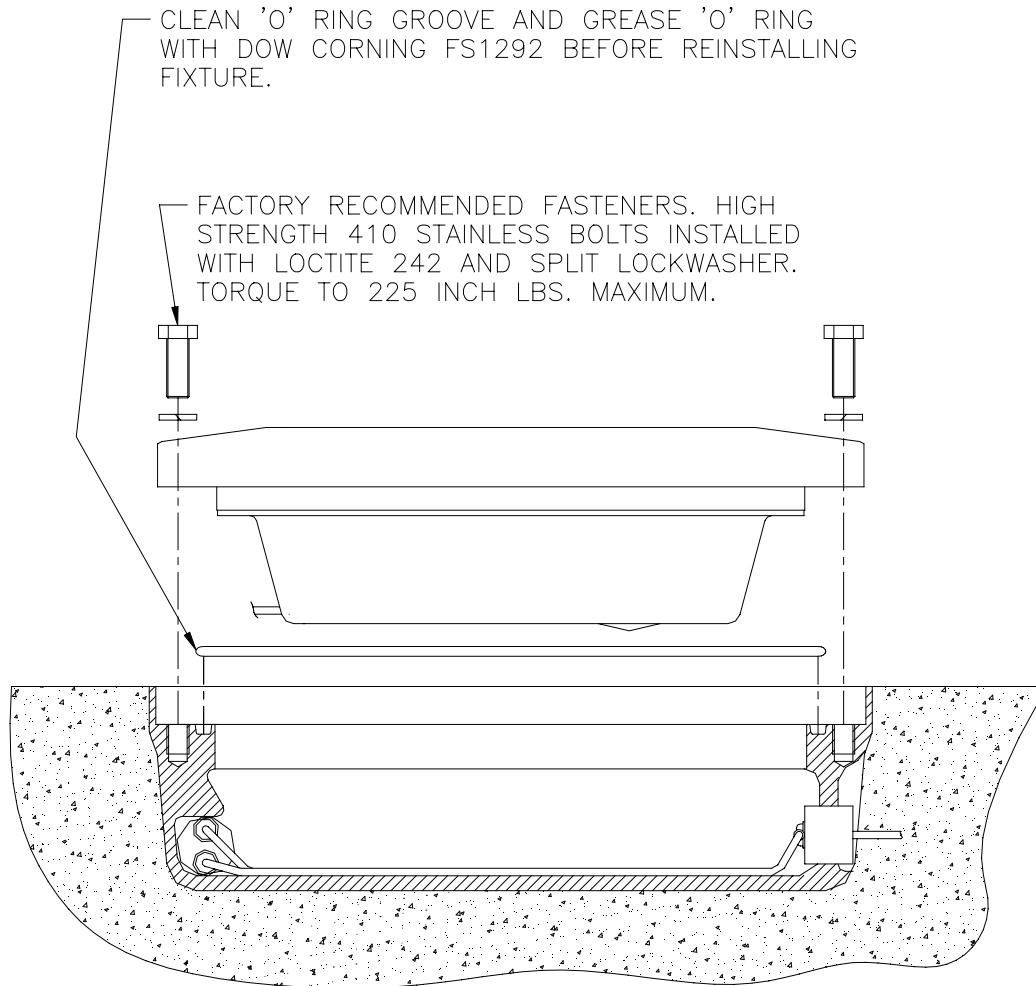
INSTRUCTION MANUAL
TAXIWAY OMNIDIRECTIONAL LIGHT (TOL) L-852E

PARTS LIST

CATALOG NUMBER 20512

PART	ITEM	QUANTITY	DESCRIPTION
20516	1	A/R	Inner Cover, 45W & 115W Version
20515-2	2	A/R	Inner Cover, 120 Volt Versions
20017	3	2	Lead Lug
10030-57	4	4	1/4" Flat Washer
10030-108	5	4	Insulating Flat Washer
10035-33-010	6	2	O-Ring
10048-25	7	A/R	Silicone Grease
20595	9	A/R	Lead Assy. L-823 Plug
20019	10	A/R	Lead Assy. Spade Terminal, White
10K04-025	11	2	1/4-20 Hex Jam Nut
10047-525	12	2	Tab
11A12-016D	13	2	#8 Lockwasher
10A06-016D08	14	2	#8-32x1/4 Long Pan Head Screw
20023	15	A/R	Spring Clip
10047-409	16	A/R	Film Disc Cutout
20327	17	A/R	Stycast Kit
19095-1	18	A/R	DCR Lamp Socket Assembly
20405	19	A/R	40W, 120 Volt Lamp, Socket Assy.
10A06-013D08	20	A/R	#6-32x1/4 Long Pan Head Screw
11A12-013D	21	A/R	#6 Lockwasher
20595-2	22	A/r	Lead Assy, L-823 Plug (120VAC)
20019-1	23	A/R	Lead Assy, Spade Terminal, Black

**INSTRUCTION MANUAL
TAXIWAY OMNIDIRECTIONAL LIGHT (TOL) L-852E**



ADHESIVES

FOR CEMENTING THE BASE RECEPTACLE INTO THE PAVEMENT RECESS, WE SUGGEST YOU CONTACT:

MAGNOLIA PLASTICS, INC.
5547 PEACHTREE INDUSTRIAL BLVD.
CHAMBLEE, GA 30341
(404) 451-2777

FIGURE 9
L-852E SHALLOW CAN INSTALLATION

**INSTRUCTION MANUAL
TAXIWAY OMNIDIRECTIONAL LIGHT (TOL) L-852E****PARTS LIST****RECOMMENDED SPARES****1-852E, P/N 21078P-Y-115**

DESCRIPTION	PART NUMBER	QUANTITY
Optical Assembly	20513-2	1
Lens, Yellow	19412-Y	5
Lens Cushion	20096-4	5
115W Lamp	20496	10
Inner Cover Assembly	20512-1	2
Inner Cover O-Ring	20400-2	10
Lamp Socket Assembly	19095-1	5
Silicone Grease	10048-25	1 (5 Oz.)
RTV-106	10048-2	1 (3 Oz.)
Reflector Assembly	20048	2
Lens O-Ring	10035-33-345	5
Bracket Reflector Mounting	20507	1
115 Watt Bracket Assembly	20801	2
Epoxy Kit	20327	1