SIEMENS

L-807 Wind Cone

Lighted & Unlighted
8-Foot & 12 Foot Wind Cone

Document No. 96A0003
Issued: March 1, 1984
Rev. R: May 14, 2004

ETL Certified to FAA Specification
AC 150/5345-27

CE

Siemens Airfield Solutions, Inc.

P.O. Box 30829
977 Gahanna Parkway
Columbus, OH 43230

Tel: (614) 861-1304
Fax: (614) 864-2069

Siemens Airfield Solutions
The innovative approach

Record of Changes

Page	Rev	Description	EC No.	Checked	Approved	Date
5-6, 5-7	G	Revised Figures 5 and 6.		EP	ED	
2-7, 4-3, 4-4, 5-2, 5-3, 5-9	H	Added metric units and Section 2.8. Revised Figures 2 and 8. Added CE mark to cover page.		EP	WT	
All	I	Reformatted manual. Figures and text changed to conform to new design.	3458	JG	VP	8/5/01
2-2 thru 2-4, 3-3, 3-8, 3-15, 5-6, 5-7, 6-3	J	Changed 100 watt PAR to 90 watt PAR floodlights. Changed Figure 6-3 from 150 W to 120 W. Added part number for 12-ft wind cone light assembly (44A5853), and changed part numbers for 4-lamp/8-ft wind cone lamp support arm from 60A2425-1 to 77A0045-3 and 5-lamp/12-ft wind cone lamp support arm from 60A2425-2 to 77A0045-4. Added coupling to Figures 2-1, 2-2, 2-3, 3-3, 3-5, 5-2.	00024	WT	VP	1/29/99
3-1, 3-5 3-13, 3-14, 5-3, 5-4, 5-7, 5-8	K	Added new Figure 3-1 and text in Section 3, Installation, for anchor bolt template and base dimensions. Updated Figure 3-3 as exploded view, deleted term "Halibrite," changed Sock Lighting and L-810 Obstruction Light parts lists. Added Quantity column to all parts lists.	00125	WT	VP	6/14/99
7-1	L	Added anchor bolt template.	00396	JS	WT	2/7/00
3-14, 3-15, 4-1, 5-1	M	Made lamp descriptions in Table 4-1 more specific. Updated Halibrite installation instructions for internally lighted wind cone. Qualified tether assembly as contractor-supplied. Updated illustration parts list instructions.	00411	JS	WT	2/25/01
2-1, 2-7, 5-3, 5-7, 5-9, 6-1 thru 6-4	N	Added internally lighted 12 ft, 3-lamp wind cones to Table 2-1. Deleted current Table 2-7 on internally lighted dimensions and replaced it with table for internally lighted lamps. Changed quantity for QHL, 120 V/100 W lamp from 2 to 3, and WFL 120 Vac, 120 W PAR-38 lamp from 4 to 4 or 5. Added caution about not using PA-3 for externally lighted wind cone to Figures 6-1 and 6-2. Added note to Figure 6-2 to show how 5-lamp option applies to the figure. Added Figure 6-4 for typical wiring diagram for internally lighted wind cone.	00429	JS	WT	3/15/00
All	O	Changed to new title page. Changed ADB to Siemens Airfield Solutions.	00696	JS	WT	5/16/01
3-4 thru 3-8	P	Changed wind cone assembly procedure. Updated Figure 3-3.	00920	JY	WT	7/26/02
5-4	Q	Changed J-bolts to Anchor Bolt Kit	01157	WT	WT	11/4/03
3-4	R	Added photographic views of mounting bolts & corrected Table 2-6	01197	WT	WT	5/14/04

Table of Contents

Maintenance

Parts

Wiring Schematics

Anchor Bolt Template

List of Figures

List of Tables

Warranties

Products of Siemens Airfield Solutions manufacture are guaranteed against mechanical, electrical, and physical defects (excluding lamps) for a period of one year from the date of installation or a maximum of two years from the date of shipment and are guaranteed to be merchantable and fit for the ordinary purposes for which such products are made.

Siemens Airfield Solutions will correct by repair or replacement, at its option, equipment or parts which fail because of mechanical, electrical or physical defects, provided that the goods have been properly handled and stored prior to installation, properly installed and properly operated after installation, and provided further that Buyer gives ADB written notice of such defects after delivery of the goods to Buyer.

Siemens Airfield Solutions reserves the right to examine goods upon which a claim is made. Said goods must be presented in the same condition as when the defect therein was discovered. Siemens Airfield Solutions furthers reserves the right to require the return of such goods to establish any claim.

Siemens Airfield Solutions's obligation under this guarantee is limited to making repair or replacement within a reasonable time after receipt of such written notice and does not include any other costs such as the cost of removal of defective part, installation of repaired product, labor or consequential damages of any kind, the exclusive remedy being to require such new parts to be furnished.

Siemens Airfield Solutions's liability under no circumstances will exceed the contract price of goods claimed to be defective. Any returns under this guarantee are to be on a transportation charges prepaid basis. For products not manufactured by, but sold by Siemens Airfield Solutions, warranty is limited to that extended by the original manufacturer.

This is Siemens Airfield Solutions's sole guarantee and warranty with respect to the goods; there are no express warranties or warranties of fitness for any particular purpose or any implied warranties of fitness for any particular purpose or any implied warranties other than those made expressly herein. All such warranties being expressly disclaimed.

Disclaimers

This manual could contain technical inaccuracies or typographical errors. Siemens Airfield Solutions reserves the right to revise this manual from time to time in the contents thereof without obligation of Siemens Airfield Solutions to notify any person of such revision or change.

Details and values given in this manual are average values and have been compiled with care. They are not binding, however, and Siemens Airfield Solutions disclaims any liability for damages or detriments suffered as a result of reliance on the information given herein or the use of products, processes or equipment to which this manual refers. No warranty is made that the use of the information or of the products, processes or equipment to which this manual refers will not infringe any third party's patents or rights. The information given does not release the buyer from making their own experiments and tests.

Section 1
Safety

1. Introduction

This section contains general safety instructions for using your Siemens Airfield Solutions equipment. Some safety instructions may not apply to the equipment in this manual. Task- and equipment-specific warnings are included in other sections of this manual where appropriate. Note all warnings and follow all instructions carefully. Failure to do so may result in personal injury, death, or property damage.

To use this equipment safely,

- refer to the FAA Advisory Circular AC 150/5340-26, *Maintenance of Airport Visual Aids Facilities*, for instructions on safety precautions.
- observe all safety regulations. To avoid injuries, always remove power prior to making any wire connections and touching any parts. Refer to FAA Advisory Circular AC 150/5340-26.
- read and become familiar with the general safety instructions provided in this section of the manual before installing, operating, maintaining, or repairing this equipment.
- read and carefully follow the instructions given throughout this manual for performing specific tasks and working with specific equipment.
- store this manual within easy reach of personnel installing, operating, maintaining, or repairing this equipment.
- follow all applicable safety procedures required by your company, industry standards, and government or other regulatory agencies.
- obtain and read Material Safety Data Sheets (MSDS) for all materials used.

2. Safety Symbols

Become familiar with the safety symbols presented in this section. These symbols will alert you to safety hazards and conditions that may result in personal injury, death, or property and equipment damage.

WARNING: Failure to observe this warning may result in personal injury, death, or equipment damage.

WARNING: Risk of electrical shock. Failure to observe this warning may result in personal injury, death, or equipment damage.

2. Safety Symbols *(contd.)*

WARNING: Disconnect equipment from line voltage. Failure to observe this warning may result in personal injury, death, or equipment damage.

WARNING: Wear safety goggles. Failure to observe may result in serious injury.

CAUTION: Failure to observe may result in equipment damage.

3. Qualified Personnel

The term *qualified personnel* is defined here as individuals who thoroughly understand the equipment and its safe operation, maintenance, and repair. Qualified personnel are physically capable of performing the required tasks, familiar with all relevant safety rules and regulations and have been trained to safely install, operate, maintain, and repair the equipment. It is the responsibility of the company operating this equipment to see that its personnel meet these requirements.

4. Intended Use

WARNING: Use of this equipment in ways other than described in this manual may result in personal injury, death, or property and equipment damage. Use this equipment only as described in this manual.

Siemens Airfield Solutions cannot be responsible for injuries or damages resulting from nonstandard, unintended applications of its equipment. This equipment is designed and intended only for the purpose described in this manual. Uses not described in this manual are considered unintended uses and may result in serious personal injury, death, or property damage. Unintended uses may result from taking the following actions:

- making changes to equipment that have not been recommended or described in this manual or using parts that are not genuine Siemens Airfield Solutions replacement parts
- failing to make sure that auxiliary equipment complies with approval agency requirements, local codes, and all applicable safety standards
- using materials or auxiliary equipment that are inappropriate or incompatible with your Siemens Airfield Solutions equipment
- allowing unqualified personnel to perform any task

5. Installation

Read the installation section of all system component manuals before installing your equipment. A thorough understanding of system components and their requirements will help you install the system safely and efficiently.

WARNING: Failure to follow these safety procedures can result in personal injury or death.

- Allow only qualified personnel to install Siemens Airfield Solutions and auxiliary equipment. Use only approved equipment. Using unapproved equipment in an approved system may void agency approvals.
- Make sure all equipment is rated and approved for the environment in which you are using it.
- Follow all instructions for installing components and accessories.
- Install all electrical connections to local code.
- Use only electrical wire of sufficient gauge and insulation to handle the rated current demand. All wiring must meet local codes.
- Route electrical wiring along a protected path. Make sure they will not be damaged by moving equipment.
- Protect components from damage, wear, and harsh environment conditions.
- Allow ample room for maintenance, panel accessibility, and cover removal.
- Protect equipment with safety devices as specified by applicable safety regulations.
- If safety devices must be removed for installation, install them immediately after the work is completed and check them for proper functioning.

6. Operation

Only qualified personnel, physically capable of operating the equipment and with no impairments in their judgment or reaction times, should operate this equipment.

Read all system component manuals before operating this equipment. A thorough understanding of system components and their operation will help you operate the system safely and efficiently.

6. Operation *(contd.)*

- Before starting this equipment, check all safety interlocks, fire-detection systems, and protective devices such as panels and covers. Make sure all devices are fully functional. Do not operate the system if these devices are not working properly. Do not deactivate or bypass automatic safety interlocks or locked-out electrical disconnects or pneumatic valves.
- Never operate equipment with a known malfunction.
- Do not attempt to operate or service electrical equipment if standing water is present.
- Use this equipment only in the environments for which it is rated. Do not operate this equipment in humid, flammable, or explosive environments unless it has been rated for safe operation in these environments.
- Never touch exposed electrical connections on equipment while the power is ON.

7. Action in the Event of a System or Component Malfunction

Do not operate a system that contains malfunctioning components. If a component malfunctions, turn the system OFF immediately.

- Disconnect and lock out electrical power.
- Allow only qualified personnel to make repairs. Repair or replace the malfunctioning component according to instructions provided in its manual.

8. Maintenance and Repair

Allow only qualified personnel to perform maintenance, troubleshooting, and repair tasks. Only persons who are properly trained and familiar with Siemens Airfield Solutions equipment are permitted to service this equipment.

- Always use safety devices when working on this equipment.
- Follow the recommended maintenance procedures in your equipment manuals.
- Do not service or adjust any equipment unless another person trained in first aid and CPR is present.
- Connect all disconnected equipment ground cables and wires after servicing equipment. Ground all conductive equipment.
- Use only approved Siemens Airfield Solutions replacement parts. Using unapproved parts or making unapproved modifications to equipment may void agency approvals and create safety hazards.

8. Maintenance and Repair *(contd.)*

- Check interlock systems periodically to ensure their effectiveness.
- Do not attempt to service electrical equipment if standing water is present. Use caution when servicing electrical equipment in a high-humidity environment.
- Use tools with insulated handles when working with electrical equipment.

Section 2
Description

1. Introduction

This section describes the Siemens Airfield Solutions L-807 wind cone assembly. Wind cones are used at airports and heliports to provide visual surface wind direction and to give an indication of velocity to flight personnel in flight or on the ground.

Refer to Table 2-1. The wind cone comes in two styles. Style I is lighted, and Style II is unlighted.

Table 2-1. L-807 Wind Cone Styles and Options

Style	Type	Options
Style I (lighted)	Externally lighted L-807, 8-ft	Four-lamp with L-810 obstruction light
		Four-lamp without L-810 obstruction light
	Externally lighted L-807, 12-ft	Five-lamp with L-810 obstruction light
		Five-lamp without L-810 obstruction light
	Internally lighted L-807, 8-ft	Two-lamp with L-810 obstruction light
		Two-lamp without L-810 obstruction light
	Internally lighted L-807, 12-ft	Three-lamp with L-810 obstruction light
		Three-lamp without L-810 obstruction light
Style II (unlighted)	Unlighted	With L-810 obstruction light
		Without L-810 obstruction light

2. Lighted Wind Cones

The lighted (Style I) wind cones may be either externally lighted or internally lighted. The internally lighted wind cone is not recognized by the FAA specification and is not approved.

See Figure 2-1 for the 4-lamp and Figure 2-2 for the 5-lamp externally lighted wind cones. The externally lighted assembly consists of a cluster of four or five 120-watt PAR floodlights and lamp holders. The lamp holders are mounted on a junction box with 90- or 72-degree spacing, providing a minimum of two foot-candles illumination on any point of the upper surface of a fully extended wind cone.

2. Lighted Wind Cones
(contd.)

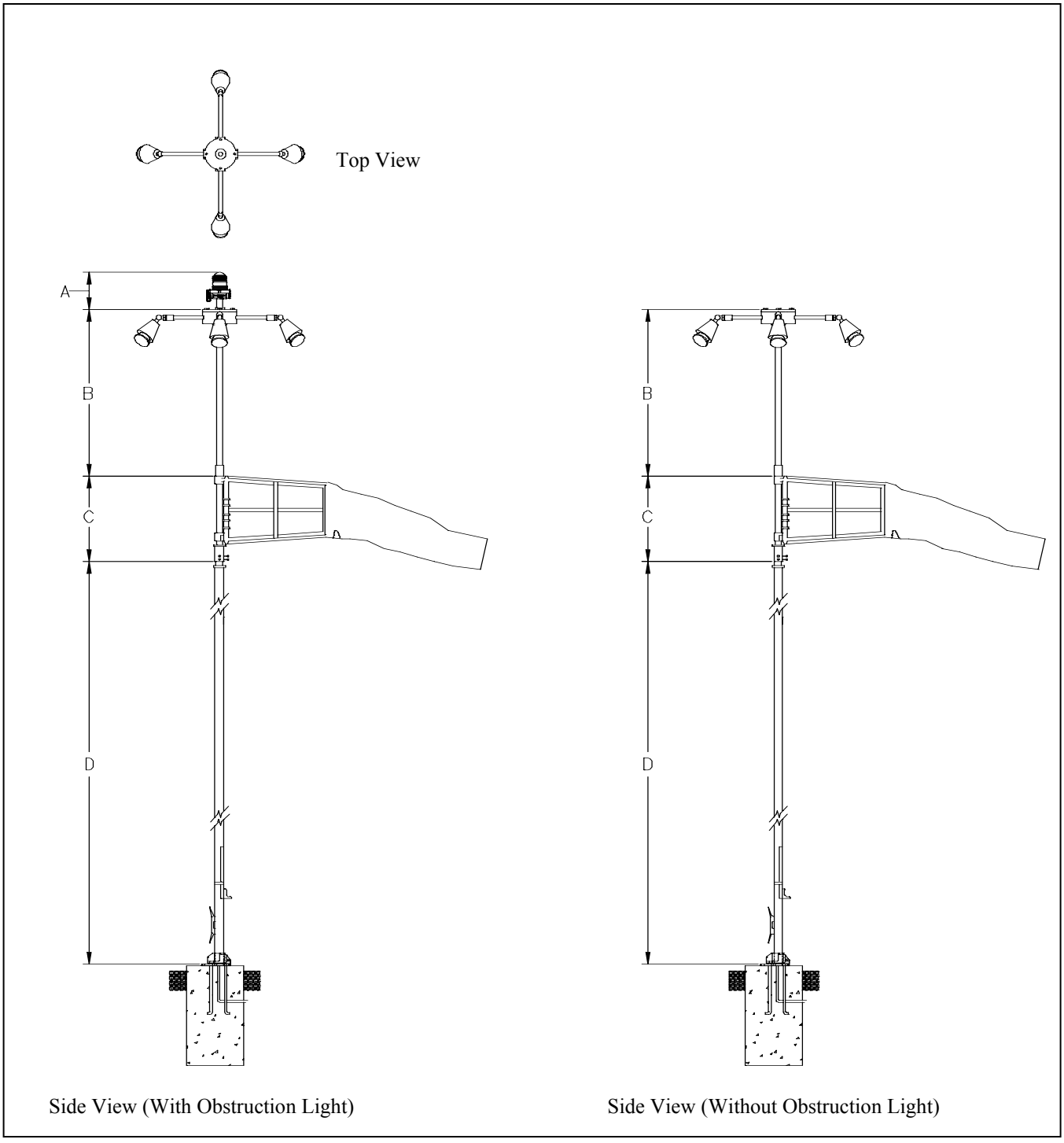


Figure 2-1. Four-Lamp Externally Lighted L-807 8-Foot Wind Cone (With/Without Obstruction Light)

2. Lighted Wind Cones
(contd.)

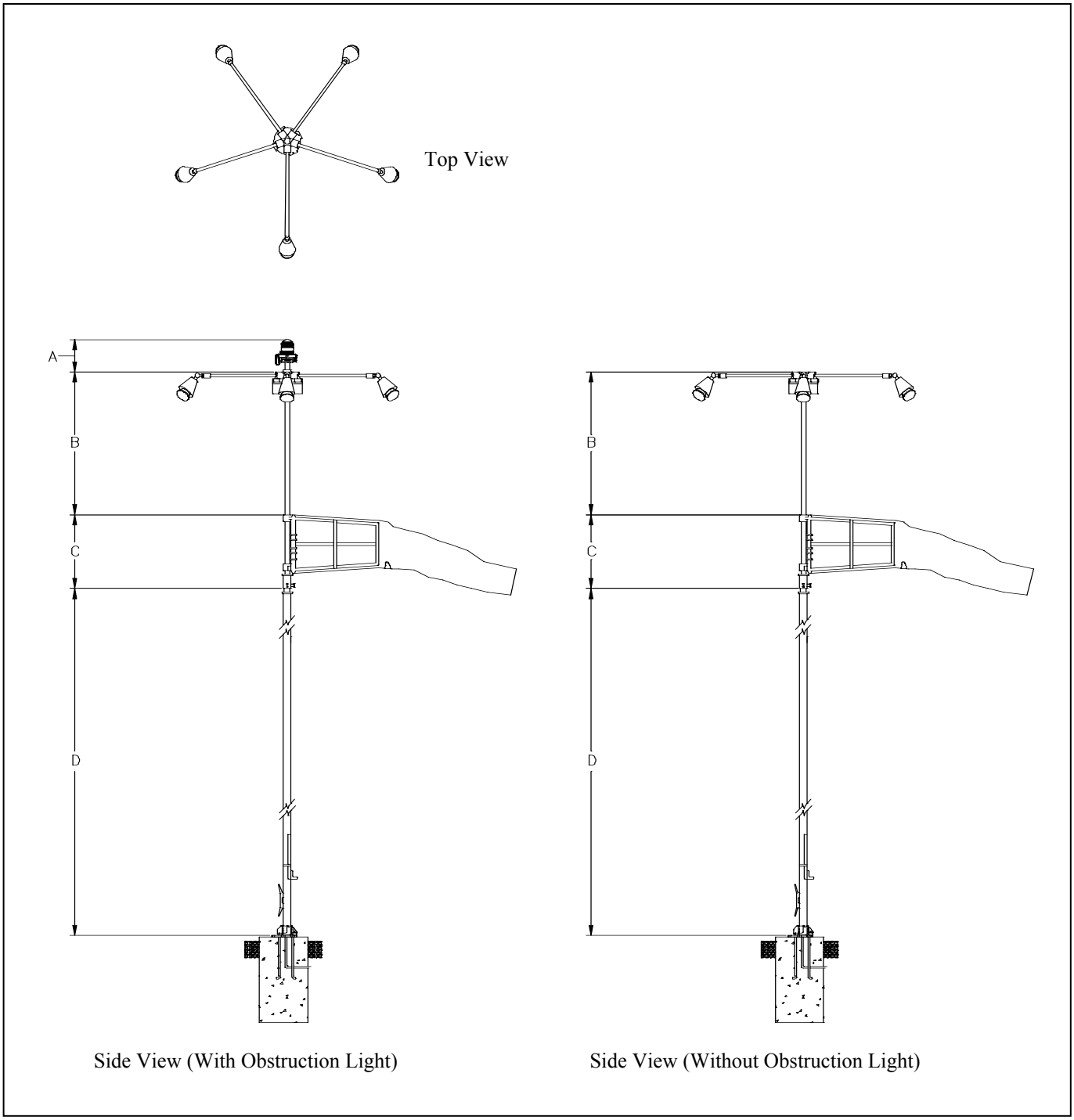


Figure 2-2. Five-Lamp Externally Lighted L-807 12-Foot Wind Cone (With/Without Obstruction Light)

2. Lighted Wind Cones *(contd.)*

See Figure 2-3. The internally lighted assembly consists of two 100-watt floodlights and lamp holders that illuminate the interior of the wind cone. The lamp holders are mounted on a bar that is installed on the outer ring of the wind cone's cage assembly and are aimed toward the tail end of the sock.

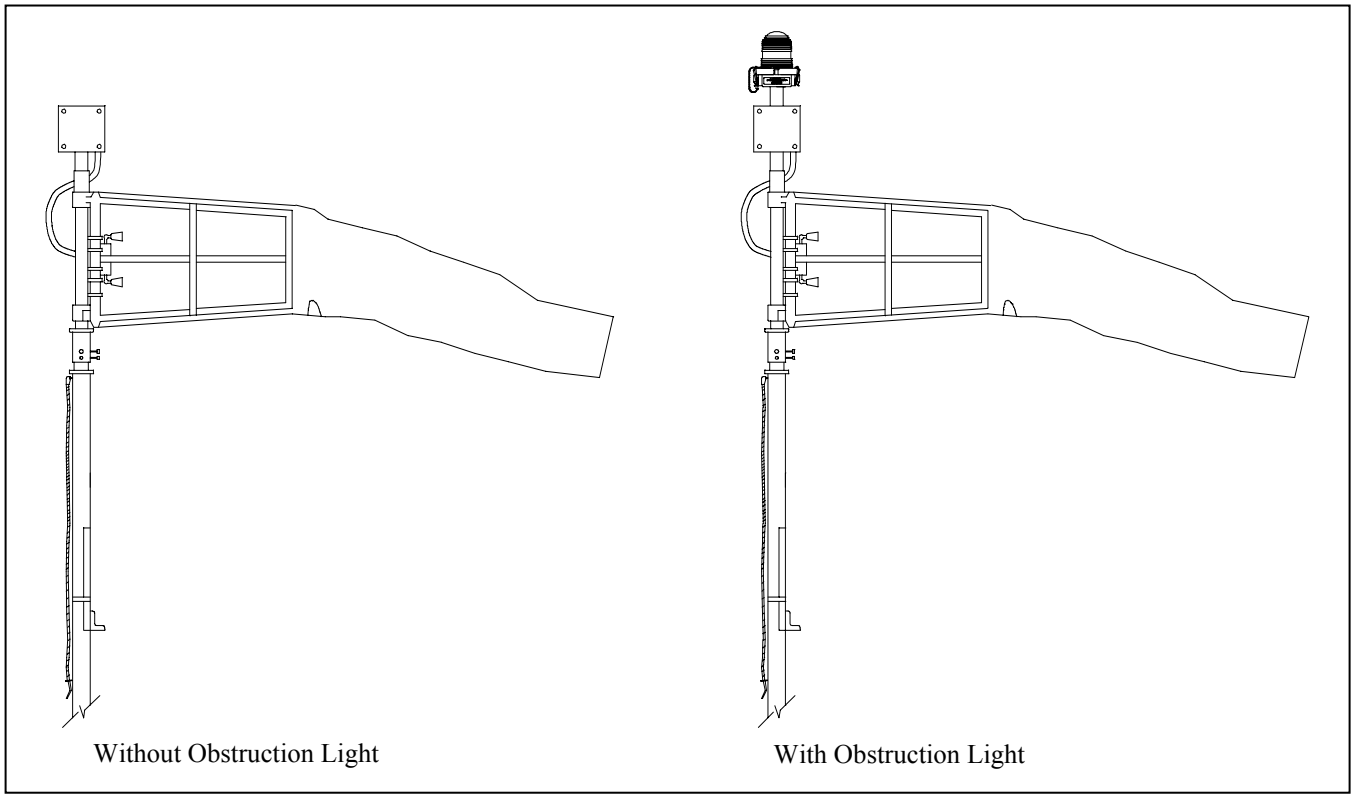


Figure 2-3. Internally Lighted L-807 Wind Cone (With/Without Obstruction Light)

3. Unlighted Wind Cones

See Figure 2-4. The unlighted L-807 wind cones may include the L-810 obstruction light as an option. A cap is provided for unlighted wind cone assemblies without the L-810 option to cover the top opening on the bearing and cage shafts.

3. Unlighted Wind Cones
(contd.)

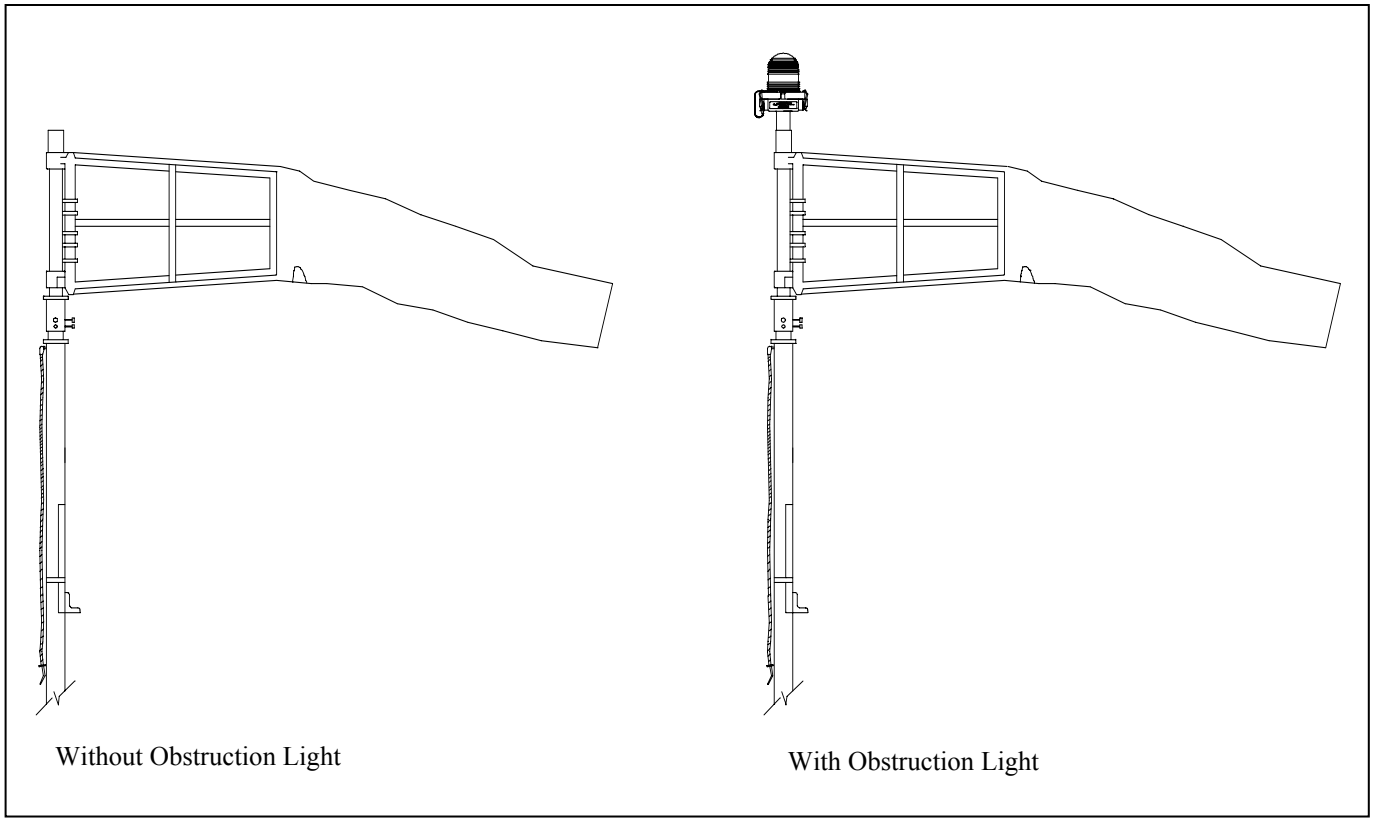


Figure 2-4. Unlighted L-807 Wind Cone (With/Without Obstruction Light)

4. L-807 Wind Cone: Required Equipment

Refer to Table 2-2 for required equipment that is supplied. Refer to Table 2-3 for required equipment that is not supplied. Refer to the *Parts* section for ordering information.

Table 2-2. Required Equipment Supplied

Description	Quantity
Wind cone assembly	1
Instruction manual	1 per order

4. L-807 Wind Cone: Required Equipment *(contd.)*

Table 2-3. Required Equipment Not Supplied

Description	Quantity
Wire nuts	2
Wiring, AWG 14	As required
Wrenches for 3/8 inch, 1/2 inch, and 5/8 inch hex screws and nuts	3
Allen hex keys for 5/64 inch, 3/16 inch and 1/4 inch	3
Medium size blade screwdriver	1
Sawhorse	1
Cloth for cleaning lamps	As required
Grease gun	1

5. Specifications

This subsection describes the specifications for the L-807 wind cones.

Fabric Cone Size

The fabric cones come in two sizes. Refer to Table 2-4.

Table 2-4. Fabric Cone Size

Cone Size	Sock Length	Throat Diameter
Size 1	8 ft (2.44 m)	18 in. (457 mm)
Size 2	12 ft (3.66 m)	36 in. (914 mm)

Nylon Wind Sock Fabric Color

The standard nylon wind sock fabric color standards include

- international orange color for Size 1 and Size 2

  NOTE: Other colors are available as a special order. Socks having highly visible contrasting colors may be desirable for installations having unique seasonal or local terrain condition.

- color fastness that exceeds Method 5671 of Federal Standard 191

Pole Assembly

The pole is made of three-inch square (76 mm square) aluminum alloy tubing. Refer to Table 2-5 for pole height.

Table 2-5. Pole Height

Sock Models	Pole Height
8 ft (2.44 m)	16 ft (4.88 m)
12 ft (3.66 m)	16 ft (4.88 m)

Temperature Range

-55 to +55 °C (-67 to +131 °F)

Wind Velocities

The wind cone gives true wind direction in wind velocities as low as 3 knots. The wind cone sock fully extends in wind velocities of 15 knots.

Movement

Free movement occurs throughout a full 360 degree rotation.

Dimensions

See Figures 2-1 and 2-2 for externally lighted wind cone dimensions. Refer to Table 2-6 for the dimensions in Figures 2-1 and 2-2.

Table 2-6. L-807 Externally Lighted Wind Cone Dimensions

Wind Cone Size	Wind Cone Length	Lamp Arm Length	A	B	C	D
Size 1, 4-lamp	8 ft (2.438 m)	1 ft (0.305 m)	8 in. (203.2 mm)	48 in. (1219.2 mm)	26 in. (660.4 mm)	16 ft (4.88 m
Size 2, 5-lamp	12 ft (3.658 m)	2 ft (0.61 m)	8 in. (203.2 mm)	50 in. (1270 mm)	43 in. (1082.2 mm)	16 ft (4.88 m)

Lamps

Refer to Table 2-7 for externally lighted wind cone lamps. Refer to Table 2-8 for internally lighted wind cone lamps.

Table 2-7. L-807 Wind Cone Lamps (Externally Lighted)

Wind Cone	Number of Lamps	Lamp Wattage
L-807 8 ft	Four	120 W
L-807 12 ft	Five	120 W

Table 2-8. L-807 Wind Cone Lamps (Internally Lighted)

Wind Cone	Number of Lamps	Lamp Wattage
L-807 8 ft	Two	100 W
L-807 12 ft	Three	100 W

Section 3
Installation

WARNING: Allow only qualified personnel to perform the following tasks. Observe and follow the safety instructions in this document and all other related documentation.

1. Introduction

This section describes instructions for installing the L-807 wind cone.

2. Unpacking

The equipment is shipped ready for installation. Handle equipment very carefully to prevent component damage. Unpack the carton upon receipt and check the contents and their condition. Note any exterior damage to the carton that might lead to detection of equipment damage.

If you note any damage to any equipment, file a claim with the carrier immediately. The carrier may need to inspect the equipment.

3. Tools/Equipment/Supplies Needed

The following are the tools, equipment, and supplies needed to install the L-807 wind cone:

- wrenches for 3/8 in., 1/2 in., and 5/8 in. hex screws and nuts
- allen hex keys for 5/64 in., 3/16 in. and 1/4 in.
- medium size blade screwdriver
- cloth for cleaning lamps
- grease gun
- sawhorse

4. Mounting Foundation

When installed on a structure or building, the wind cone must be tethered. Refer to *Optional Tether Installation* in this section.

Refer to the guidelines below when mounting the wind cone on the base.

- See Figure 3-1. Put the L-807 wind cone on a concrete base (4).

  NOTE: The recommended concrete base is 6 BAG entrained with ¾ aggregates producing 3000 psi (20, 684.28 KN/m2) after 20 days. Refer to site plans and specifications.

- Slope the top of the concrete base (5) downward from the 8-in.- (2032-mm-) diameter bolt circle for drainage.

- Offset the 1-in.- (254-mm-) diameter electrical conduit (2) 1.25 in. (31.75 mm) toward the mounting hole on the prevailing wind side (3) of the wind cone base. (See also Figure 3-2, Items 2 and 3).

- Use the four equally spaced 1-in.- (254-mm-) diameter anchor bolt holes (1) in the bolt circle as centers for locating the 5/8-in. (15.875-mm) x 27-in.- (685.8-mm-) long anchor bolts –Ref Kit 94A0152 (1). (See also Figure 3-2, Item 2.)

NOTE: The wind cone foundation in Figure 3-1 is given as only a general guide. The contractor has the responsibility to determine the dimensions and type of foundation demanded by the soil conditions at the installation site.

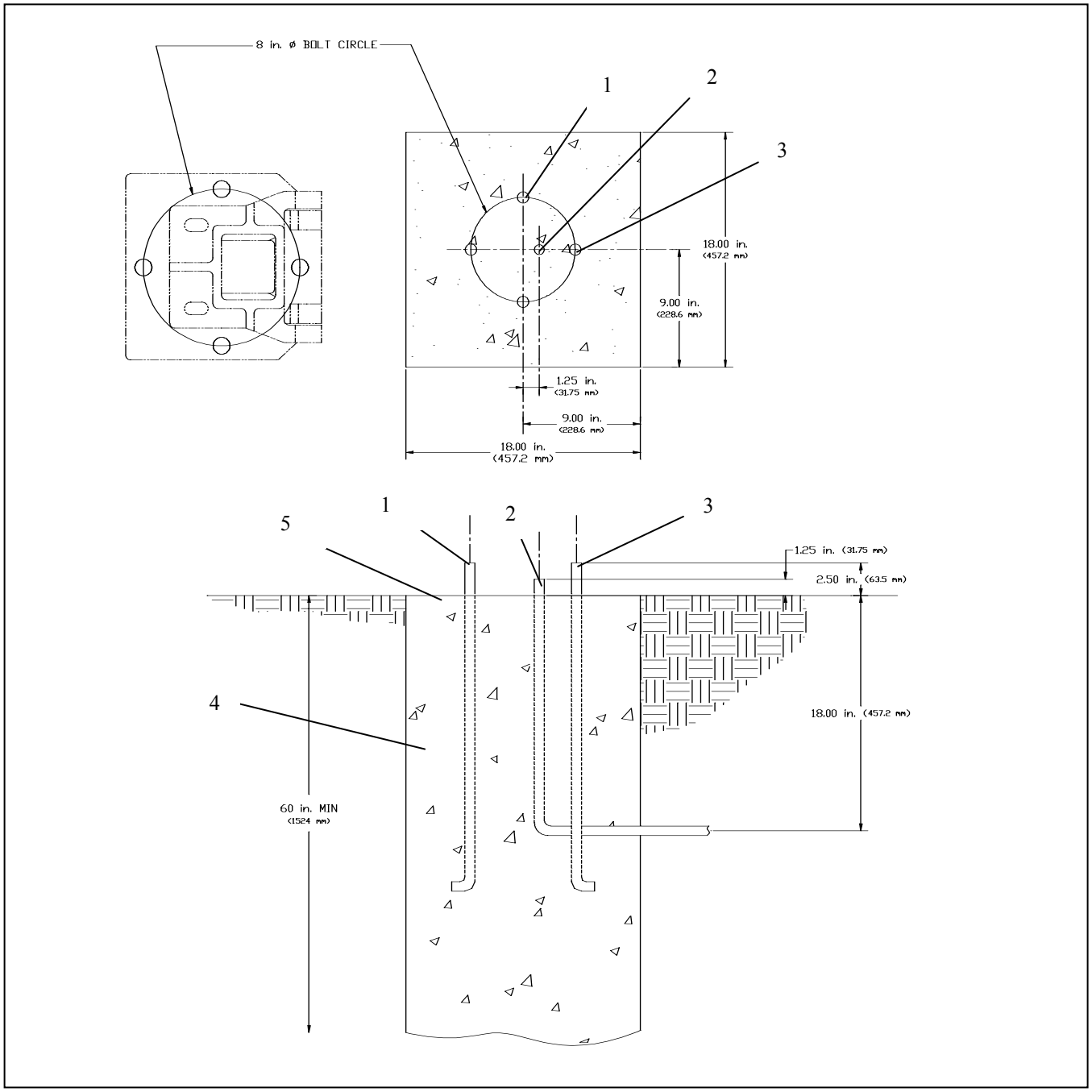


Figure 3-1. Locating Anchor Bolts

1. 5/8-in.-Diameter Anchor Bolt – Kit 94A0152
2. 1-in. Electrical Conduit (Contractor-Supplied)
3. Mounting Hole for Prevailing Wind
4. Concrete Base
5. Top of Concrete Base

4. Mounting Foundation *(contd.)*

NOTE: Figure 3-2 shows the pole support base for the 8-ft wind cone. Figure 3-2 also applies when using the 12-ft wind cone.

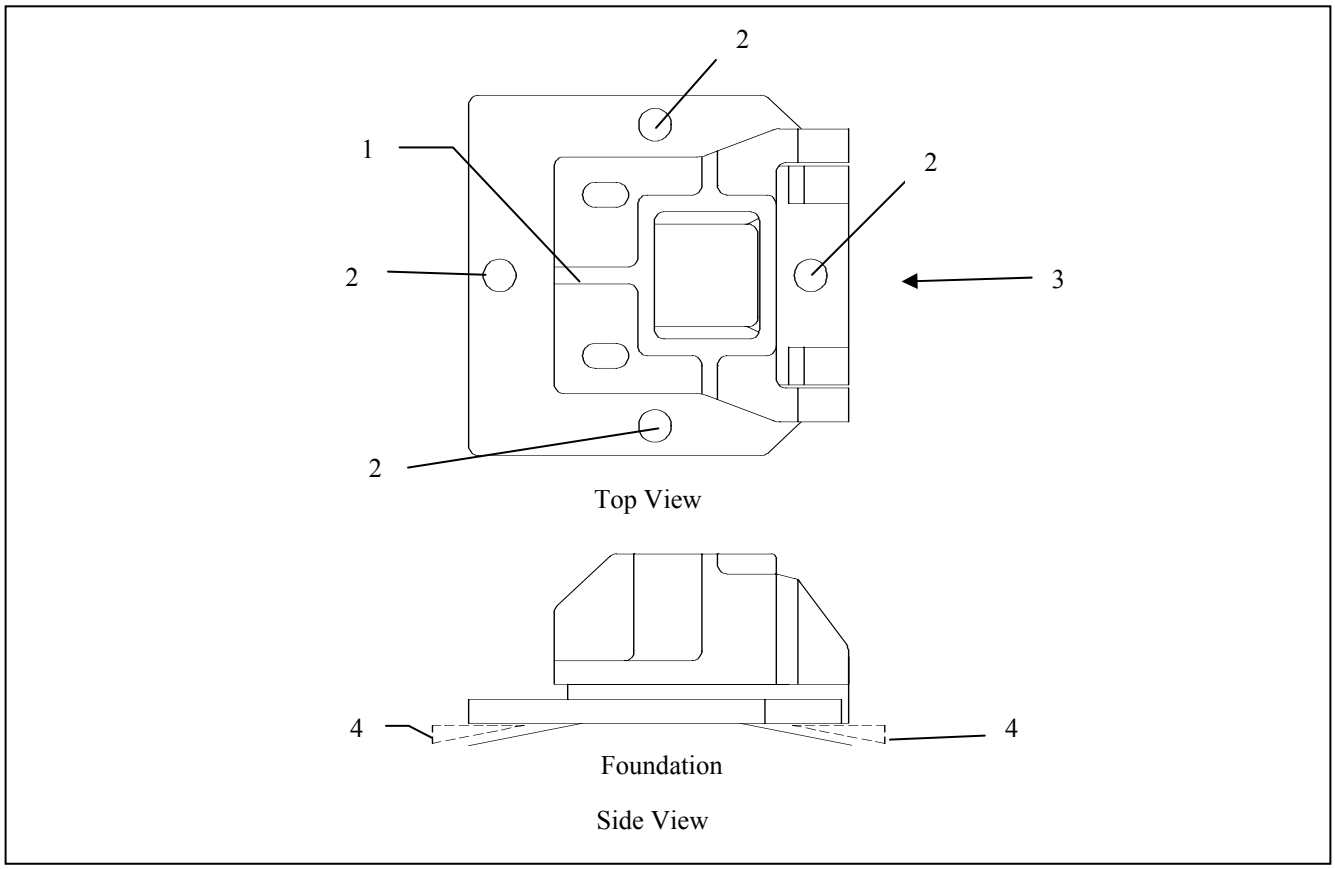


Figure 3-2. Installing Pole Support Base (8-Foot Wind Cone Base Shown)

1. Gusset Opposite from Prevailing Winds
2. Four Equally Spaced Mounting Holes on 8-in. Bolt Circle
3. Prevailing Winds
4. Contractor-Supplied Shims

5. Assembly Procedures

This subsection describes procedures for installing the assemblies listed below.

- L-807 wind cone pole assembly
- sock assembly
- optional sock lighting assembly and obstruction light
- optional obstruction light only

L-807 Wind Cone Assembly 8 Ft and 12 Ft

NOTE: Check the packing list with the parts list to verify that all parts are present before proceeding. Refer to the *Parts* section.

To assemble the L-807 wind cone, perform the following procedure:

1. See Figure 3-3. Pre-assembly the pole support base plate (15) by turning the plate over and installing the two 1/2-13 x 2 inch long hex head bolts and 1/2 inch thin flatwashers.

2. Place the thin 1/2 flat washer (30) into the couterbore pocket first and then insert and thread the 1/2 bolt (16) into the taped through hole. Hand-tighten the hex bolt against the flat washer as shown in the photograph below. The tapped hole prevents the bolt from dropping out after the pole support base plate to turned upright. The pole support base is now ready to be mounted on the concrete pad.

Bottom View of Support Plate


Top View of Support Plate

CAUTION: Before fastening the base plate (see Figure 3-3, Item 15) to the concrete pad, check to make sure that the pad has not been sloped or tapered under the plate. If the concrete pad is sloped, for example, to drain water away from the anchor bolts,

place contractor-supplied shims (see Figure 3-2, Item 4) under the plate to prevent the plate from being stressed during installation on the pad. Failure to use shims, if the pad is sloped or tapered, could cause the base plate to crack immediately or in the future after tightening the four mounting hex nuts on the anchor bolts.

L-807 Wind Cone Assembly
(contd.)

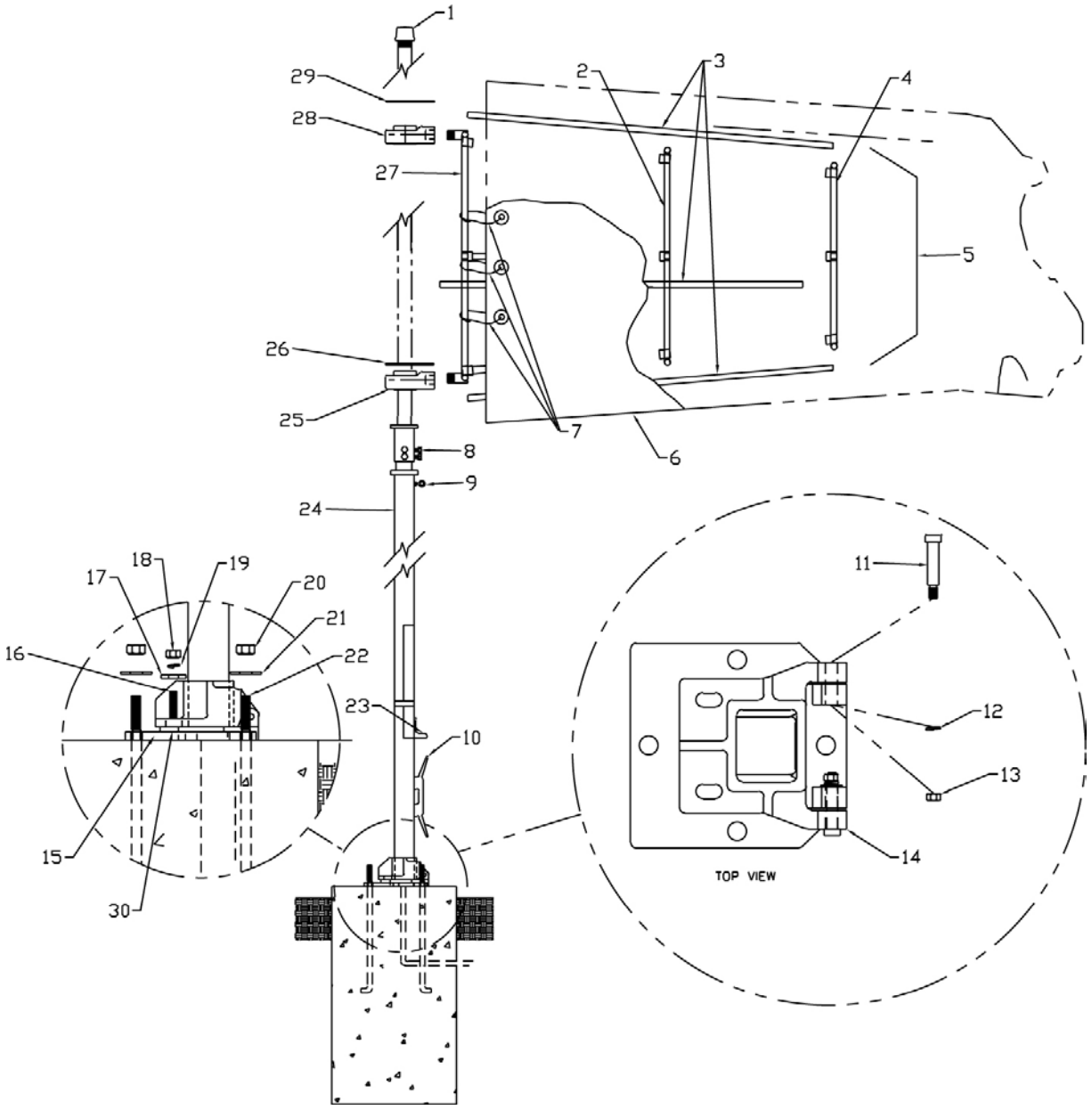


Figure 3-3. Assembling Wind Cone

1. Pipe Cap
2. Mid Ring
9. Eye Bolt
10. Rope Cleat
17. 1/2-Inch Flatwasher (Thick)
18. 1/2 Hex Nut
25. Lower Bearing
26. Lower Bearing Shield

3. Support Rod
4. Trail Ring
5. Cage Assembly
6. Wind Sock
7. Sock Ties
8. Hex Screws
11. 1/2 x 2 Long Shoulder Screw with 3/8–16 Thread
12. 3/8 Split Washer
13. 3/8–16 Hex Nut
14. Hinge
15. Pole Support Base Plate
16. 1/2–13 x 2 Hex Head Screw
19. 1/2 Split Washer
20. 5/8–11 Hex Nut
21. 5/8 Flatwasher
22. Anchor Bolt
23. Support Arm Assembly
24. Pole Assembly
27. Cage Throat Ring
28. Upper Bearing
29. Upper Bearing Shield
30. 1/2 Flatwasher (Thin)

L-807 Wind Cone Assembly
(contd.)

3. See Figure 3-3. Position the base plate over the four 5/8-inch anchor bolts (22) in the concrete pad. Position the plate so that when the windcone hinge base is attached to the baseplate the gussets on the hinge base are opposite the prevailing wind direction. In addition, add shims under the base plate if the pad is not level.

4. Secure the base plate (15) to the four anchor bolts (22) using 5/8 flatwashers (21) and hex nuts (20). Hand tighten the hex nuts. Check to see if the plate is level. Add or remove shims as necessary to level the base. When base is level, torque the four 5/8 hex nuts to 80/83 foot-pounds.

5. Install the windcone pole with hinge (14) to the pole base plate by using the two 3/8-16 shoulder screws (11) and hardware. Torque the hex nuts to 18-20 foot-pounds.

6. After the hinge has been secured to the baseplate, raise the pole vertically and secure the assembly with the two 1/2 inch hex nuts and the two ½-inch flatwashers (thick). Hand-tighten the hex nuts. Verify the vertical alignment of the pole assembly. The pole assembly should be 90 degrees to the ground to ensure that the wind sock cage rotates freely with the wind. If the pole assembly is not 90 degrees vertical, lower the pole and add or remove shims as necessary and re-verify the vertical alignment of the pole assembly.

7. Cut and remove the shipping strap to free the pole support arm located on the side of the pole.

NOTE: The pole assembly is now ready to lower to finish assembly.

8. Remove the two 1/2 inch hex nuts and washers and then lower the pole down to the ground carefully.

CAUTION: The support arm assembly will swing out and down during lowering. Lower the pole to rest on the support arm assembly. Refer to *Lowering Pole Assembly* in the *Maintenance* section.

9. Lay cage throat ring (27) on a flat surface with threaded connectors welded on the inner diameter of the ring pointing up and toward the center of the ring.

L-807 Wind Cone Assembly
(contd.)

10. Thread four support rods (3) into the throat ring connectors. Thread finger tight.

11. Slide the mid ring (2) over the four support rods. Sleeves should point toward the throat ring and away from the center of the ring. Locate mid ring from the throat ring at the distance shown in Table 3-1.

Table 3-1. Locating Mid Ring

Wind Cone Length	Distance
8 ft (2.44 m)	18 in. ± 1/4 in. (457 mm ± 6 mm)
12 ft (3.66 m)	27 in. ± 1/4 in. (686 mm ± 6 mm)

NOTE: The location of the mid ring is measured from the far side of the throat ring to the near side of the mid ring. In addition, sleeves on the mid ring are not threaded but provide a slip fit.

12. Tighten two hex-socket set screws in each mid ring sleeve at four places to secure the mid ring to support rods.

13. Slide the trail ring (4) on the ends of the four support rods.

NOTE: Sleeves on the inside of the ring should point inward and toward the center of the ring.

14. Tighten the two hex-socket set screws in each trail ring sleeve at four places to secure the trail ring to the support rods.

15. Thread the upper bearing (28) and lower bearing (25) on two thread adapters at 180 degree positions on the throat ring. Tighten bearings onto adapter and align bearing holes vertically with each other by eye.

16. Insert lower bearing shield (26) into the lower bearing and slide the shaft through the lower bearing approximately 2–3 inches (51–76 mm). Then slide the upper bearing shield (29) over the shaft and position against the upper bearing (28).

17. Check alignment of the lower bearing (25) with the shaft and continue to slide the shaft through the bearing approximately 2–3 inches (51–76 mm) and then slide the upper bearing shield (29) over the shaft. Continue to push the bearing cage shaft assembly through both bearings until the lower bearing is against the shaft collar flange.

18. Recheck alignment of the shaft and bearings to ensure that the cage assembly will not bind as the cone rotates with the wind.

L-807 Wind Cone Assembly
(contd.)

19. After you check alignment and ensure the lower bearing is against the shaft collar flange, tighten two set screws in each bearing to secure the cage assembly to the shaft. Then ensure both bearing shields are pushed down against the bearings.

20. Place the cage shaft assembly onto the end of the pole assembly and secure by tightening four hex-head screws. Grease both bearings.

    NOTE: Grease both bearings on the cage assembly through grease fittings on the bearings. A rust-inhibited, water-resistant, lithium-based grease is recommended. In extremely cold climates, wind cone movement may become sluggish. Replace grease with low temperature lubricant.

    NOTE: On unlighted cones without the L-810 obstruction light, install pipe cap (1) on the end of the bearing shaft and the bearing cage shaft.

21. Consider the conditions below and then proceed to the next step.

If the following condition exists...	**Proceed to...**
Wind cone is unlighted and/or does not include L-810 obstruction light.	Step 15 in *L-807 Wind Cone Assembly* in *Assembly Procedures* in this section
Optional sock lighting assembly is included.	*Optional Sock Lighting Assembly* in this section
Optional sock lighting assembly and obstruction light are included.	*Optional Sock Lighting Assembly* and *Obstruction Light* in this section
Optional obstruction light only is included.	*Optional Obstruction Light Only* in this section

22. Slip the wind sock (6) over the cage assembly (5) and align the drain grommets in the wind sock to face down when the wind cone assembly is raised to the vertical position. Attach the sock to the throat ring by inserting plastic tie-wraps through the grommets in the sock throat and then around the cage throat ring. Pull the tie-wraps tight and trim off excess tie-wrap.

23. Thread the lowering rope through the eye bolt (9), located at the top of the pole, and knot the end of the rope. Coil the other end of the rope around the rope cleat located on the side of the pole.

24. Raise the wind cone assembly by walking the pole hand-over-hand into the vertical position. Hold in the vertical position and secure the assembly to the base with two ½ inch hex nuts (18) and flatwashers (17). Torque the hex nuts to 40/42 foot-pounds.

Optional Sock Lighting Assembly

To assemble the optional sock lighting assembly, perform the following procedure:

1. See Figure 3-4. Screw the light assembly junction box (5) onto the end of the bearing cage shaft assembly and tighten. Then remove four junction box lid screws (2) and remove junction box lid (12) and gasket (11).

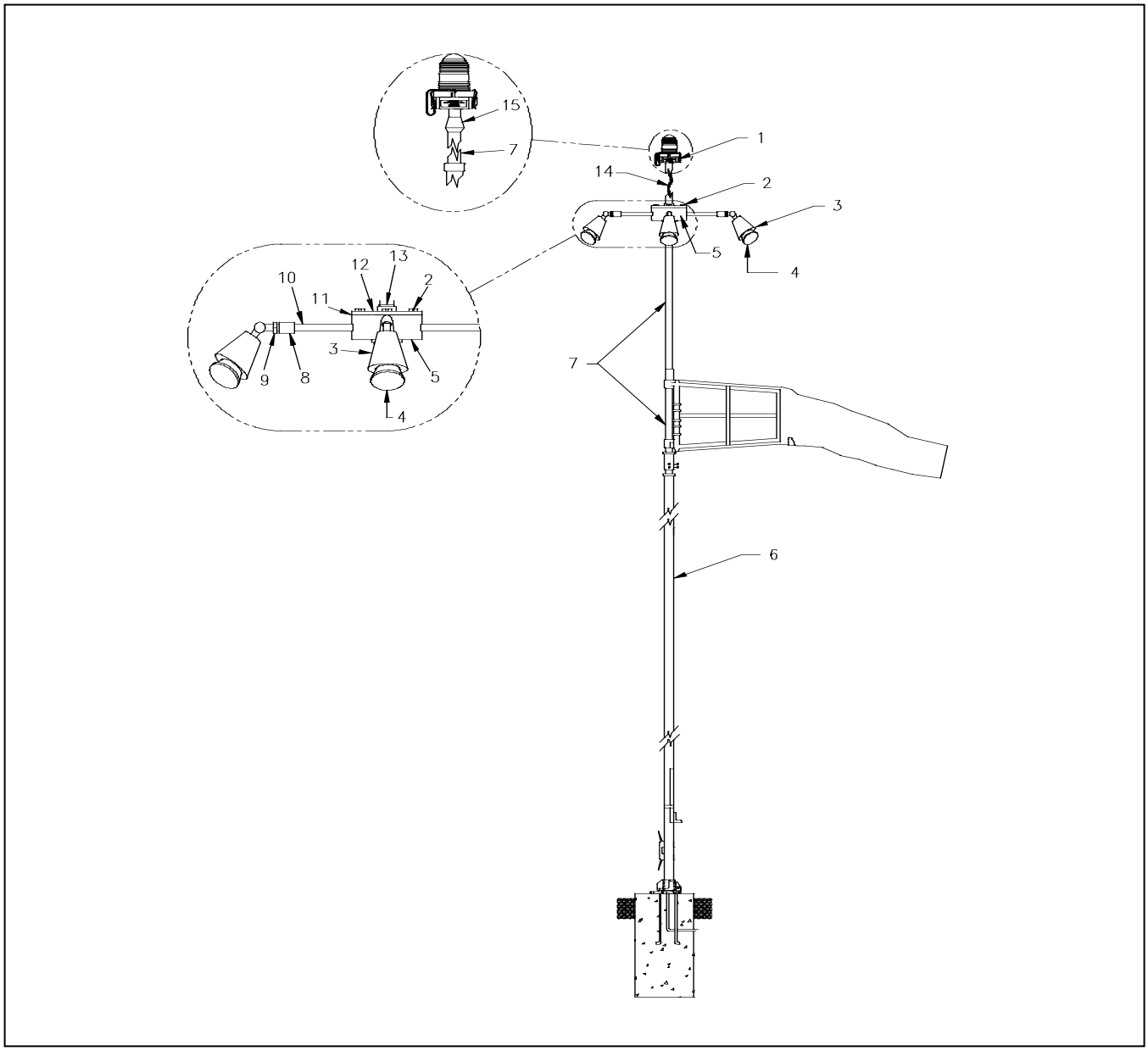


Figure 3-4. Optional Sock Lighting Assembly

1. Obstruction Light Assembly
2. 10-32 x ¾ Round Head Screw
3. Lamp Holder
4. Lamp
5. Junction Box
6. Pole Assembly
7. Shaft Assembly
8. Coupling
9. Locknut
10. Lamp Support Arm
11. Gasket
12. Junction Box Lid
13. Pipe Plug
14. Customer-Supplied Wiring, AWG 14
15. Reducer Pipe Nipple

Optional Sock Lighting Assembly *(contd.)*

2. Feed fish tape through the junction box and out through the bottom of the pole assembly base and pull through two 25-foot- (7.6-m-) long AWG 14 wires (14). Allow the two wires to extend one foot (305 mm) beyond the junction box.

   NOTE: One AWG 14 wire is black, and the other wire is white. These wires should be rated at 300 Vac.

3. Connect the wires of the four- (or five-) lamp sockets and power leads in parallel. Use customer-supplied wire nuts on all connections or other hardware as required by local regulations.

4. If an adjustment is required to align the lamp holders (3) in a vertical plane, loosen the locknut (9) located next to the coupling (8) at the end of the lamp support arm (10). Screw the lamp support arm into the junction box for 8-ft wind cone or junction box lid for 12-ft wind cone. Connect the power leads to the junction box (8-ft wind cone) or junction box lid (12-ft wind cone).

   NOTE: The lamp holder is pre-assembled and includes electrical leads.

   NOTE: Vertical angle of lamp holders has been factory preset at 37 degrees. Do not change this angle. Readjustment will prevent the wind sock from being properly illuminated.

5. After you have checked the alignment of the lamp holders, screw four (or five) 120 watt flood lamps (4) into the sockets. Secure the junction box with a gasket (11) and four junction box lid screws (2). Tighten screws.

   NOTE: Refer to the *Parts* section for lamp specifications.

6. Take up the wire slack as needed, but do not put tension on the wires.

7. Consider the conditions below and then proceed to the next step.

If the following condition exists...	**Proceed to...**
Optional sock lighting assembly is included.	Step 15 of *L-807 Wind Cone Assembly* in this section
Optional sock lighting assembly and obstruction light are included.	*Optional Sock Lighting Assembly* and *Obstruction Light* in this section

Optional Sock Lighting Assembly and Obstruction Light

To assemble the optional sock lighting assembly and the obstruction light, perform the following procedure:

1. See Figure 3-4. Remove the pipe plug (13) from the junction box (5) and discard. Assemble and install the sock lighting option. Refer to *Optional Sock Lighting Assembly* in this section.

2. Disassemble the L-810 obstruction light (1) by removing lens clamps, lens, lamp, and lamp socket. Feed two 18-inch- (457-mm-) long AWG 14 wires (14) into the obstruction light base and connect wires to the lamp socket terminals. Reinstall the lamp socket to the lamp base.

   NOTE: One AWG 14 wire is black, and the other wire is white. These wires should be rated at 300 Vac.

3. Screw the obstruction light supplied with the reducer pipe nipple (15) into the junction box lid (12). Connect wires in parallel with flood lamp wires in the junction box. Secure the junction box lid, with the obstruction light base installed to the junction box with gasket and four junction box lid screws (2). Tighten the screws and reassemble the L-810 obstruction light.

4. Proceed to Step 14 of *L-807 Wind Cone* in *Assembly Procedures* in this section.

Optional Obstruction Light Only

To assemble the optional obstruction light, perform the following procedure:

1. See Figure 3-4. Screw 1-1/4 x 1-inch (31.75 x 25.4-mm) reducer pipe nipple (15) onto the end of the cage shaft assembly.

2. Feed fish tape through the coupling and out through the bottom of the pole assembly base and pull through two 25-foot- (7.6-m-) long AWG 14 wires (14). Allow wires to extend one foot (305 mm) beyond the coupling.

   NOTE: One AWG 14 wire is black, and the other wire is white. These wires should be rated at 300 Vac.

3. Disassemble the L-810 obstruction light (1) by removing lens clamps, lens, lamp, and lamp socket. Feed two 18-inch- (457-mm-) long AWG 14 wires (14) through the light base and connect wires to the lamp socket terminals.

   NOTE: One AWG 14 wire is black, and the other wire is white. These wires should be rated at 300 Vac.

Optional Obstruction Light Only *(contd.)*

4. Connect two power leads to two obstruction light leads with customer-supplied wire nuts.
5. Screw the L-810 obstruction light assembly onto the reducer pipe nipple.
6. Reassemble the obstruction light assembly with lamp and lens.
7. Take up wire slack as needed, but do not put tension on wires.
8. Proceed to Step 15 of *L-807 Wind Cone Assembly* in this section.

6. Power Adapter Connections

If a 6.6 ampere series circuit is to power the lighted wind cone, use a Siemens Airfield Solutions PA-4 adapter for the externally lighted wind cone and use the PA-3 adapter for the internally lighted wind cone. Refer to the *Wiring Schematics* section for the wind cone wiring connections.

7. Internally Lighted Wind Cone Installation

This subsection describes installation procedures for the internally lighted wind cone.

To install the internally lighted wind cone, perform the following:

1. Assemble the wind cone by completing steps 1 through 13 in *L-807 Wind Cone Assembly* in this section.

   NOTE: See Figure 3-5. Do not install 1-1/4 x 1-inch (31.75 x 25.4 mm) reducer bushing (6) until you install the wind cone cage (7) on the shaft.

7. Internally Lighted Wind Cone Installation *(contd.)*

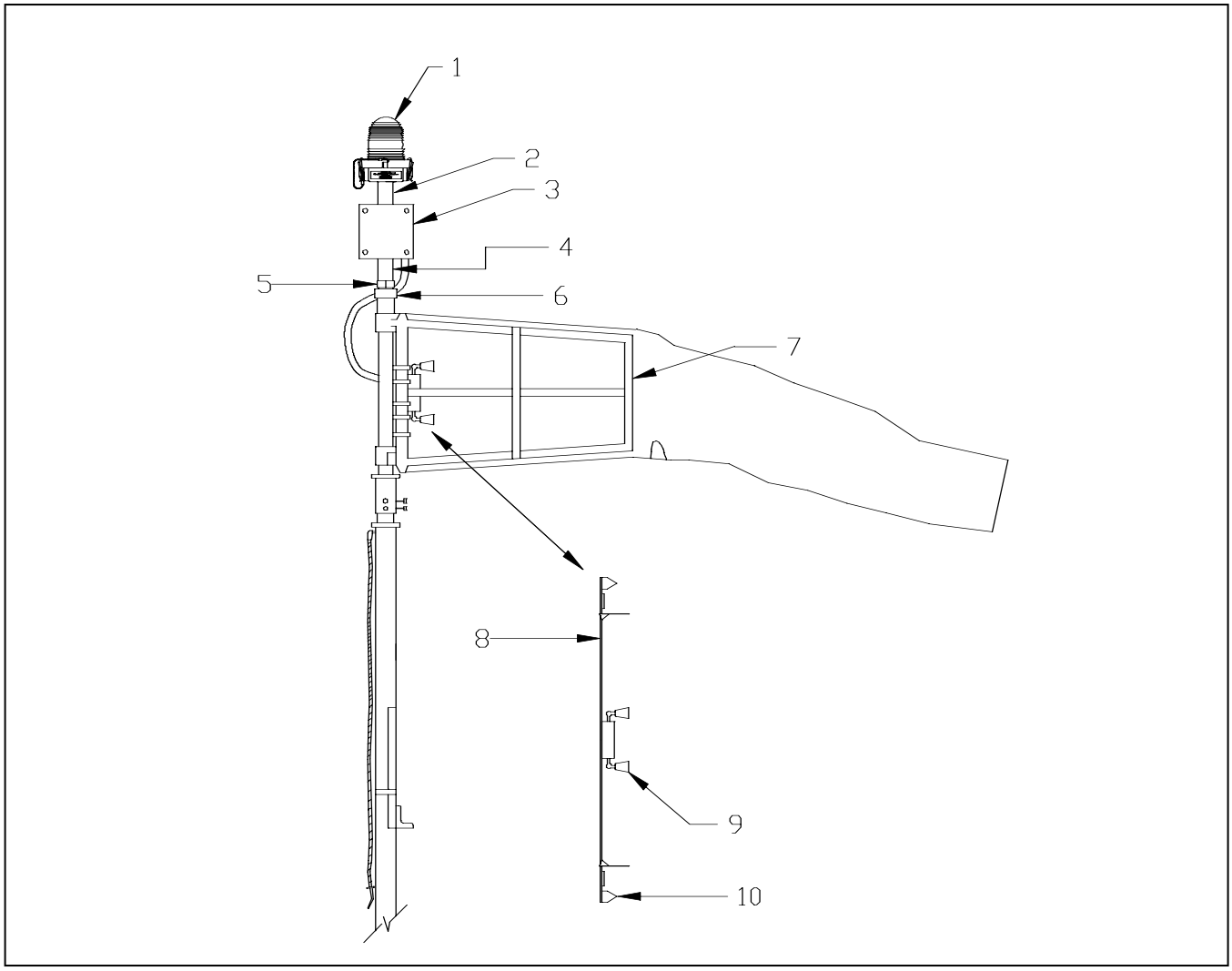


Figure 3-5. Installing Internally Lighted Wind Cone

1. L-810 Obstruction Light
2. Pipe Nipple
3. Rotating Power Assembly
4. Pipe Nipple
5. Hex Reducer Bushing
6. Reducer Bushing
7. Wind Cone Cage
8. Lamp Bar
9. Lamp Holder
10. Mounting Clamp

7. Internally Lighted Wind Cone Installation *(contd.)*

2. Install assembled wind cone cage (7) onto shaft assembly without the sock and secure the cage assembly to the shaft with set screws found in the bearings. The top bearing should be below threads on the end of the shaft. Reseal the weather cap to the pipe with a silicone RTV sealant.

3. Install 1-1/4 x 1-inch (31.75 x 25.4-mm) reducer bushing on the end of the shaft. Reseal the weather cap to the pipe with a silicone RTV sealant.

4. Install 3/4 x 2 inch (19 x 51 mm) pipe nipple (2) onto the bottom of the rotating power assembly (3). Install 3/4 x 2 inch (19 x 51 mm) reducer bushing on the other end of the pipe nipple.

5. Pull wires through the wind cone pole so that you can feed a sufficient length of wire through the assembly and attach to the two leads from the rotating power enclosure.

6. Position the long 3/4-inch- (19-mm-) diameter shaft of the device with 3/4-inch bushing downward and feed wires through the shaft into the enclosure. Then insert the 3/4-inch (19-mm) bushing into the 1-1/4 x 1-inch (31.75 x 25.4-mm) reducer bushing (installed on the top of the wind cone) and tighten.

7. Loosen the bolts and nuts on the end of the lamp bar (8).

8. Loosen the screws in the lamp holders (9) on the lamp bar. Rotate the lamp holders 90 degrees and tighten.

9. Attach the lamp bar on the throat ring of the wind cone cage by slipping mounting clamps over the throat ring. Rotate the lamp bar so that it is nearly parallel to the shaft of the wind cone. Tighten screws at each mounting clamp.

10. Disassemble the L-810 obstruction light by removing the lens clamp, lens, and lamp socket.

11. Attach wires from the power rotating enclosure to the L-810 terminals. Screw the L-810 base onto the 1 x 3-inch (25 x 76-mm) pipe nipple. Then screw into the hub on the top of the rotating power assembly and tighten.

7. Internally Lighted Wind Cone Installation *(contd.)*

12. Install 69 W, 120 Vac lamp into the L-810 socket, and reinstall the lens and lens clamp.

    NOTE: Lamps are pre-installed.

13. Install the wind sock. Refer to Step 15 of *L-807 Wind Cone Assembly* in this section.

14. Complete installation of wind cone pole. Refer to steps 16 and 17 of *L-807 Wind Cone Assembly* in this section.

8. Export Wind Cone Installation

For the export wind cone installation only, perform the following requirement:

A fence with a padlock gate shall be installed around the wind cone to prevent unauthorized entry.

9. Optional Tether Installation

See Figure 3-6. To install an optional tether (contractor-supplied), attach one end of the tether (2) to an eyebolt installed in the pole or a clamp attached to the pole (1). Attach the other end of the tether to a bolt in the base (3) or bolt secured to the building.

9. Optional Tether Installation *(contd.)*

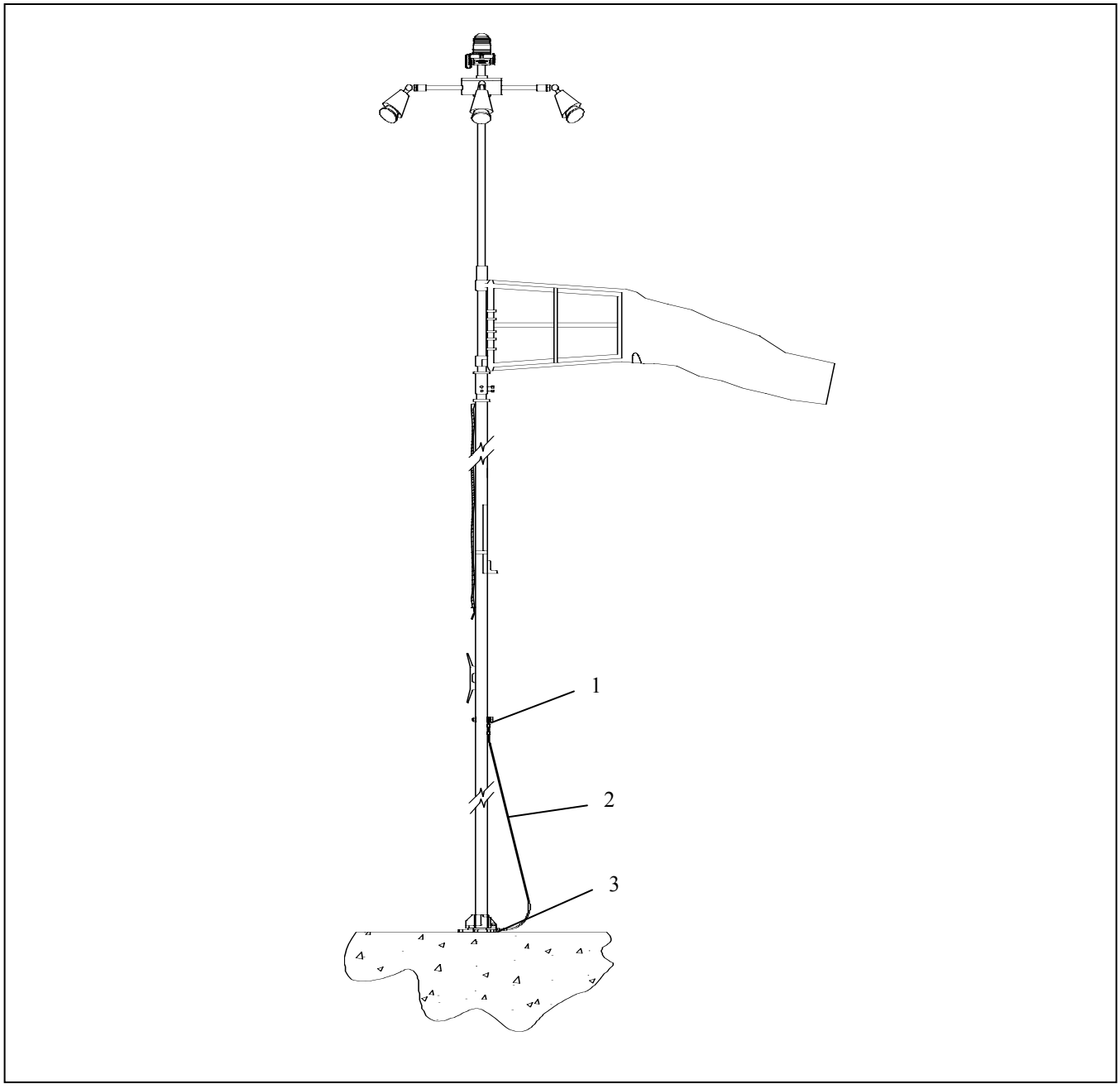


Figure 3-6. Tether Installation

1. Contractor-Supplied Eyebolt or Clamp
2. Contractor-Supplied Tether
3. Bolt in Base

Section 4
Maintenance

1. Introduction

To keep L-807 wind cones operating efficiently, follow a preventive maintenance schedule. Follow the guidelines discussed below. Refer to FAA AC 150/5340-26 for more detailed information.

2. Lighted Wind Cones

To maintain lighted wind cones, follow the guidelines below.

- Check input voltage to ensure voltage is 120 Vac ± 5 volts. Correct voltage, if necessary.
- Replace lamps after 80 percent and before 90 percent of the rated lamp life. Refer to Table 4-1 to estimate percent of the rated lamp life. Clean globes inside and out.

Table 4-1. Rated Lamp Life

Lamp	Lamp Life
69 W/120 Vac obstruction lamp	8,000
QHL, 120 V/100 W sock lamp (internally lighted)	2,000
PAR 38 120 W/120 Vac sock lamp (externally lighted)	3,000

- Clean globes inside and out when lamps are replaced. If lamp burns dimly, check for correct voltage and clean globes.

3. Lubrication

To lubricate wind cones, follow the guidelines below.

- Grease both bearings on the cage assembly through the grease fittings on bearings. A rust inhibited, water resistant, lithium-based grease is recommended.

  NOTE: In extremely cold climates, wind cone movement may become sluggish. Replace grease with low-temperature lubricant.

- Inspect bearing weather shield. If shield is cracked, deformed, or missing, replace with new weather shield. Weather shield can be made locally using 1/8-in.-thick (3.175 mm), 70 durometer neoprene rubber.

4. Structure

To maintain the wind cone structure, follow the guidelines below.

- Check all metal parts for wear such as corrosion and cracks. Replace metal parts, if necessary.
- Check for flaking paint. Use touch up paint to maintain high visibility and to prevent corrosion.

5. Wind Cone Sock and Cage

To maintain the wind cone sock and cage, follow the guidelines below.

- Check for missing or broken sock ties. Replace sock ties, if necessary.
- Check for looseness of the set screws or bolts listed below. Tighten set screws or bolts, if necessary.
    - two set screws for each bearing
    - four hex head screws holding shaft assembly to pole
    - eight set screws on each sock ring inside sock

6. Wiring

To maintain wiring for the wind cone, check for cracked or frayed power wiring at base plate. Replace power wiring at base plate, if necessary.

7. Lowering Pole Assembly

See Figure 3-3. Consider the guidelines listed below before lowering the pole assembly.

- Before lowering the pole assembly,
    - remove two hex nuts (18), split washers (19), and flatwasher (17) from the base plate screw (16).
    - check the rope for breaks, cuts, fraying, or other deterioration that would allow the rope to break during the lowering operation. Replace rope, if necessary.
    - check that the support leg swings away from the pole freely by moving the support leg by hand. If the support leg is tight, oil joint or adjust the nut torque until the support leg swings freely.

      NOTE: Additional support can be provided by placing a sawhorse in the lowering path of the pole.
- During lowering of the pole assembly,
    - use at least two people: one person to hold the rope and the other person to handwalk the pole down.
    - ensure that the wind cone does not hit the ground.

After lowering of pole assembly,

- raise assembled pole assembly.
- reinstall the two hex nuts (18), split washers (19), and flatwasher (17) and torque screws to 42/44 foot-pounds.

`

8. Miscellaneous

- Remove bird and/or insect nests or other debris from the wind cone cage.
- Make sure drain grommets are located in the bottom side of the wind sock and are clear.

Section 5
Parts

1. Introduction

To order parts, call Siemens Airfield Solutions Customer Service or your local representative. Use this five-column parts list, and the accompanying illustration, to describe and locate parts correctly.

2. Using the Illustrated Parts List

This subsection describes how to use the illustrated parts list covered later in this section. It does not provide the actual parts list.

The Item column numbers correspond to the numbers that identify parts in illustrations following each parts list. NS (not shown) indicates that a listed part is not illustrated.

The Description column gives the part name, as well as its dimensions and other characteristics when appropriate. Indentions show the relationships between assemblies, subassemblies, and parts.

The Part Number column gives the Siemens Airfield Solutions part number.

Item	Description	Part Number	Quantity	Note
S1	Assembly	xxxxxxxx	1	A
NS	Part	xxxxxxxx	1	
H1	Part or Assembly			
	Part/Assembly for option 1	xxxxxxxx	2	
	Part/Assembly for option 2	xxxxxxxx	2	
T1	Assembly	xxxxxxxx	1	
	• Part	xxxxxxxx	1	
	• Part	xxxxxxxx	2	
NOTE A				

The Quantity column contains the quantity required per unit, assembly, or subassembly. The code AR (As Required) is used if the part number is a bulk item ordered in quantities or if the quantity per assembly depends on the product version or model.

The Note column contains letters that refer to notes at the end of each parts list. Notes contain special ordering or product/part version information.

3. L-807 Wind Cone Part Numbering System

This section describes how to determine the part number for a particular L-807 wind cone.

Unlighted (Style II) L-807 Wind Cone Part Numbers

Refer to Table 5-1 for the unlighted wind cone part numbers.

Table 5-1. Unlighted Wind Cone Part Numbers

Size	Part Number	Includes L-810 Obstruction Light
Size 1 (8 ft {2.44 m})	44D0941-1	No
Size 1 (8 ft {2.44 m})	44D0941-4	Yes
Size 2 (12 ft {3.66 m})	44D0941-13	No
Size 2 (12 ft {3.66 m})	44D0941-16	Yes

Externally Lighted (Style I) L-807 Wind Cone Part Numbers

Refer to Table 5-2 for the externally lighted wind cone part numbers.

Table 5-2. Externally Lighted (Style I) Wind Cone Part Numbers

Size	Part Number	Includes L-810 Obstruction Light
Size 1 (8-ft {2.44-m})	44D0941-10	Yes
Size 2 (12-ft {3.66-m})	44D0941-22	Yes

Internally Lighted (Style I) L-807 Wind Cone Part Numbers

Refer to Table 5-3 for the internally lighted wind cone part numbers.

Table 5-3. Internally Lighted (Style I) Wind Cone Part Numbers

Size	Part Number	Includes L-810 Obstruction Light	Note
Size 1 (8-ft {2.44-m})	44D0941-4	Yes	A
Size 2 (12-ft {3.66-m})	44D0941-16	Yes	B
NOTE A: Must order Retrofit Kit separately when ordering the internally lighted wind cone. Refer to *Retrofit Kit (8 ft {2.44 m}) Wind Cone Parts List* in this section for items supplied in the Retrofit Kit for the 8-foot (2.44-m) L-807 wind cone. NOTE B: Must order Retrofit Kit separately when ordering internally lighted wind cone. Refer to *Retrofit Kit (12 ft {3.66 m}) Wind Cone Parts List* in this section for items supplied in the Retrofit Kit for the 12-foot (3.66-m) L-807 wind cone.			

4. Internally Lighted Wind Cone Retrofit Kit Parts List

This subsection includes the retrofit kit parts list for the 8-foot (2.44-m) and 12-foot (3.66-m) internally lighted wind cones.

Retrofit Kit (8-ft {2.44-m}) Wind Cone Parts List

Refer to the parts list below for the 8-foot internally lighted wind cone retrofit kit part numbers.

Item	Description	Part Number	Quantity	Note
NS	Retrofit kit, 8-ft (2.44-m) wind cone	94A0065	1	
NS	• Internal power box assembly	44A1925	1	
NS	• Hex reducer bushing, 3/4 x 1 inch	77A0019	1	
NS	• Pipe nipple, 3/4 x 2 inch	77A0131	1	
NS	• Pipe nipple, 1 x 3 inch	77A0069-3	1	
NS	• QHL, 120 V/100 W lamp	3400-0089	2	
NS: Not Shown				

Retrofit Kit (12-ft {3.66-m}) Wind Cone Parts List

Refer to the parts list below for the 12-foot internally lighted wind cone retrofit kit part numbers.

Item	Description	Part Number	Quantity	Note
NS	Retrofit kit, 12-ft (3.66-m) wind cone	94A0066	1	
NS	• Internal power box assembly	44A1926	1	
NS	• Hex reducer bushing, 3/4 x 1 inch	77A0019	1	
NS	• Pipe nipple, 3/4 x 2 inch	77A0131	1	
NS	• Pipe nipple, 1 x 3 inch	77A0069-3	1	
NS	• QHL, 120 V/100 W lamp	3400-0089	3	
NS: Not Shown				

5. L-807 Wind Cone Parts List

This subsection provides the part numbers for the L-807 wind cone parts listed below.

- common parts
- externally lighted sock lighting parts
- internally lighted sock lighting parts
- L-810 obstruction light parts
- cage assembly (8-ft {2.44-m}) parts
- cage assembly (12-ft {3.66-m}) parts
- wind cone sock (8-ft {2.44-m}) parts
- wind cone sock (12-ft {3.66-m}) parts
- power adapter parts

Common Parts

See Figures 5-1 and 5-2. Figure 5-1 shows the L-807 wind cone with internal lighting assembly. Figure 5-2 shows the L-807 wind cone with external lighting assembly.

Item	Description	Part Number	Quantity	Note
9	Pole assembly Pole assembly, 8-ft (2.44-m) Pole assembly, 12-ft (3.66-m)	 44D0940 44D1845	 1 1	
10	Split washer, 3/8 inch	66A0026-29	2	
11	Hex nut, 3/8–16, stainless steel	65A0015-29	2	
12	Flatwasher, 3/8 inch	66A0015-29	2	
13	Shoulder screw, ½ x 2 with 3/8–16 thread	64A0072	2	
14	Anchor Bolt Kit (includes 4 each 5/8–11 x 27, long galvanized J-Bolt, 5/8 -11 galvanized hex nut, and 5/8 flat galvanized washer)	94A0152	1	
15	See Item 14			
16	See Item 14			
17	Flatwasher, 1/2 inch (thick)	66A0251	2	
18	Hex nut, 1/2–13	65A0015-33	2	
19	Rope cleat	62B0319	1	
20	Cage bearing shields (may be purchased locally and made)	63A0332	2	
21	Cage bearings	75B0012	2	
25	Flatwasher, ½-inch (thin)	66A0015-33	2	
NS	Hex socket set screw, 8–32 x 3/16, large, stainless steel (used on mid and tail ring sleeves)	64A0213-3	16	
NS: Not Shown				

Common Parts *(contd.)*

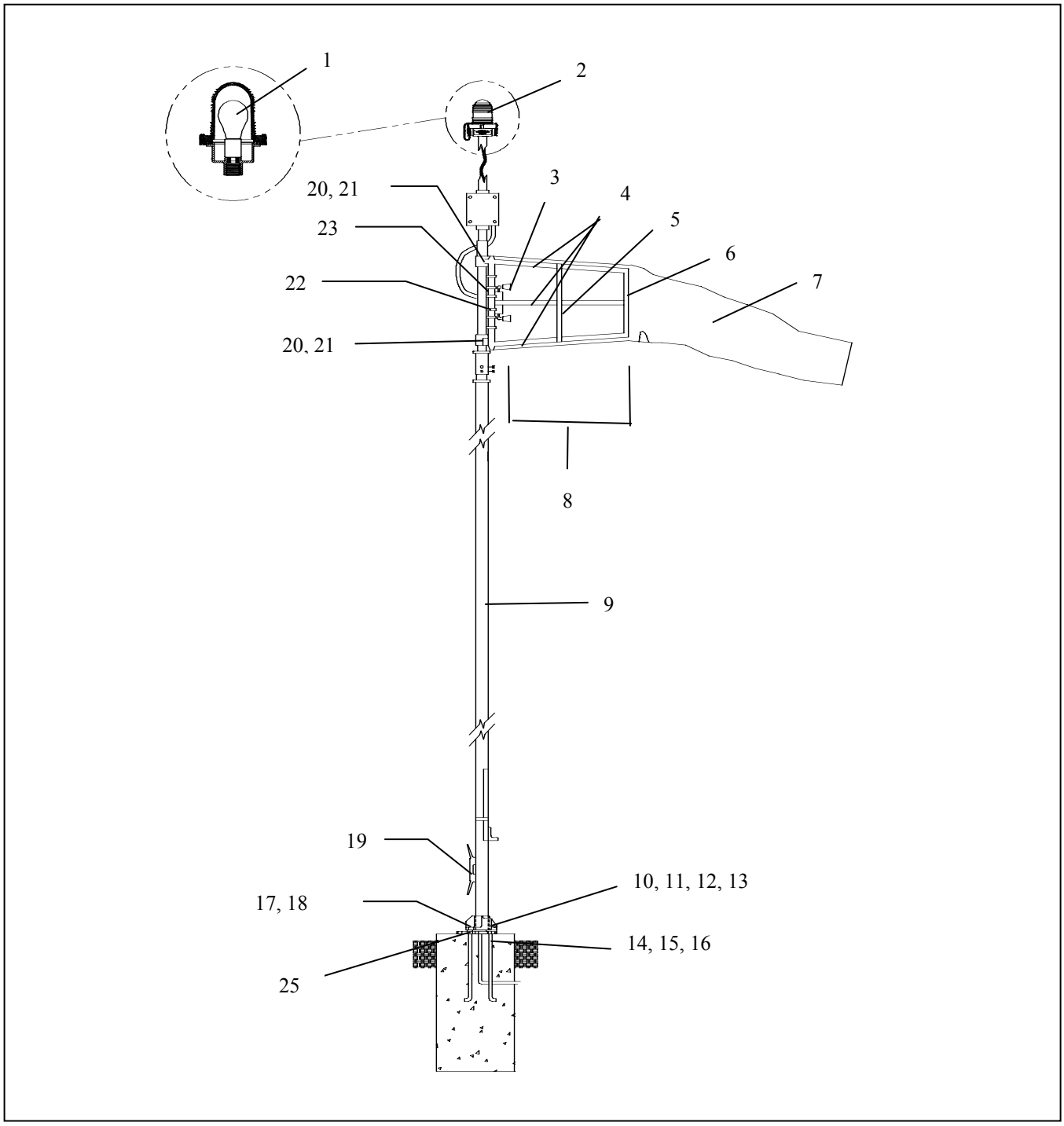


Figure 5-1. L-807 Wind Cone (With Internal Lighting Assembly and Obstruction Light)

Common Parts *(contd.)*

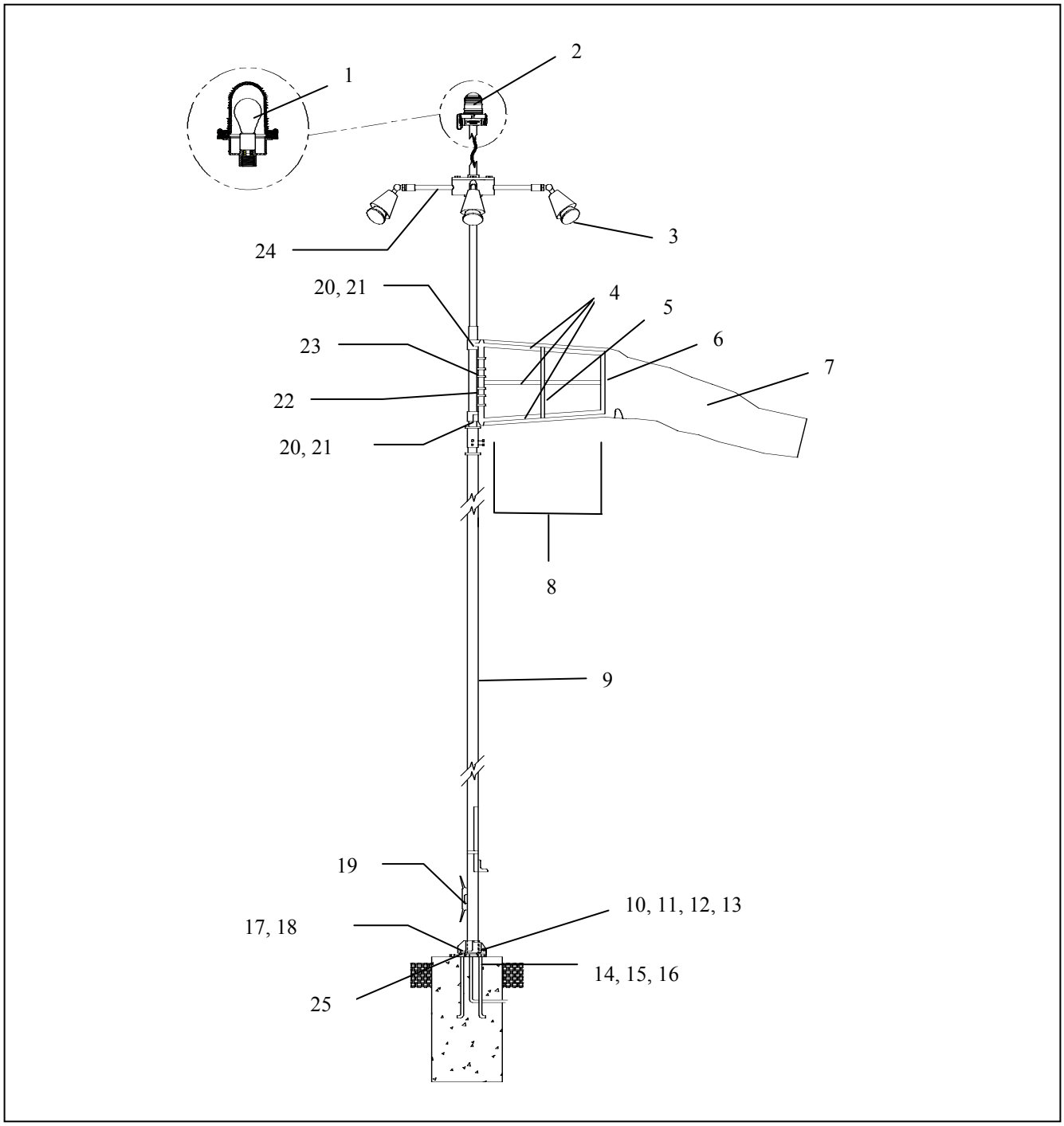


Figure 5-2. L-807 Wind Cone (With External Lighting Assembly and Obstruction Light)

Internally Lighted Wind Cone Sock Lighting Parts List

See Figure 5-1.

Item	Description	Part Number	Quantity	Note
3	Light assembly			
	Light assembly, L-807, 8 ft	44A5902	1	
	Light assembly, L-807, 12 ft	44A5853	1	

Externally Lighted Wind Cone Sock Lighting Parts List

See Figure 5-2.

Item	Description	Part Number	Quantity	Note
NS	Lamp, WFL 120 Vac, 120 W PAR-38	48A0078	4 or 5	
24	Lamp support arm			
	Lamp support arm, 4-lamp, L-807, 8-ft	77A0045-3	1	
	Lamp support arm, 5-lamp, L-807, 12-ft	77A0045-4	1	

L-810 Obstruction Light Parts List

See Figure 5-2.

Item	Description	Part Number	Quantity	Note
1	Lamp, 69 W/120 Vac	48A0009	1	
2	L-810 obstruction light assembly	44B0936	1	

Cage Assembly (8-ft {2.44-m}) Parts List

See Figure 5-1.

Item	Description	Part Number	Quantity	Note
4	Support rod	77B0045-01	4	
5	Ring assembly, mid	44C0934-05	1	
6	Ring assembly, trail	44C0934-06	1	
8	Cage assembly	44D0923	1	
23	Ring assembly, throat	44B0935-02	1	

Cage Assembly (12-ft {3.66-m}) Parts List

See Figure 5-1.

Item	Description	Part Number	Quantity	Note
4	Support rod	77B0045-02	4	
5	Ring assembly, mid	44C0934-02	1	
6	Ring assembly, trail	44C0934-03	1	
8	Cage assembly	44D0919	1	
23	Ring assembly, throat	44B0935-01	1	

Wind Cone Sock (8-ft {2.44-m}) Parts List

See Figure 5-1.

Item	Description	Part Number	Quantity	Note
7	International orange sock	77C0061-1	1	
22	Sock ties (may be purchased locally)	63A0082	10	

Wind Cone Sock (12-ft {3.66-m}) Parts List

See Figure 5-1.

Item	Description	Part Number	Quantity	Note
7	International orange sock	77C0062-1	1	
22	Sock ties (may be purchased locally)	63A0082	18	

Power Adapter Parts List

NOTE: The power adapter is used to power the lighted wind cone from a 6.6A series circuit. The power adapter is ordered separately.

Item	Description	Part Number	Quantity	Note
NS	PA-4 power adapter, 3-step CCR	44D02004-1121	1	
NS	PA-4 power adapter, 5-step CCR	44D02004-1221	1	
NS	PA-3 power adapter, 300 VA, 120 V, 6.6 A	44B1545	1	
NS: Not Shown				

6. Recommended Spare Parts

See Figure 5-1.

Item	Description	Part Number	Quantity	Note
1	Lamp, 69 W/120 Vac (for obstruction light)	48A0009	1	
NS	Lamp, QHL, 120 V/100 W (for internally lighted wind cone)	3400-0089	3	
NS	Lamp, WFL 120 Vac, 120 W PAR-38 (for externally lighted wind cone)	48A0078	4	
3	Light assembly			
	Light assembly, L-807, 8 ft	44A5902	1	
	Light assembly, L-807, 12 ft	44A5853	1	
7	International orange sock			
	International orange sock, L-807, 8 ft	77C0061-1	1	
	International orange sock, L-807, 12 ft	77C0062-1	1	
20	Cage bearing shields (may be purchased locally and made)	63A0332	2	

Section 6
Wiring Schematics

1. Introduction

This section provides wiring connections for the externally and internally lighted L-807 wind cones.

2. PA-4 Connections for Externally Lighted Wind Cone

See Figure 6-1. Refer to Table 2-8 for lamps and lamp wattage.

NOTE: Figure 6-1 shows the 8-ft L-807 wind cone wiring connections for four 120 W lamps plus one 69 W obstruction light lamp. The 12-ft L-807 wind cone would show five 120 W lamps plus one 69 W obstruction lamp.

CAUTION: Do not use power adapter PA-3 for externally lighted wind cones. Failure to observe may result in equipment damage.

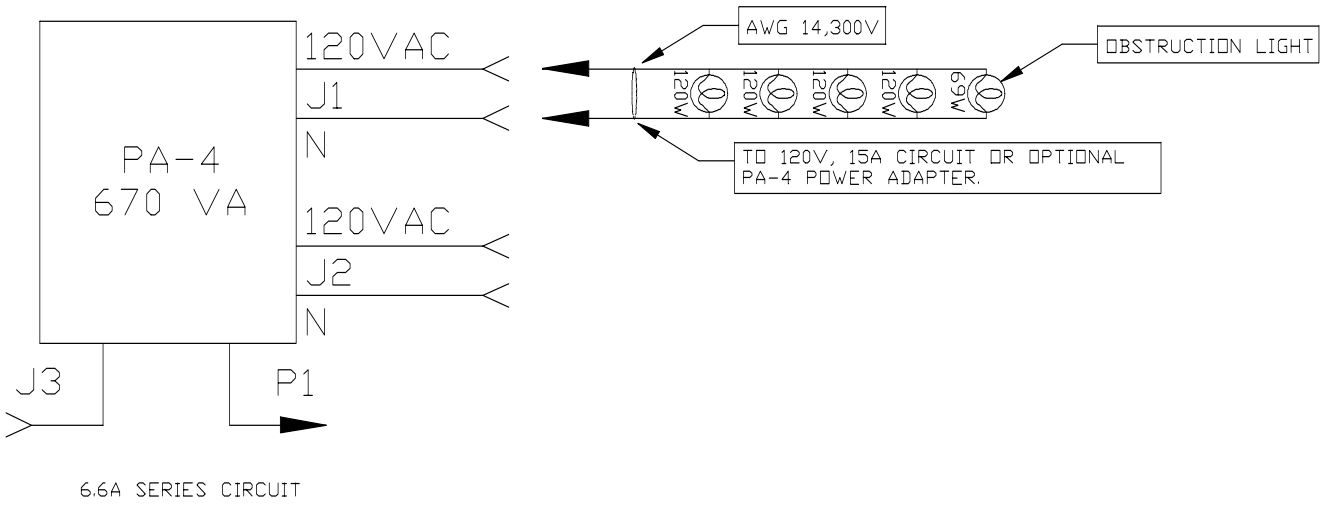


Figure 6-1. PA-4 Connections for Externally Lighted Wind Cone

3. PA-3 Connections for Internally Lighted Wind Cone

See Figure 6-2.

NOTE: Figure 6-2 shows 8-ft wind cone wiring connections for two 100 W lamps plus one 69 W obstruction light lamp. The 12-ft L-807 wind cone would show three 100 W lamps plus one 69 W obstruction lamp.

CAUTION: Do not use power adapter PA-3 for externally lighted wind cones. Failure to observe may result in equipment damage.

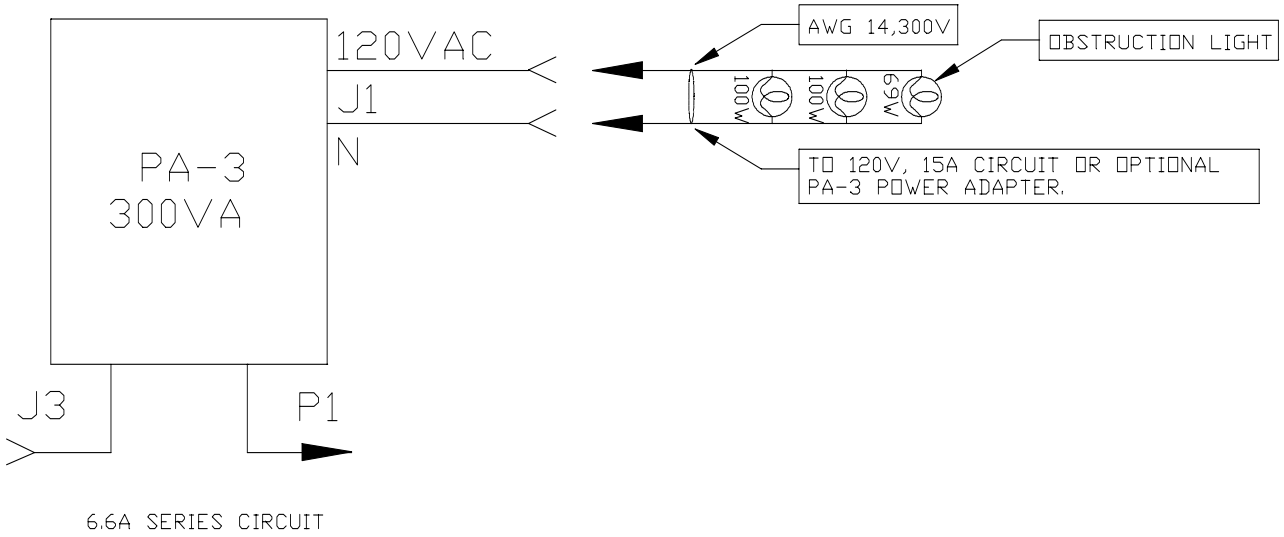


Figure 6-2. PA-3 Connections for Internally Lighted Wind Cone

4. Typical Wiring Diagram (Externally Lighted Wind Cone)

See Figure 6-3.

NOTE: Figure 6-3 shows the 8-ft L-807 wind cone wiring connections for four 120 W lamps plus one 69 W obstruction light lamp. The 12-ft L-807 wind cone would show five 120 W lamps plus one 69 W obstruction lamp.

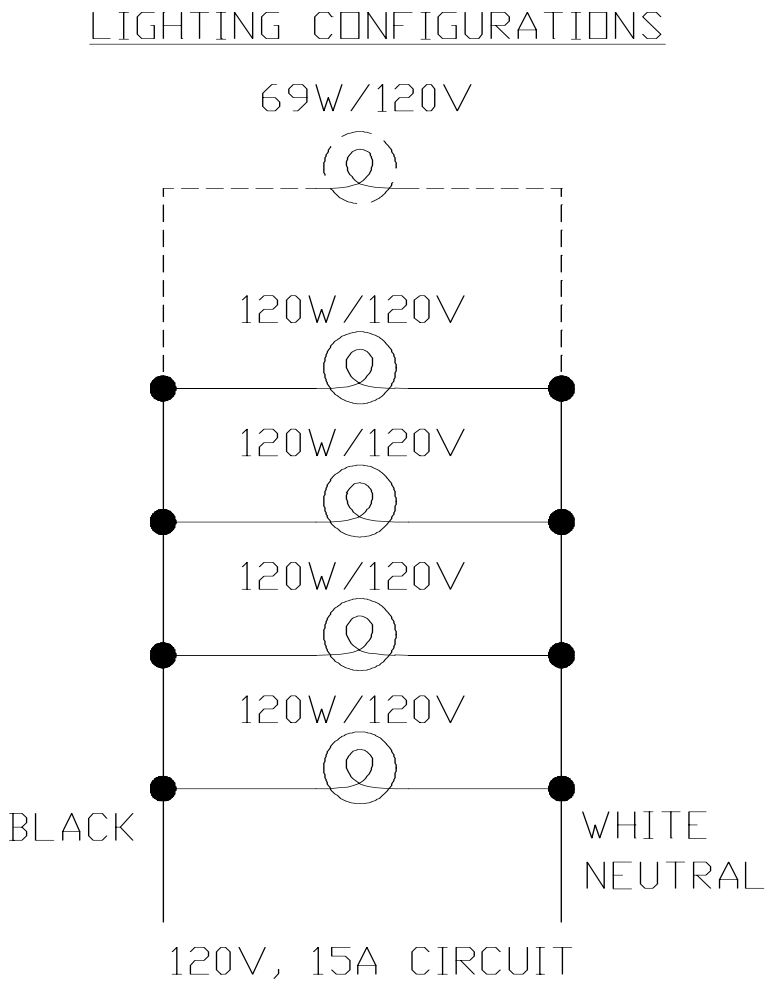


Figure 6-3. Typical Wiring Diagram (Externally Lighted Wind Cone)

5. Typical Wiring Diagram (Internally Lighted Wind Cone)

See Figure 6-4.

NOTE: Figure 6-4 shows the 8-ft L-807 wind cone wiring connections for two 100 W lamps plus one 69 W obstruction light lamp. The 12-ft L-807 wind cone would show three 100 W lamps plus one 69 W obstruction lamp.

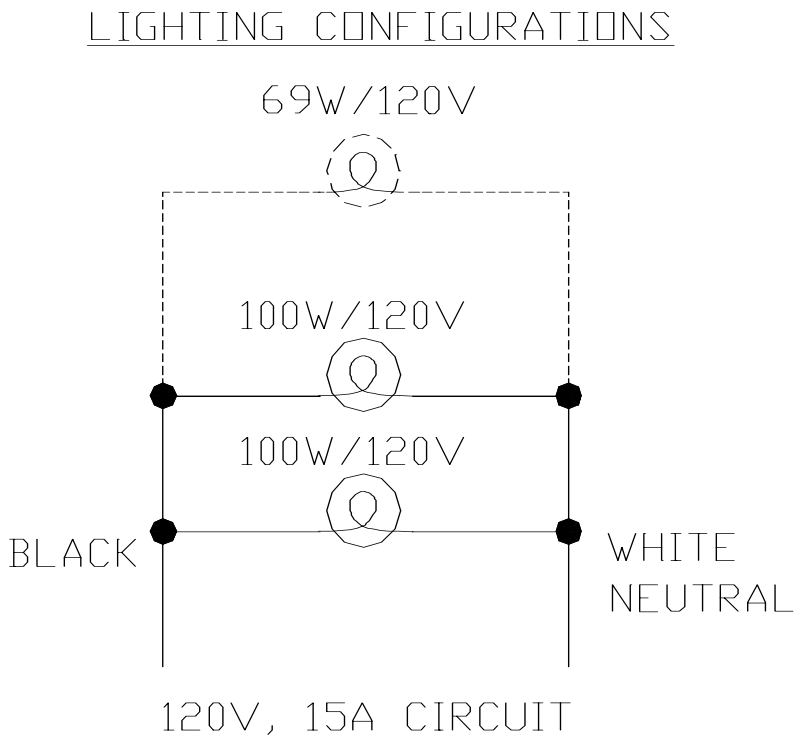
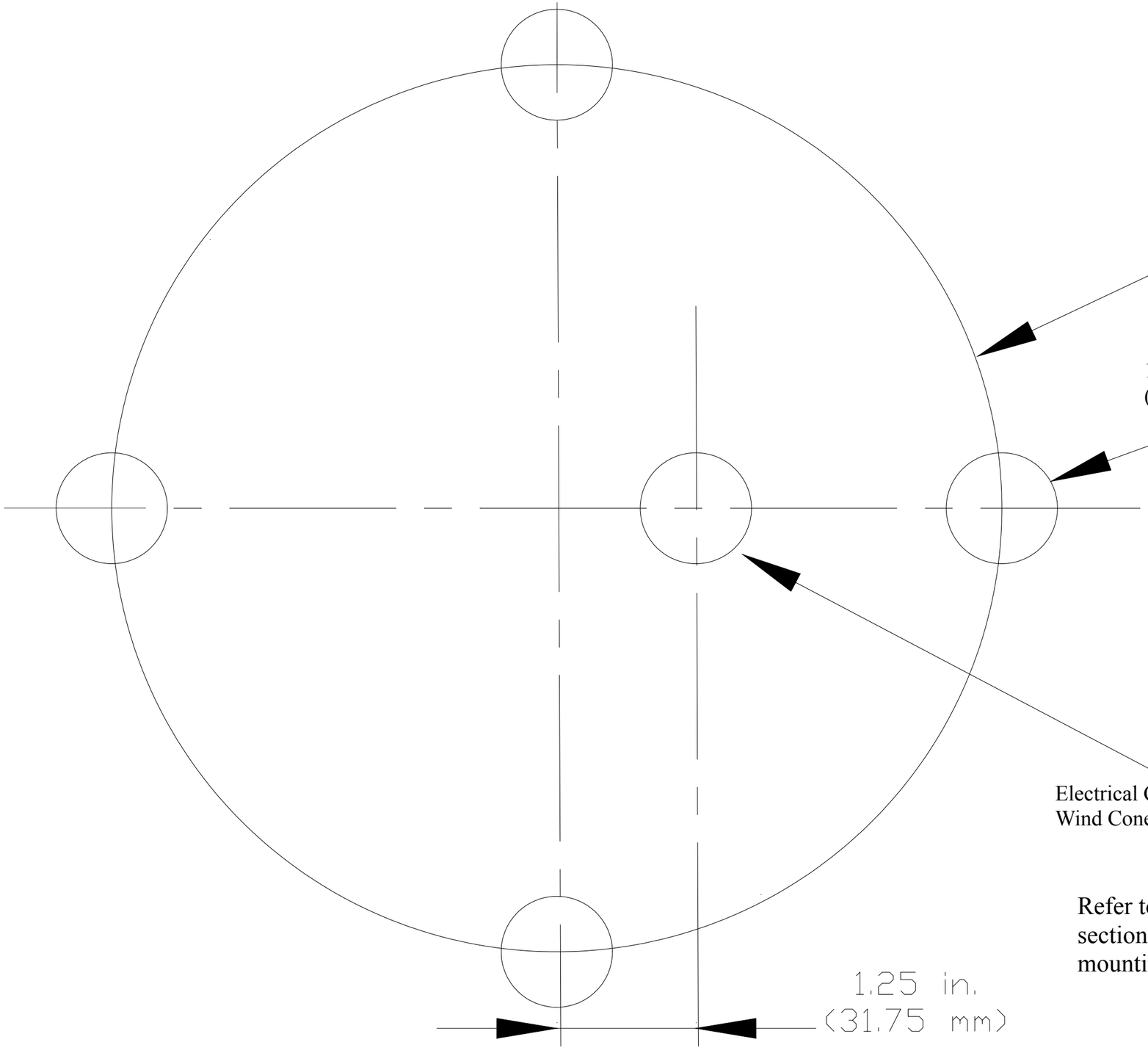


Figure 6-4. Typical Wiring Diagram (Internally Lighted Wind Cone)



Refer to Figure 3-1 in the Installation section for additional foundation and mounting information.