

L-861SE Clamp Band ERTE Incandescent Elevated Runway Threshold/End Light, Medium-Intensity, Clamp Band

Spare Parts

SP_2056, Rev. A, 2020/09/04





A.0 Disclaimer / Standard Warranty

CE certification

The equipment listed as CE certified means that the product complies with the essential requirements concerning safety and hygiene. The European directives that have been taken into consideration in the design are available on written request to ADB SAFEGATE.

ETL certification

The equipment listed as ETL certified means that the product complies with the essential requirements concerning safety and FAA Airfield regulations. The FAA directives that have been taken into consideration in the design are available on written request to ADB SAFEGATE.

All Products Guarantee

ADB SAFEGATE will correct by repair or replacement per the applicable guarantee above, 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 SAFEGATE written notice of such defects after delivery of the goods to Buyer. Refer to the Safety section for more information on Material Handling Precautions and Storage precautions that must be followed.

ADB SAFEGATE 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. ADB SAFEGATE furthers reserves the right to require the return of such goods to establish any claim.

ADB SAFEGATE'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.

ADB SAFEGATE'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 ADB SAFEGATE, warranty is limited to that extended by the original manufacturer. This is ADB SAFEGATE'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.

Standard Products Guarantee

Products of ADB SAFEGATE manufacture are guaranteed against mechanical, electrical, and physical defects (excluding lamps) which may occur during proper and normal use for a period of two years from the date of ex-works delivery, and are guaranteed to be merchantable and fit for the ordinary purposes for which such products are made.



Note

See your sales order contract for a complete warranty description.

FAA Certified product installed in the United States and purchased or funded with monies through the Airport Improvement Program (AIP) installations guarantee

ADB SAFEGATE L858 Airfield Guidance Signs are warranted against mechanical and physical defects in design or manufacture for a period of 2 years from date of installation, per FAA AC 150/5345-44 (applicable edition).

ADB SAFEGATE L858(L) Airfield Guidance Signs are warranted against electrical defects in design or manufacture of the LED or LED specific circuitry for a period of 4 years from date of installation, per FAA EB67 (applicable edition).

ADB SAFEGATE LED light fixtures (with the exception of obstruction lighting) are warranted against electrical defects in design or manufacture of the LED or LED specific circuitry for a period of 4 years from date of installation, per FAA EB67 (applicable edition).



Note

See your sales order contract for a complete warranty description.

Liability



WARNING

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

ADB SAFEGATE cannot be held responsible for injuries or damages resulting from non-standard, unintended uses of its equipment. The equipment is designed and intended only for the purpose described in the manual. Uses not described in the manual are considered unintended uses and may result in serious personal injury, death or property damage.

Unintended uses, includes the following actions:

- Making changes to equipment that have not been recommended or described in this manual or using parts that are not genuine ADB SAFEGATE replacement parts or accessories.
- Failing to make sure that auxiliary equipment complies with approval agency requirements, local codes, and all applicable safety standards if not in contradiction with the general rules.
- Using materials or auxiliary equipment that are inappropriate or incompatible with your ADB SAFEGATE equipment.
- Allowing unskilled personnel to perform any task on or with the equipment.

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1.0 Safety

Introduction to Safety

This section contains general safety instructions for installing and using ADB SAFEGATE 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.

1.1 Safety Messages

HAZARD Icons used in the manual

For all HAZARD symbols in use, see the Safety section. All symbols must comply with ISO and ANSI standards.

Carefully read and observe all safety instructions in this manual, which alert you to safety hazards and conditions that may result in personal injury, death or property and equipment damage and are accompanied by the symbol shown below.



WARNING

Failure to observe a warning may result in personal injury, death or equipment damage.



DANGER - Risk of electrical shock or ARC FLASH

Disconnect equipment from line voltage. Failure to observe this warning may result in personal injury, death, or equipment damage. ARC Flash may cause blindness, severe burns or death.



WARNING - Wear personal protective equipment Failure to observe may result in serious injury.



WARNING - Do not touch

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



CAUTION

Failure to observe a caution may result in equipment damage.

Qualified Personnel



Important Information

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 ensure that its personnel meet these requirements.

Always use required personal protective equipment (PPE) and follow safe electrical work practice.

1.1.1 Introduction to Safety



CAUTION

Unsafe Equipment Use

This equipment may contain electrostatic devices, hazardous voltages and sharp edges on components

- · Read installation instructions in their entirety before starting installation.
- Become familiar with the general safety instructions in this section of the manual before installing, operating, maintaining or repairing this equipment.
- Read and carefully follow the instructions throughout this manual for performing specific tasks and working with specific equipment.
- Make this manual available to 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.
- 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 prior to returning power to the circuit.

Failure to follow this instruction can result in serious injury or equipment damage

Additional Reference Materials



Important Information

- IEC International Standards and Conformity Assessment for all electrical, electronic and related technologies.
- IEC 60364 Electrical Installations in Buildings.
- FAA Advisory: AC 150/5340-26 (current edition), Maintenance of Airport Visual Aid Facilities.
- Maintenance personnel must refer to the maintenance procedure described in the ICAO Airport Services Manual, Part 9
- ANSI/NFPA 79, Electrical Standards for Metalworking Machine Tools.
- · National and local electrical codes and standards.

1.1.2 Intended Use



CAUTION

Use this equipment as intended by the manufacturer

This equipment is designed to perform a specific function, do not use this equipment for other purposes

• Using 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.

Failure to follow this instruction can result in serious injury or equipment damage



1.1.3 Material Handling Precautions: Storage



CAUTION

Improper Storage

Store this equipment properly

• If equipment is to be stored prior to installation, it must be protected from the weather and kept free of condensation and dust.

Failure to follow this instruction can result in equipment damage



2.0 Product Introduction

This section describes the L-861SE threshold/end light. The L-861SE threshold/end light is used to delineate the threshold/end of non-precision IFR runways.



The L-861SE light fixture consists of the following:

- A pair of inner lens doublets (3) coupled with a clear outer globe (1)
- Continuous clamping band (4)
- Inner spring clip (2) to hold two 180-degree inner lens segments
- Frangible coupling (7) that threads into a 1-1/2 12 NPT tapped hole in either a 30-inch (762-mm) stake assembly or a 12-inch-diameter L-867 base cover plate.

The cast aluminum head and base assembly can be mounted on a standard

L-867 base plate or on a steel stake. Base mounting is easier to maintain and provides added protection for the equipment. Stake-mounted lights require transformers, cables, and connectors that are designed for direct earth burial.

Refer to Table 1 for mounting heights.



Note

The measurements in Table 1 are taken from the grade to the top of the light fixture.

Table 1: Mounting Heights

Туре	Height (in.)	Height (mm)
Standard (FAA minimum)	14	355.6
Standard	24	610
Standard (FAA maximum)	29	736.6

The L-861SE light fixture is available with bidirectional white/red, white/green, red/green, red/red, green/green, green/yellow lenses.

2.1 Incandescent Elevated Runway Threshold/End Light

Compliance with Standards

FAA:	L-861SE AC 150/5345-46 (Current Edition). ETL Certified.

Uses

FAA L-861SE

- Runway threshold/end
- Non-precision IFR runways

Features

- Top casting holds the outer globe, which is indexed to the fixture and held in place by a continuous clamping band. Two prismatic inner lens segments are mounted inside on the socket mounting plate assembly.
- Light fixture is designed to withstand jet blast
- Lamp Life: Rated at 500-1000 hours at 6.6 A
- Four screws allow a 4° leveling adjustment of the fixture after installation
- Fixture uses aluminum castings, stainless steel hardware, and is protected with aviation yellow gloss enamel paint

Operating Conditions

Temperature:	-40 °F to +131 °F / -40 °C to +55 °C
Wind:	Withstands wind velocities up to 300 mph / 480 kph

Packaging

Assembled Fixtures	Dimensions of Cartons - in	(cm)	Indiv. Weight
	Individual	8 Per Box	
14-inch OAH	6.5 × 6.5 × 20.5	15.5 × 23.5 × 19.5	5 lb
	(17 × 17 × 52)	$(39.5 \times 60 \times 50)$	2.3 kg
24-inch OAH	6.5 × 6.5 × 31	19.5 × 19.5 × 29	6.25 lb
	(17 × 17 × 79)	(50 × 50 × 74)	2.8 kg
30-inch OAH	6.5 × 6.5 × 37	19.5 × 19.5 × 35.5	7 lb
	(17 × 17 × 94)	(50 × 50 × 90)	3.2 kg

2.2 Equipment and Accessories Supplied

Refer to Table 2 for required equipment that is supplied.

Table 2: Required Equipment Supplied

Description	Quantity
L-861SE light fixture (includes lamp, frangible coupling, and L-823 cordset)	1
Instruction manual	1 per order



2.3 Equipment Required But Not Supplied

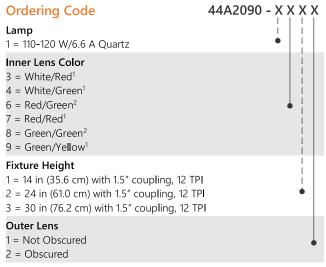
Refer to Table 3 for required equipment that is not supplied. Refer to the *Parts* section for part numbers.

Table 3: Required Equipment Not Supplied

Description	Quantity
Torque wrench, 0□200 in-lb with 3/8 socket	1
Screwdriver. #2 Phillips	1
L-867 base, 12 or 16-inches in diameter. Used only when base mounted.	1
Stake assembly (30-inch galvanized steel). Used only when stake mounted.	1
L-830 isolation transformer for series circuit.	1
Single conductor (primary) connector kit	1
Two-conductor (secondary) plug connector kit	1
Two-conductor (secondary) receptacle connector kit	1
Loctite Grade AV or equivalent	As required



3.0 Parts



Notes

- $^{\rm 1}$ $\,$ Color and/or color configuration not recognized by FAA.
- Configurations 44A2090-16X1 Red/Green and 44A2090-18X2 Unidirectional Green are ETL Certified.

3.1 Product Major Components

Table 4: Spare Components

Description	Part No.
Column 1", 7.25" (18.42 cm) for 14" OAH	62A0007-7
Column 1", 17.25" (43.82 cm) for 24" OAH	62A0007-17
Column 1", 23.25" (59.06 cm) for 30" OAH	62A0007-23
Frangible coupling, 1.5 inch, 12 TPI	62B0073/SPARE
Clamp band assembly	44A2060
Frangible coupling, 1.5 inch, 12 TPI, with slot	62B0461/SPARE
Gasket	63A0640
Head assembly w/clamp band, gasket, socket, mounting plate, and 24-in cord set	44A2080-1
Head assembly w/clamp band, gasket, socket, mounting plate, and 14-in cord set	44A2080-2
Head assembly w/clamp band, gasket, socket, mounting plate, and 30-in cord set	44A2080-3
Inner lens clip	60C2041
Inner lens, bracket	61A0146
Inner lens, spring clip	65A0163
Lamp, 110-120 W/6.6 A (ETL Certified)	48A0069
Lens, inner - 180° segment, white	63B0415-1
Lens, inner - 180° segment, yellow	63B0415-2
Lens, inner - 180° segment, red	63B0415-3

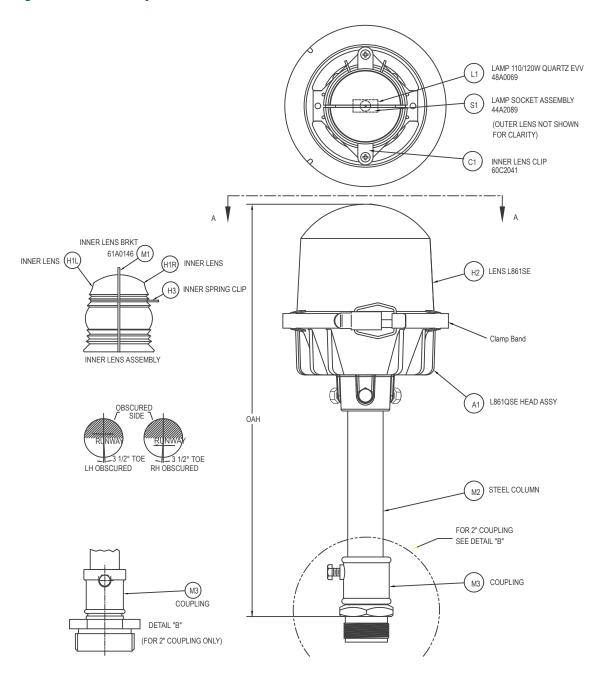
Table 4: Spare Components (continued)

Description	Part No.
Lens, inner - 180° segment, green	63B0415-4
Outer lens, white bidirectional	63B0480
Socket mounting plate assembly (includes socket, mounting plate and inner lens clip)	44A2089

Notes

3.2 Illustrated Parts List or Exploded View Diagram

Figure 1: ERTE Assembly (see Tables 4-7)



Slot across threaded end allows easy replacement of broken frangible coupling



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ASSEMBLY NUMBER	PART NUMBER	ITEM NO.	PART NAME/ DESCRIPTION	Q ТҮ.
4442000041	63B0415/1	H1L	Inner Lens, Clear	1
44A2090/X1XX –	63B0415/1	H1R	Inner Lens, Clear	1
44A2090/X2XX –	63B0415/1	H1L	Inner Lens, Clear	1
	63B0415/2	H1R	Inner Lens, Yellow	1
4442000 (V2)/V	63B0415/1	H1L	Inner Lens, Clear	1
44A2090/X3XX —	63B0415/3	H1R	Inner Lens, Red	1
444200000	63B0415/1	H1L	Inner Lens, Clear	1
44A2090/X4XX —	63B0415/4	H1R	Inner Lens, Green	1
4442000 (VEVV	63B0415/2	H1L	Inner Lens, Yellow	1
44A2090/X5XX —	63B0415/3	H1R	Inner Lens, Red	1
4442000 (VCVV	63B0415/3	H1L	Inner Lens, Red	1
44A2090/X6XX -	63B0415/4	H1R	Inner Lens, Green	1
44A2090/X7XX –	63B0415/3	H1L	Inner Lens, Red	1
	63B0415/3	H1R	Inner Lens, Red	1
44A2090/X8XX -	63B0415/4	H1L	Inner Lens, Green	1
	63B0415/4	H1R	Inner Lens, Green	1
4442000 (VOVV	63B0415/4	H1L	Inner Lens, Green	1
44A2090/X9XX —	63B0415/2	H1R	Inner Lens, Yellow	1
4442000 (VAVV	63B0415/3	H1L	Inner Lens, Red	1
44A2090/XAXX -	63B0415/5	H1R	Inner Lens, Blue	1
4442000 (VRVV	63B0415/5	H1L	Inner Lens, Blue	1
44A2090/XBXX –	63B0415/5	H1R	Inner Lens, Blue	1

Table 6: A1 and M2 Column and Head Assembly

ASSEMBLY NUMBER	PART NUMBER	ITEM NO.	PART NAME/ DESCRIPTION	Q ТҮ.
44A2090/XX1X 44A2090/XX5X	44A2080/1	A1	Head Assy For 14" OAH	1
	62A0007/8	M2	6.5" Column For 14" OAH	1
44A2090/XX2X 44A2090/XX6X	44A2080/2	A1	Head Assy For 24" OAH	1
	62A0007/18	M2	16.5" Column For 24" OAH	1
44A2090/XX3X 44A2090/XX7X	44A2080/3	A1	Head Assy For 30" OAH	1
	62A0007/24	M2	22.5" Column For 30" OAH	1

Table 7: H2 Outer Lens

ASSEMBLY NUMBER	PART NUMBER	ITEM NO.	PART NAME/ DESCRIPTION	QTY.
44A2090/XXX1	63B0480	H2	Outer Lens, Clear	1
44A2090/XXX2	63B0580	H2	Outer Lens, Clear/ obscured	1

Table 8: M3 Coupling

ASSEMBLY NUMBER	PART NUMBER	ITEM NO.	PART NAME/	QTY.
			DESCRIPTION	
44A2090/XX1X	62B0073/SPARE	M3	14" OAH, 1-1/2" Coupling	1
44A2090/XX2X	62B0073/SPARE	M3	24" OAH, 1-1/2" Coupling	1
44A2090/XX3X	62B0073/SPARE	M3	30" OAH, 1-1/2" Coupling	1
44A2090/XX5X	61A0281/SPARE	M3	14" OAH, 2" Coupling	1
44A2090/XX6X	61A0281/SPARE	M3	24" OAH, 2" Coupling	1
44A2090/XX7X	61A0281/SPARE	M3	30" OAH, 2" Coupling	1

Table 9: Stake Mounting and Hardware

Item	Description	Part Number	Quantity	Note
NS	Stake assembly	44B0348	1	
NS	Stake hardware only	44A2158	1	
NS	Stake only	62B0284	1	



Appendix A: SUPPORT

Our experienced engineers are available for support and service at all times, 24 hour/7 days a week. They are part of a dynamic organization making sure the entire ADB SAFEGATE is committed to minimal disturbance for airport operations.

ADB SAFEGATE Support

Live Technical Support - Americas

If at any time you have a question or concern about your product, just contact ADB SAFEGATE's technical service department. Trained in all areas of system issues, troubleshooting, quality control and technical assistance, our highly experienced Technical support specialists are available 24 hours a day, seven days a week to provide assistance over the phone.

ADB SAFEGATE Americas Technical Service & Support (US & Canada): +1-800-545-4157

ADB SAFEGATE Americas Technical Service & Support (International): +1-614-861-1304

During regular business hours, you can also Chat with a Service Technician. We look forward to working with you!

Before You Call

When you have an airfield lighting or system control system problem it is our goal to support airfield maintenance staff as quickly as possible. To support this effort we ask that you have the following information ready before calling.

- The airport code
- If not with an airport, then company name (prefer customer id number)
- · Contact phone number and email address
- Product with part number preferable or product number
- Have you reviewed the product's manual and troubleshooting guide
- Do you have a True RMS meter available (and any other necessary tools)
- Be located with the product ready to troubleshoot





Note

For more information, see www.adbsafegate.com, or contact ADB SAFEGATE Support via email at support@adbsafegate.com or

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A.1 ADB SAFEGATE Website

The ADB SAFEGATE website, www.adbsafegate.com, offers information regarding our airport solutions, products, company, news, links, downloads, references, contacts and more.

A.2 Recycling

A.2.1 Local Authority Recycling

The disposal of ADB SAFEGATE products is to be made at an applicable collection point for the recycling of electrical and electronic equipment. The correct disposal of equipment prevents any potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling. The recycling of materials helps to conserve natural resources. For more detailed information about recycling of products, contact your local authority city office.

A.2.2 ADB SAFEGATE Recycling

ADB SAFEGATE is fully committed to environmentally-conscious manufacturing with strict monitoring of our own processes as well as supplier components and sub-contractor operations. ADB SAFEGATE offers a recycling program for our products to all customers worldwide, whether or not the products were sold within the EU.

ADB SAFEGATE products and/or specific electrical and electronic component parts which are fully removed/separated from any customer equipment and returned will be accepted for our recycling program.

All items returned must be clearly labeled as follows:

- For ROHS/WEEE Recycling
- Sender contact information (Name, Business Address, Phone number).
- Main Unit Serial Number.

ADB SAFEGATE will continue to monitor and update according for any future requirements for *EU directives* as and when *EU member states* implement new *regulations* and or *amendments*. It is our aim to maintain our *compliance plan* and assist our customers.



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