





Runway Threshold/End Light

IRTE, IRTM, IRTA Style 2, F-Range Series Incandescent In-pavement, FAA L-850D/E Runway Threshold and Runway End Light, High-Intensity

# **Spare Parts**

SP\_96A0308, Rev. A, 2020/04/30

ADB SAFEGATE



# 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 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.



See your sales order contract for a complete warranty description.

# FAA Certified product installed in the United States or in US Military 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).



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.

<u>/</u>	WARNING Failure to observe a warning may result in personal injury, death or equipment damage.
<u>k</u>	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.
<u>^</u>	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**



# Unsafe Equipment Use

CAUTION

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**

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#### 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 ADB Safegate F-Range Type L-850D/E, Style 2 inset lights referred to in "Uses".

See Figure 1 for the L-850D inset light. See Figure 2 for the L-850E inset light. The 12-inch L-850D/E F-Range inset light fixtures are designed to mark the runway ends and threshold. The L-850D can be supplied as a bidirectional or unidirectional fixture, whereas the L-850E is supplied only as a unidirectional fixture. They are manufactured in accordance with FAA specification AC 150/5345-46, Style 2 (0.50 inches height above grade) and the photometric requirements of the latest edition of ICAO Annex 14.

# 2.1 Incandescent In-pavement Runway Threshold/End Light

# **Compliance with Standards**

FAA:	L-850D AC 150/5345-46 (Current Edition). ETL Certified.

## Uses

FAA L-850D

- Runway displaced threshold light (unidirectional green, one 62 W lamp)
  - Runway threshold/end (bidirectional red/ green: one 62 W lamp, green; two 62 W lamps, red)

## **Features**

- FAA Style 2-Low protrusion above ground of ≤0.50 inch reduces vibrations caused by aircraft landing gear in both light fixture and landing gear, increasing lamp life
- Designed and built with simplicity and ease of maintenance in mind
- Light channel in front of prism windows protects prisms from damage and prevents rubber buildup thereby maintaining optimal light output
- Low-energy/long-life halogen lamps are 62 W with a rated life of 1,000 hours at 6.6 A
- Low-temperature lights. Temperature rise at center of top cover remains below FAA-specified limit of 320 °F (160 °C).
- Fixture uses aluminum alloy cover and inner cover, stainless steel hardware, and aluminum alloy and stainless steel optical assembly
- Includes a UL 467 rated ground lug, which accepts an AWG 6 earth ground wire

# **Optional Snow Plow Ring**

Depending on installation method and snow plowing technique used, a snow plow ring may be necessary. Snow plow rings are available for either standard or stainless steel adjustable Size B L-868 cans. Contact ADB SAFEGATE Sales for additional details.

# **Toe-in Coding Threshold Only**

- Toe-in direction for green side is from the pilot's perspective on approach. Opposite side (runway end/red side) is straight.
- Position the fixtures on either side of the runway so that the fixture toe-in points to the runway centerline
- In a displaced threshold/runway edge application, the toe-in is always towards the runway centerline. When ordering always choose the same toe-in direction as the threshold beam. For example, if the threshold beam is toed right, the runway edge light is toed right.



# **Dimensions**

Outside Diameter:	11.94 in / 30.33 cm
Bolt Circle Diameter (L-868B):	11.25 in / 28.58 cm
Max. Bottom Cover O.D.:	9.94 in / 25.25 cm
Bottom Cover Depth:	3.8 in / 9.65 cm <sup>1</sup>

#### Notes

<sup>1</sup> If used in conjunction with an L-868B Top Section, the overall height of the Top Section must be 4 in (10.16 cm) minimum.

# Packaging

	Runway End	Threshold/End	
In cardboard box:	7 × 13 × 13 in / 18 × 33 × 33 cm	7 × 13 × 13 in / 18 × 33 × 33 cm	
Weight with packing:	15.3 lb / 6.94 kg	18.5 lb / 8.4 kg	
Weight packing:	12.3 lb / 5.58 kg	15.5 lb / 7 kg	



# 2.2 Incandescent In-pavement Runway Threshold/Military Approach Light

# **Compliance with Standards**

FAA:	L-850E AC 150/5345-46 (Current Edition). ETL Certified.
Military:	Photometry complies with UFC 3-535-01 Fig 3-2.B (Approach White & Red) and Fig 4-5 (Threshold Green).

## Uses

FAA L-850E	•	Threshold lighting system, L-850E (2 green, 105 W lamps)
U.S. Military	•	Military approach lighting system (2 white or 2 red, 105 W lamps)
	٠	Military threshold system (2 green, 105 W lamps)

# **Features**

- FAA Style 2–Low protrusion above ground of ≤ 0.50 inch reduces vibrations caused by aircraft landing gear in both the light fixture and the landing gear, increasing lamp life
- Designed and built with simplicity and ease of maintenance in mind
- Light channel in front of prism windows protects prisms from damage and prevents rubber buildup thereby maintaining optimal light output
- Low-energy/long-life halogen lamps are 105 W with a rated life of 1,000 hours at 6.6 A
- Low-temperature lights. Temperature rise at center of top cover remains below FAA-specified limit of 320 °F (160 °C).
- Fixture uses aluminum alloy cover and inner cover, stainless steel hardware, and aluminum alloy and stainless steel optical assembly
- Includes a UL 467 rated ground lug, which accepts an AWG 6 earth ground wire

# **Optional Snow Plow Ring**

Depending on installation method and snow plowing technique used, a snow plow ring may be necessary. Snow plow rings are available for either standard or stainless steel adjustable Size B L-868 cans. Contact ADB SAFEGATE Sales for additional details.

Ordering Code Color 1 = FAA Green (ETL Certified) 2 = Military White <sup>2</sup> 3 = Military Red <sup>2</sup> 4 = Military Green <sup>2</sup>	44A6248 - X X X 0
Film Disc Cutout 1 = Included 2 = Not Included Light Beam	•
1 = Straight (ETL Certified) <sup>1</sup> 2 = Right Toed <sup>2</sup> 3 = Left Toed <sup>2</sup>	•
Notes	
<ul> <li>External fixture-to-base can O-ring, Part No. 7 separately if needed for installation. For FAA in normally included with the flange ring.</li> <li>Normally used on military applications</li> <li>Configuration not recognized by the FAA</li> </ul>	

# **Toe-in Coding**

- Toe-in direction is from the pilot's perspective (the approach end of the runway)
- For more information about FAA-E-2968 Steady Burning, Semi-Flush, Approach Light for MALSR, Style II, unidirectional, green applications, see IAML data sheet DS-2029.



Runway Threshold

# **Dimensions**

Outside Diameter:	11.94 in / 30.33 cm
Bolt Circle Diameter (L-868B):	11.25 in / 28.58 cm
Max. Bottom Cover O.D.:	9.94 in / 25.25 cm
Bottom Cover Depth:	3.8 in / 9.65 cm <sup>1</sup>

# Notes

<sup>1</sup> If used in conjunction with an L-868B Top Section, the overall height of the Top Section must be 4 in (10.16 cm) minimum.

# Packaging

In cardboard box:	7 × 13 × 13 in / 17.8 × 33 × 33 cm
Weight with packing:	18.5 lb / 8.4 kg
Weight without packing:	15.5 lb / 7 kg

# 2.3 Incandescent In-pavement Runway Threshold/End Light

# **Compliance with Standards**

Military:	Designed according to L-850D AC 150/5345-46 (Current Edition) and photometry tested to UFC 3-535-01 Fig 4-5 (green) and Fig 4-10 (red).
ICAO:	Annex 14, Vol. 1, par 5.3.10.10 (Runway Threshold) and par 5.3.11 (Runway End).

#### Uses

ICAO and U.S. Military

- Runway end light (unidirectional red, one 105 W lamp)
- Runway threshold light (unidirectional green, two 105 W lamps)
- Runway threshold/end (bidirectional red/ green: one 105 W lamp, red; two 105 W lamps, green)



# **Features**

- FAA Style 2–Low protrusion above ground of ≤ 0.50 inch reduces vibrations caused by aircraft landing gear in both the light fixture and the landing gear, increasing lamp life
- · Designed and built with simplicity and ease of maintenance in mind
- Light channel in front of prism windows protects prisms from damage and prevents rubber buildup thereby maintaining optimal light output
- Low-energy/long-life halogen lamps are 105W with a rated life of 1,000 hours at 6.6 A
- Low-temperature lights. Temperature rise at center of top cover remains below FAA-specified limit of 320 °F (160 °C).
- Fixture uses aluminum alloy cover and inner cover, stainless steel hardware, and aluminum alloy and stainless steel optical assembly
- Includes a UL 467 rated ground lug, which accepts an AWG 6 earth ground wire

# **Optional Snow Plow Ring**

Depending on installation method and snow plowing technique used, a snow plow ring may be necessary. Snow plow rings are available for either standard or stainless steel adjustable Size B L-868 cans. Contact ADB SAFEGATE Sales for additional details.

# **Toe-in Coding Threshold/End Only**

- Toe-in direction for green side is from the pilot's perspective on approach. Opposite side (runway end/red side) is straight.
- Position the fixtures on either side of the runway so that the fixture toe-in points to the runway centerline
- In a displaced threshold/runway edge application, the toe-in is always towards the runway centerline. When ordering always choose the same toe-in direction as the threshold beam. For example, if the threshold beam is toed right, the runway edge light is toed right.



# Packaging

	Runway End	Threshold/End
In cardboard box:	7 × 13 × 13 in / 18 × 33 × 33 cm	7 × 13 × 13 in / 18 × 33 × 33 cm
Weight with packing:	15.3 lb / 6.94 kg	18.5 lb / 8.4 kg
Weight w/out packing:	12.3 lb / 5.58 kg	15.5 lb / 7 kg



# 3.0 Parts

The parts section is a separate file in the book so that it can be used in the Parts manual.

## Figure 1: L850E

Ordering Code Color 1 = FAA Green (ETL Certified) 2 = Military White <sup>2</sup> 3 = Military Red <sup>2</sup> 4 = Military Green <sup>2</sup>	44A6248 - X X X 0
Film Disc Cutout 1 = Included 2 = Not Included	•
Light Beam 1 = Straight (ETL Certified) <sup>1</sup> 2 = Right Toed <sup>2</sup> 3 = Left Toed <sup>2</sup>	
Notes	7000 00 650

- External fixture-to-base can O-ring, Part No. 7080.90.650, is ordered separately if needed for installation. For FAA installations, this O-ring is normally included with the flange ring.
   <sup>1</sup> Normally used on military applications
- <sup>2</sup> Configuration not recognized by the FAA

# Figure 2: L850D

Ordering Code	44A6656 - X X X X
Threshold Beam 0 = Obscured 1 = Green Straight <sup>2</sup> 2 = Green Right Toed 3 = Green Left Toed 4 = Red Straight <sup>3</sup> 5 = Red Right Toed <sup>2</sup> 6 = Red Left Toed <sup>2</sup> Runway End Beam	
0 = Obscured 1 = Red Straight 2 = Red Right Toed <sup>2</sup> 3 = Red Left Toed <sup>2</sup> 4 = White Right Toed <sup>1,2</sup> 5 = White Left Toed <sup>1,2</sup> 6 = Yellow Right Toed <sup>1,2</sup> 7 = Yellow Left Toed <sup>1,2</sup> 8 = Yellow Straight <sup>2</sup> 9 = White Straight <sup>2</sup>	•
Film Disc Cutout 1 = Included 2 = Not Included Base Mounting 1 = One Cord Set 2 = Two Cord Sets	•

#### Notes

- Fixtures manufactured after September 5, 2006, use one green 62 W lamp and two red 62 W lamps. For fixtures that use two green 105 W lamps and one red 105 W lamp, see IRTM data sheet DS-2055.
- External fixture-to-base can O-ring, Part No. 7080.90.650, is ordered separately if needed for installation. For FAA installations, this O-ring is normally included with the flange ring.
- <sup>1</sup> 3° toe-in for displaced threshold/runway edge applications
- <sup>2</sup> Configuration not recognized by the FAA
- <sup>3</sup> Not submitted to ETL for certification

# Figure 3: L850D Military / ICAO Style 2

	•
Ordering Code	44A6247 - X X X X
Threshold Beam 0 = Obscured 1 = Green Straight 2 = Green Right Toed 3 = Green Left Toed 4 = Red Straight 5 = Red Right Toed 6 = Red Left Toed	
Runway End Beam 0 = Obscured 1 = Red Straight 2 = Red Right Toed 3 = Red Left Toed 4 = White Right Toed <sup>1</sup> 5 = White Left Toed <sup>1</sup> 6 = Yellow Right Toed <sup>1</sup> 7 = Yellow Left Toed <sup>1</sup> 8 = Yellow Straight 9 = White Straight	•
Film Disc Cutout 1 = Included 2 = Not Included	
Base Mounting 1 = One Cord Set 2 = Two Cord Sets	•

#### Notes

• External fixture-to-base can O-ring, Part No. 7080.90.650, is ordered separately if needed for installation. For FAA installations, this O -ring is normally included with the flange ring.

<sup>1</sup> 3° toe-in for high-intensity displaced threshold/runway edge applications.

# 3.1 F-Range IRTE L-850D/E Parts List

See Figure 4 and Figure 5.

# Figure 4: F-Range L-850D Main Assembly Parts



NOTE: for dash X numbers and complete description see parts list



# Figure 5: F-Range L-850E Main Assembly Parts



NOTE: for dash X numbers and complete description see parts list

Part Number	Description	Quantity	Note
Top cover assembly – FAA L-8	50D (2 red/1green)	1	
44A6661-2	Top cover assembly, runway end		
44A6661-3	Top cover assembly, runway end / threshold		
Top cover assembly – Military	L-850D (1 red/2green)	1	
44A6264-2	Top cover assembly, runway end		
44A6262-3	Top cover assembly, runway end /threshold		
Top cover assembly – FAA L-8	50E (2 green)	1	
44A6265-1	Top cover assembly, threshold end		
Top cover assembly – Milita	ry L-850E	1	
44A6265-2	Top cover assembly, threshold end (red/clear only)		
Optical support assembly – FA	AA L-850D	1	
44A6660-5	Optical support assembly, runway end, straight, threshold toed left		
44A6660-6	Optical support assembly, runway end, toed left, threshold straight		
44A6660-7	Optical support assembly, runway end toed right, threshold straight		
44A6660-8	Optical support assembly, runway end straight, threshold straight		
44A6660-9	Optical support assembly, runway end toed left, threshold straight		
44A6660-10	Optical support assembly, runway end obscured, threshold toed right		
44A6660-11	Optical support assembly, runway end obscured, threshold Straight		
44A6660-12	Optical support assembly, runway end obscured, threshold toed left		
Optical support assembly – FA	AA L-850E	1	
44A6263-11	Optical support assembly, runway end obscured, threshold only straight, L-850E		

# IRTE, IRTM, IRTA Style 2, F-Range Series Parts

Part Number	Description	Quantity	Note
44A6263-12	Optical support assembly, runway end obscured, threshold only left, L- 850E		
Optical support assembly – Mi	ilitary L850D	1	
44A6263-1	Optical support assembly, threshold toed right runway end toed right		
44A6263-2	Optical support assembly, threshold straight, runway end toed right		
44A6263-5	Optical support assembly, threshold straight, runway end toed left		
44A6263-6	Optical support assembly, threshold toed left, runway end toed left		
44A6263-7	Optical support assembly, threshold toed right, runway end straight		
44A6263-8	Optical support assembly, threshold straight, runway end straight		
44A6263-9	Optical support assembly, threshold toed left, runway end straight		
44A6263-13	Optical support assembly, threshold obscured, runway end		
44A6263-14	Optical support assembly, threshold obscured, runway end straight		
44A6263-15	Optical support assembly, threshold obscured, runway end toed left		
Inner pan assembly – FAA L-85	50D	1	
44A6019-9	Inner pan assembly, runway & threshold, 1 cordset, without film disc cutout		
44A6019-10	Inner pan assembly, runway & threshold, 1 cordset, with film disc cutout		
44A6019-11	Inner pan assembly, runway & threshold, 2 cordsets, without film disc cutout		
44A6019-12	Inner pan assembly, runway & threshold, 2 cordsets, with film disc cutout		
Inner pan assembly – FAA L-85	50E	1	
44A6019-13	Inner pan assembly, runway & threshold, 1 cordset, without film disc cutout		
44A6019-14	Inner pan assembly, runway & threshold, 1 cordset, with film disc cutout		
Inner pan assembly – Military	L-850D	1	
44A6019-9	Inner pan assembly, runway & threshold, 1 cordset, without film disc cutout		
44A6019-10	Inner pan assembly, runway & threshold, 1 cordset, with film disc cutout		
44A6019-11	Inner pan assembly, runway & threshold, 2 cordsets, without film disc cutout		
44A6019-12	Inner pan assembly, runway & threshold, 2 cordsets, with film disc cutout		
44A6019-15	Inner pan assembly, runway only, without film disc cutout		
44A6019-16	Inner pan assembly, runway only, with film disc cutout		
Terminal block assembly – L85	0D/E	See note.	А
44A6112-1	Terminal block assembly, without film disc cutout		
44A6112-2	Terminal block assembly, with film disc cutout		
47A0118	Film disc cutout	See note.	А
48A0386	Lamp, 62W/6.6A, MR16 (FAA L-850D)		



Part Number	Description	Quantity	Note
60A2602	Pressure release screw	1	
63A0222	Grommet (for optical bracket)	3	
1428.00.290	Yellow Dichroic Prism	See note.	В
63A0986	Flat seal	See note.	A
53A0993-2	Prism – Clear (White)	See note.	А
1428.00.270	Red Dichroic Prism		С
1428.00.280	Green Dichroic Prism		D
53B0267-011	O-ring, pressure screw	1	

NOTE A: Quantity is 1 for L-850D Runway end only; 3 for L-850D Runway & Threshold; 2 for L-850E. NOTE B: Quantity is 1 for the yellow lens; The white optical support system has no filter. NOTE C: Quantity is 2 for FAA L-850D (after 9/1/06); Quantity is 1 for FAA L-850D (before 9/1/06) NOTE D: Quantity is 1 for FAA L-850D (after 9/1/06); Quantity is 2 for FAA L-850D (before 9/1/06)

Part Number	Description	Quantity	Note
73A0133-31	Cordset	See note.	А
1411.22.002	Lamp holder assembly	See note.	В
2990.40.900	Lamp, 105 W/6.6A/MR16 (L850D Military and L850E)	See note.	В
4017.50.130	Film disc cutout clip	See note.	В
4071.50.030	Prism gasket sleeve	See note.	В
4071.50.052	Prism keeper plate	See note.	В
4071.50.090	Wire clamp (for cordset)	See note.	А
4017.50.360	Prism clamp	See note.	В
4071.62.240	Top cover, FTE, L-850D (Not for Military Application)	1	
4071.62.250	Top cover, FEN, L-850D (FAA and Military Application)	1	
4071.62.260	Top cover, FTH, L-850E	1	
4071.62.630	Inner cover (one cordset application)	1	D
4071.62.650	Inner cover (two cordsets application)	1	D
4071.83.090	Optical bracket	1	
6111.87.140	Female cordset terminal (for inner pan terminal block)	See note.	В
63A1014	Grommets (for cordset)	See note.	A
MS00001-376-01	O-ring (for top cover)	1	

NOTE A: Quantity is 1 for unidirectional, 2 for bidirectional.

NOTE B: Quantity is 1 for Military L-850D Runway end only; 2 for L-850E; 3 for L-850D Runway & Threshold.

NOTE C: Quantity is 1 for the yellow lens; 2 for red/green lens. The white optical support system has no filter or spring.

NOTE D: Inner cover does not include cordset.

# 3.2 F-Range Optical Support Assembly Parts List

# Figure 6: Optical Support Assemblies







Part Number	Description	Quantity	Note
Optical Support Assembly – F	AA L-850D	1	
44A6660-5	Optical support assembly, runway end, straight, threshold toed left		
44A6660-6	Optical support assembly, runway end, toed left, threshold straight		
44A6660-7	Optical support assembly, runway end toed right, threshold straight		
44A6660-8	Optical support assembly, runway end straight, threshold straight		
44A6660-9	Optical support assembly, runway end toed left, threshold straight		
44A6660-10	Optical support assembly, runway end obscured, Threshold toed right		
44A6660-11	Optical support assembly, runway end obscured, Threshold Straight		
44A6660-12	Optical support assembly, runway end obscured, threshold toed left		
	Optical Support Assembly – L-850E	1	
44A6263-11	Optical support assembly, runway end obscured, threshold only straight (L-850E)		
44A6263-12	Optical support assembly, runway end obscured, threshold only left (L-850E)		
	Optical Support Assembly – Military L-850D	1	
44A6263-1	Optical support assembly, threshold toed right runway end toed right		
44A6263-2	Optical support assembly, threshold straight, runway end toed right		

Part Number Description		Quantity	Note
44A6263-5	Optical support assembly, threshold straight, runway end toed left		
44A6263-6	Optical support assembly, threshold toed left, runway end toed left		
44A6263-7	Optical support assembly, threshold toed right, runway end straight		
44A6263-8	Optical support assembly, threshold straight, runway end straight	threshold straight, runway end	
44A6263-9	Optical support assembly, threshold toed left, runway end straight		
44A6263-13	Optical support assembly, threshold obscured, runway end		
44A6263-14	Optical support assembly, threshold obscured, runway end straight		
44A6263-15	Optical support assembly, threshold obscured, runway end toed left		
4071.83.090	Optical bracket	1	
63A0222	Grommet (for optical bracket)	5	
1411.22.002	Lamp holder assembly	See note.	A
48A0386	Lamp, 62W/6.6A/MR16 (FAA L850D)	See note.	А

NOTE A: Quantity is 2 for FAA L-850D Runway end only; 1 for FAA L-850D Threshold only; 2 for L-850E; 3 for FAA L-850D Runway & Threshold.

# **3.3 IRTE Spare Parts**

See L-850D Figure 4 and L-850E Figure 5.

Part Number	Description
44A6660-X	Optical support assembly – FAA L-850D
44A6263-X	Optical support assembly – Military L-850D and L-850E
44A6112-1	Terminal block assembly, without film disc cutout
44A6112-2	Terminal block assembly, with film disc cutout
48A0386	Lamp, 62W/6.6A, MR16 (FAA L-850D)
60A2602	Pressure release screw
4071.83.090	Optical bracket
63A0222	Grommet (for optical bracket)
1428.00.290	Yellow Dichroic Prism , L-850D only
63A0993-2	Prism
1428.00.270	Prism – Red Dichroic



Part Number	Description
1428.00.280	Prism – Green Dichroic
63B0267-011	O-ring, pressure screw
67A0095	Lubricate
73A0133-31	Cordset
1411.22.002	Lamp holder assembly
2990.40.900	Lamp, 105 W (L850D Military and L850E)
4071.50.030	Prism gasket sleeve
4071.50.052	Prism keeper plate
4071.50.090	Wire clamp (for cordset)
4071.62.240	Top cover, FTE, L-850D
4071.62.250	Top cover, FEN, L-850D
4071.62.260	Top cover, FTH, L-850E
4071.62.630	Inner cover (one cordset application)
	<b>Note</b> Inner cover does not include cordset.
4071.62.650	Inner cover (two cordsets application)
	<b>Note</b> Inner cover does not include cordset.
6111.87.140	Female cordset terminal (for inner pan terminal block)
63A1014	Grommets (for cordset)
MS00001-376-01	O-ring (for top cover)

IRTE, IRTM, IRTA Style 2, F-Range Series Parts



# **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, guality 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 Brussels: +32 2 722 17 11 Rest of Europe: +46 (0) 40 699 17 40 Americas: +1 614 861 1304. Press 3 for technical service or press 4 for sales support. China: +86 (10) 8476 0106

# 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 labelled 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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