



L-852A-D, J & K ITCF, FRange, ICAO LED Taxiway Centerline Light

Spare Parts

SP_3062, Rev. A, 2020/03/11


**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 further 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 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).



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 Introduction



L-852A-D (L)



L-852J/K (L)

1.1 LED In-pavement Taxiway Centerline Light

Compliance with Standards

FAA:	Designed according to L-852(L) Series AC 150/5345-46 (Current Edition) and the FAA Engineering Brief No. 67. ETL Certified.
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Uses

- FAA L-852A(L)** • Taxiway centerline on straight sections and clearance bar in category I and II applications, $\geq 1,200$ ft RVR
- FAA L-852B(L)** • Taxiway centerline on curved sections in category I and II applications, $\geq 1,200$ ft RVR
- FAA L-852C(L)** • Taxiway centerline on straight section and clearance bar in category III applications, $< 1,200$ ft RVR
- FAA L-852D(L)** • Taxiway centerline on curved sections in category III applications, $< 1,200$ ft RVR
 - White/white or white/yellow used on MIRL runway edge for intersections where runway edge spacing > 400 ft (122 m)
- FAA L-852J(L)** • Taxiway centerline on curved sections in category I and II applications, $\geq 1,200$ ft RVR
- FAA L-852K(L)** • Taxiway centerline on curved sections in category III applications, $< 1,200$ ft RVR

Use of two LED modules allows the option of separate control of each module in bi-directional applications.

Power Supply

ITCF LED F-Range fixture is designed to work with any IEC- or FAA-compliant transformer up to 100 W without affecting the performance or lifetime of the light fixture or transformer. See data sheet 3033 for more details on recommended isolation transformers specified below.

ITCF-L Fixture	Fixture Load ¹	Isolation Transformer	Primary (CCR) Load
L-852D(L), L-852K(L)			
Unidirectional w/out heater	21 VA	20/25 W	29 VA
Bidirectional w/out heater ²	27 VA	30/45 W	35 VA
Bidirectional w/out heater ³	25 VA per side (50 VA total)	20/25 W per side	33 VA per side (66 VA total)

Introduction

ITCF-L Fixture	Fixture Load ¹	Isolation Transformer	Primary (CCR) Load
Unidirectional with heater	56 VA	65 W	69 VA
Bidirectional with heater ²	58 VA	65 W	71 VA
Bidirectional with heater ³	45 VA per side (90 VA total)	30/45 W per side	54 VA per side (108 VA total)

Notes¹ Fixture load does not include isolation transformer load² One cord set³ One cord set per side (2 total)

ITCF-L Fixture	Fixture Load ⁴	Isolation Transformer	Primary (CCR) Load
L-852B(L), L-852C(L)			
Unidirectional w/out heater	14 VA	10/15 W	19 VA
Bidirectional w/out heater ⁵	17 VA	20/25 W	22 VA
Bidirectional w/out heater ⁶	14 VA per side (28 VA total)	10/15 W per side	19 VA per side (38 VA total)
Unidirectional with heater	46 VA	30/45 W	55 VA
Bidirectional with heater ⁵	56 VA	65 W	69 VA
Bidirectional with heater ⁶	34 VA per side (68 VA total)	30/45 W per side	43 VA per side (86 VA total)

Notes⁴ Fixture load does not include isolation transformer load⁵ One cord set⁶ One cord set per side (2 total)

ITCF-L Fixture	Fixture Load ⁷	Isolation Transformer	Primary (CCR) Load
L-852A(L), L-852J(L)			
Unidirectional w/out heater	8 VA	10/15 W	16 VA
Bidirectional w/out heater ⁸	9 VA	10/15 W	17 VA
Bidirectional w/out heater ⁹	8 VA per side (16 VA total)	10/15 W per side	16 VA per side (32 VA total)
Unidirectional with heater	25 VA	30/45 W	33 VA
Bidirectional with heater ⁸	43 VA	30/45 W	51 VA
Bidirectional with heater ⁹	25 VA per side (50 VA total)	30/45 W per side	33 VA per side (66 VA total)

Notes⁷ Fixture load does not include isolation transformer load⁸ One cord set⁹ One cord set per side (2 total)

2.0 Parts

Ordering Code

Series

- A = L-852A(L)
- B = L-852B(L)
- C = L-852C(L)
- D = L-852D(L)
- J = L-852J(L)
- K = L-852K(L)

LED Color

- 1 = Yellow/Yellow
- 2 = Green/Green
- 3 = Yellow/Green²
- 5 = Green/Obscure
- 6 = Yellow/Obscure
- 8 = Red/Green²
- 0 = White/White (L-852D only)
- A = Green Left/Yellow Right (J/K only)^{1,3}
- B = Yellow Left/Green Right (J/K only)^{1,3}
- C = Green Left/Obscured Right (J/K only)³
- D = Obscured Left/Green Right (J/K only)³
- E = Yellow Left/Obscured Right (J/K only)³
- F = Obscured Left/Yellow Right (J/K only)³
- G = White/Yellow (L-852D only)
- H = Green/White²
- I = Red/White²
- J = Red/Yellow²

0

Mounting and Cord Set

- 1 = Two L-823 cord sets, L-868B (12") standard base^{5,6}
- 3 = One L-823 cord set, L-868B (12") standard base
- 5 = One L-823 cord set, L-868A (10")^{4,5}
- 6 = Two L-823 cord sets, L-868A (10")^{4,5,6}

Arctic Option

- 0 = Without arctic option
- 1 = With arctic option

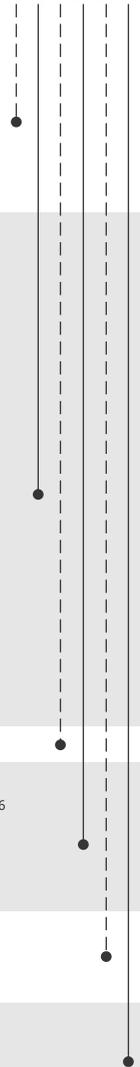
Power

- 2 = 60 Hz
- 3 = 50 Hz⁵
- 4 = 50/60 Hz (two cord sets)⁵

Notes

- Contact the Sales Department for availability of ITCF-L (ICAO straight) and ITCF-M (ICAO curved) options.
- ¹ Color options not recognized by the FAA.
- ² Color options 3, 8, H, I, and J are not recognized by the FAA for L-852B(L), L-852D(L), L-852J(L) and L-852K(L) fixtures.
- ³ See graphic below for L-852J/K(L) color selection guidelines.
- ⁴ Refers to older style 10-inch L-868A base can compliant to AC 150/5345-42C. 10-inch base cans are no longer specified in the current FAA Advisory Circular.
- ⁵ Not ETL Certified.
- ⁶ Use Power option 4 for fixtures with two cord sets or as directed by ADB SAFEGATE.

ITCF- X X 0 X X X



Two-piece Ordering Code^{1,2}

Series

- A = L-852A(L)
- B = L-852B(L)
- C = L-852C(L)
- D = L-852D(L)

LED Color

- 1 = Yellow/Yellow
- 2 = Green/Green
- 3 = Yellow/Green³
- 5 = Green/Obscure
- 6 = Yellow/Obscure
- 8 = Red/Green³
- 0 = White/White
- G = White/Yellow
- H = Green/White
- I = Red/White³

0

Mounting and Cord Set

- 7 = One L-823 cord set, L-868B (12") standard base with 4 bolts⁴
- 8 = Two L-823 cord sets, L-868B (12") standard base with 4 bolts⁴

Arctic Option

- 0 = Without arctic option
- 1 = With arctic option

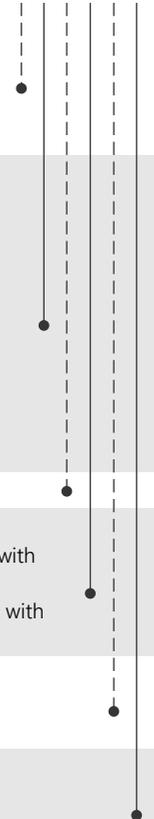
Power

- 2 = 60 Hz
- 3 = 50 Hz

Notes

- ¹ Not available for L-852J(L) and L-852K(L).
- ² Not ETL Certified.
- ³ Color options not recognized by the FAA.
- ⁴ Fixture with snowplow ring is shipped with 4 bolts and 2 optional pin inserts, allowing a field modification to a 2-bolt/2-pin configuration.

ITCF- X X 0 X X X



2.1 Part Diagrams and Part Numbers

To order parts, call ADB Safegate Customer Service or your local representative.

This section provides a schematic drawing of each F-Range type, along with a list of part numbers, ordering codes and spare components. Refer to the appropriate section for the fixture type.

Figure 2: ITCF, L-852x, 1 Cordset. Assembly Shown

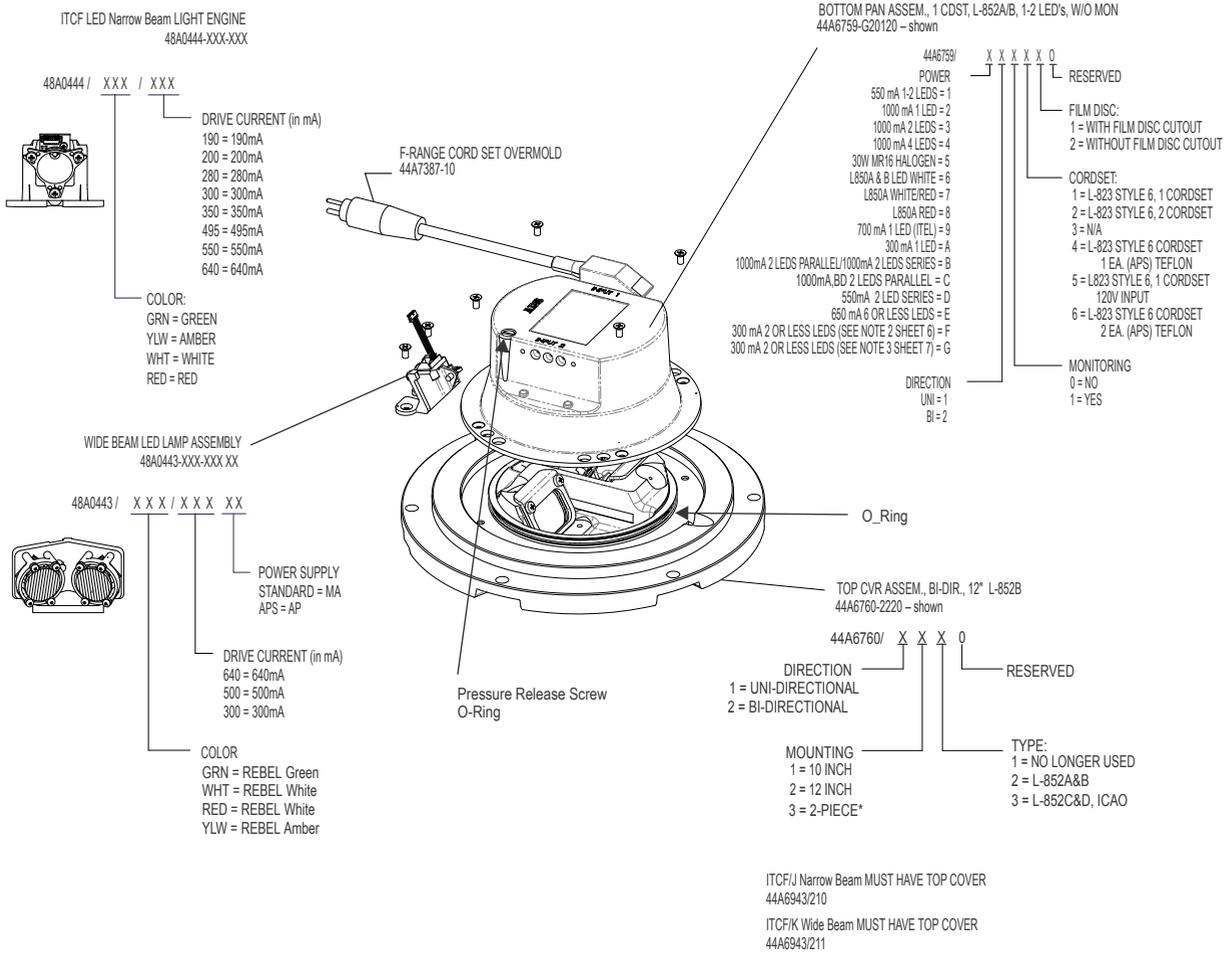


Figure 3: ITCF, Base Assembly Shown

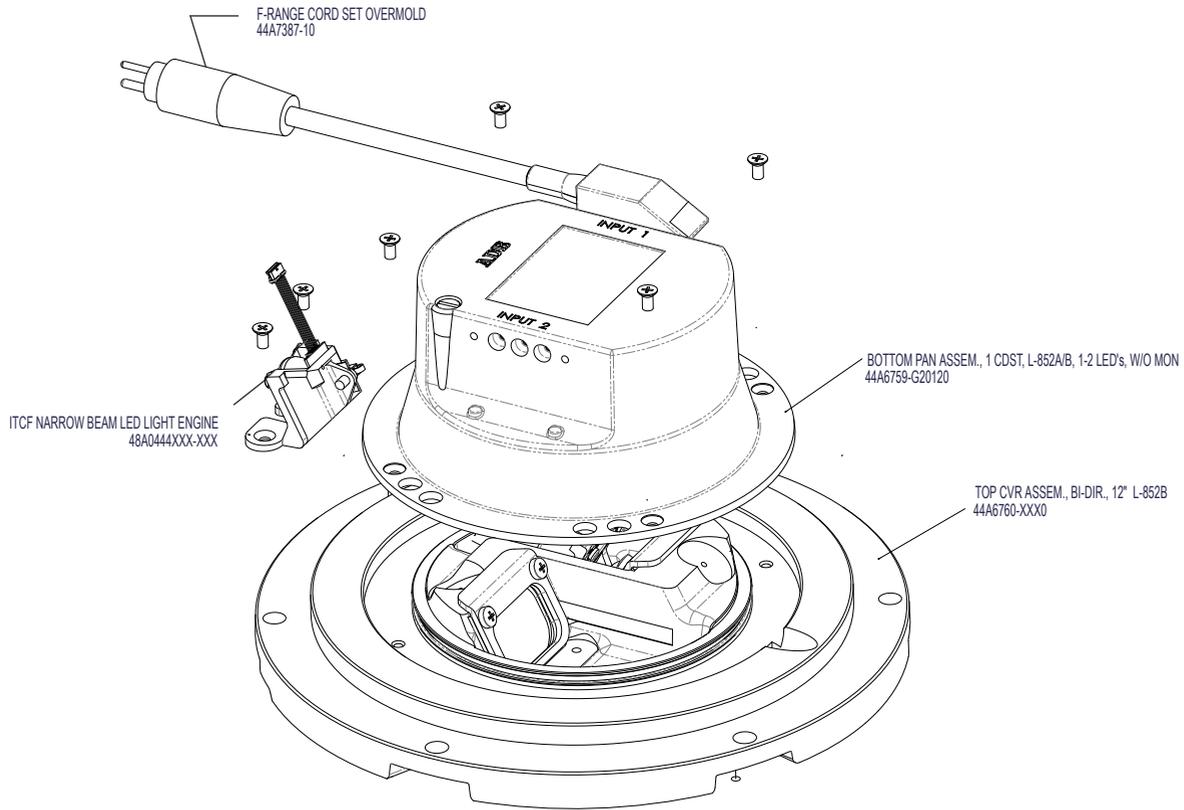


Figure 4: Typical 12" L-852D(L), Bi-Dir., Cordset Assembly Shown

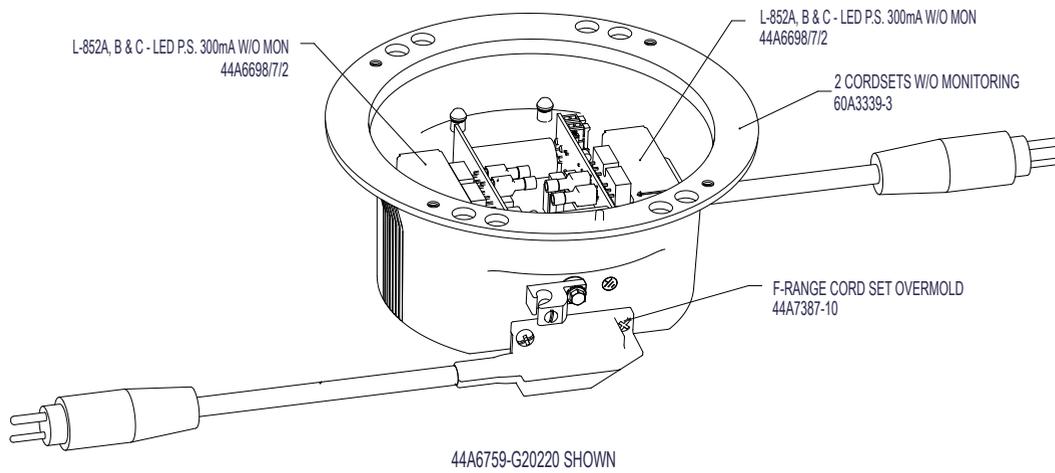


Figure 5: ITCF using a Intermediate Base Assembly

PCB ASSY, LED PWR SUPPLY 50/60Hz, SINGLE DRIVER, NO MON, FAA / ICAO
44A7228-00101

PCB ASSY, LED PWR SUPPLY 50/60Hz,DUAL DRIVER, NO MON, FAA / ICAO
44A7228-00201

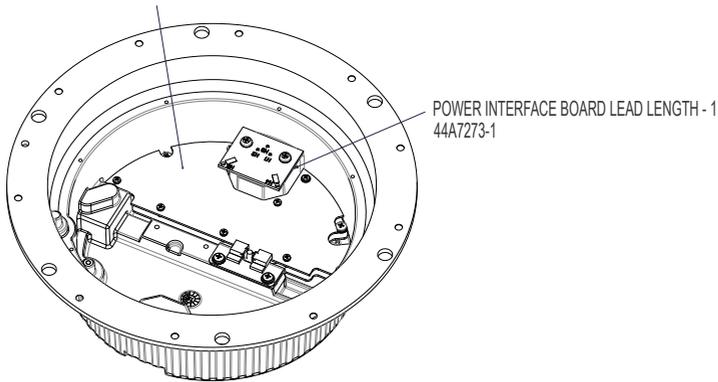
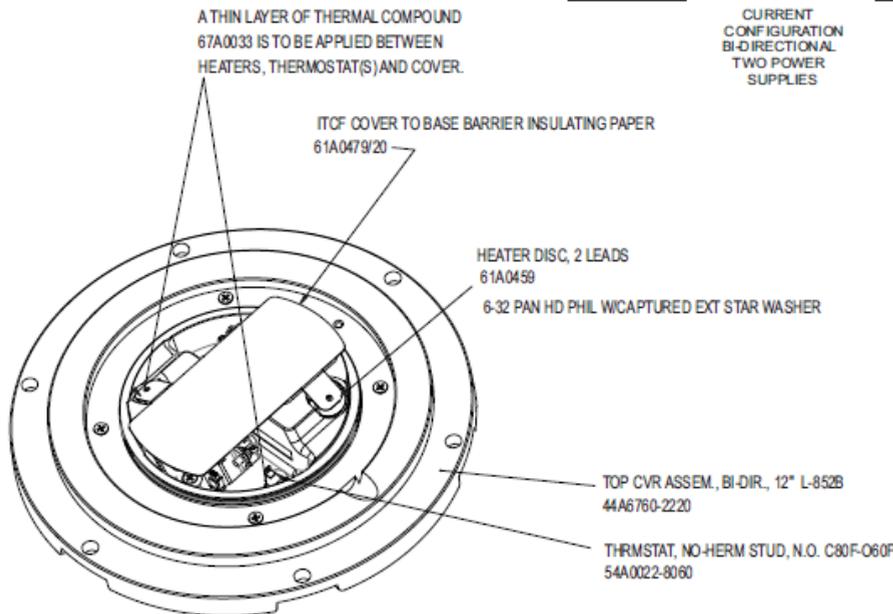
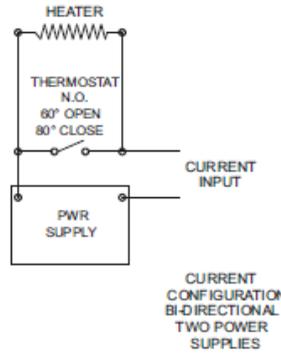
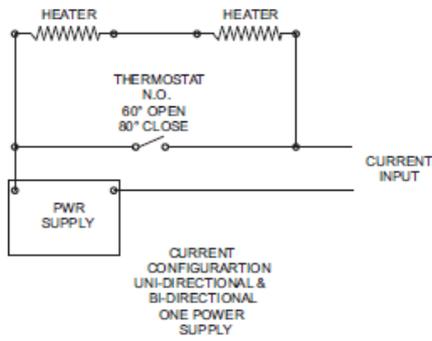
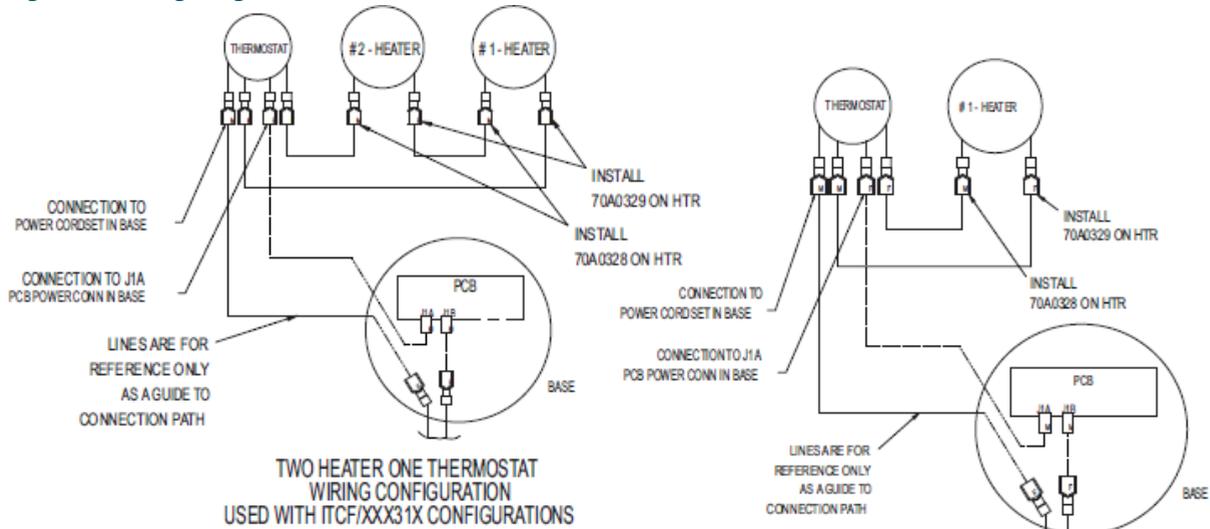


Figure 6: Wiring Diagrams for the Heaters



BARRIER IS HELD IN PLACE BY PASSING SCREWS FOR HEATERS THRU BARRIER.
THERMOSTAT MAX TORQUE: 6.7 INCH POUNDS.

Figure 7: Top Cover Assembly 44A6760/XXX0

Top Cover	Associated Order Codes	
62A2125-1 FRANGE L850A/L852, ICAO, UNIDIR 12" MACH	44A6760-1220	44A6760-1230
62A2125-2 FRANGE L850A/L852, ICAO, BIDIR 12" MACH	44A6760-2220	44A6760-2230
62A2131-1 FRANGE L850A/L852 UNIDIR 10"	44A6760-1120	44A6760-1130
62A2131-2 FRANGE L850A/L852 BIDIR 10"	44A6760-2130	44A6760-2120
62A2194-X* TOP COVER MACHINING, FRC & FTD, L-850A, L-852*	44A6760-2320*	

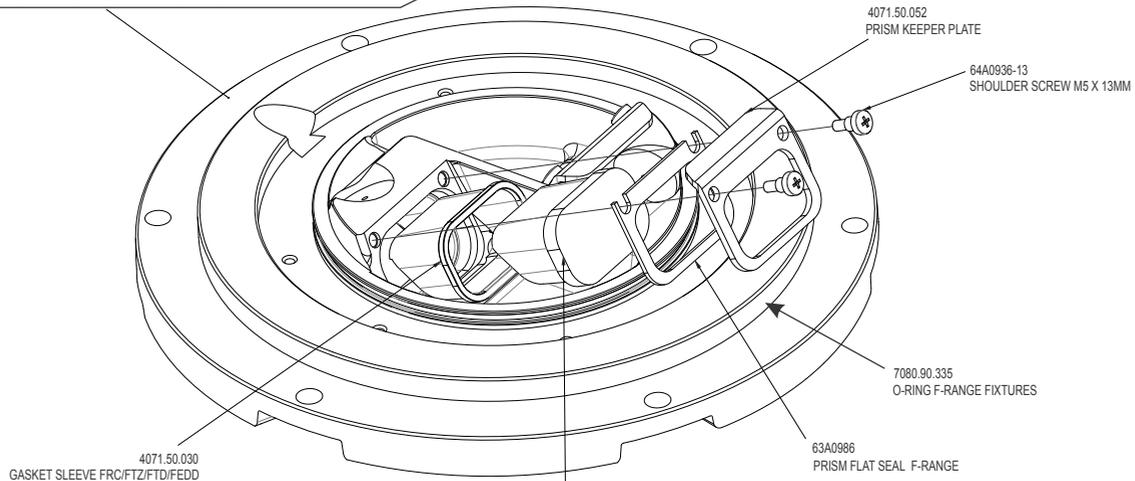
44A6760/XXX0

DIRECTION
1 = UNI-DIRECTIONAL
2 = BI-DIRECTIONAL

MOUNTING
1 = 10 INCH
2 = 12 INCH
3 = 2-PIECE*

RESERVED

TYPE:
1 = NO LONGER USED
2 = L-852A&B
3 = L-852C&D, ICAO
4 = L-852N



Prism	Associated Order Codes	qty
63A0979-1 PRISM F-RANGE WIDE BEAM	44A6760-2320*	2
63A0993-2 PRISM F-RNG NARR BM OPT GLASS	44A6760-2220.	2
	44A6760-2120.	2
	44A6760-1120	
	44A6760-2230	2
	44A6760-2130	2
	44A6760-1230	
	44A6760-1220	
	44A6760-1130	

Note

L-852N is not an ITCF fixture but uses this top cover. 2-piece covers are in blue and are marked with an *.

Figure 8: L-852J(L) Top Cover Parts

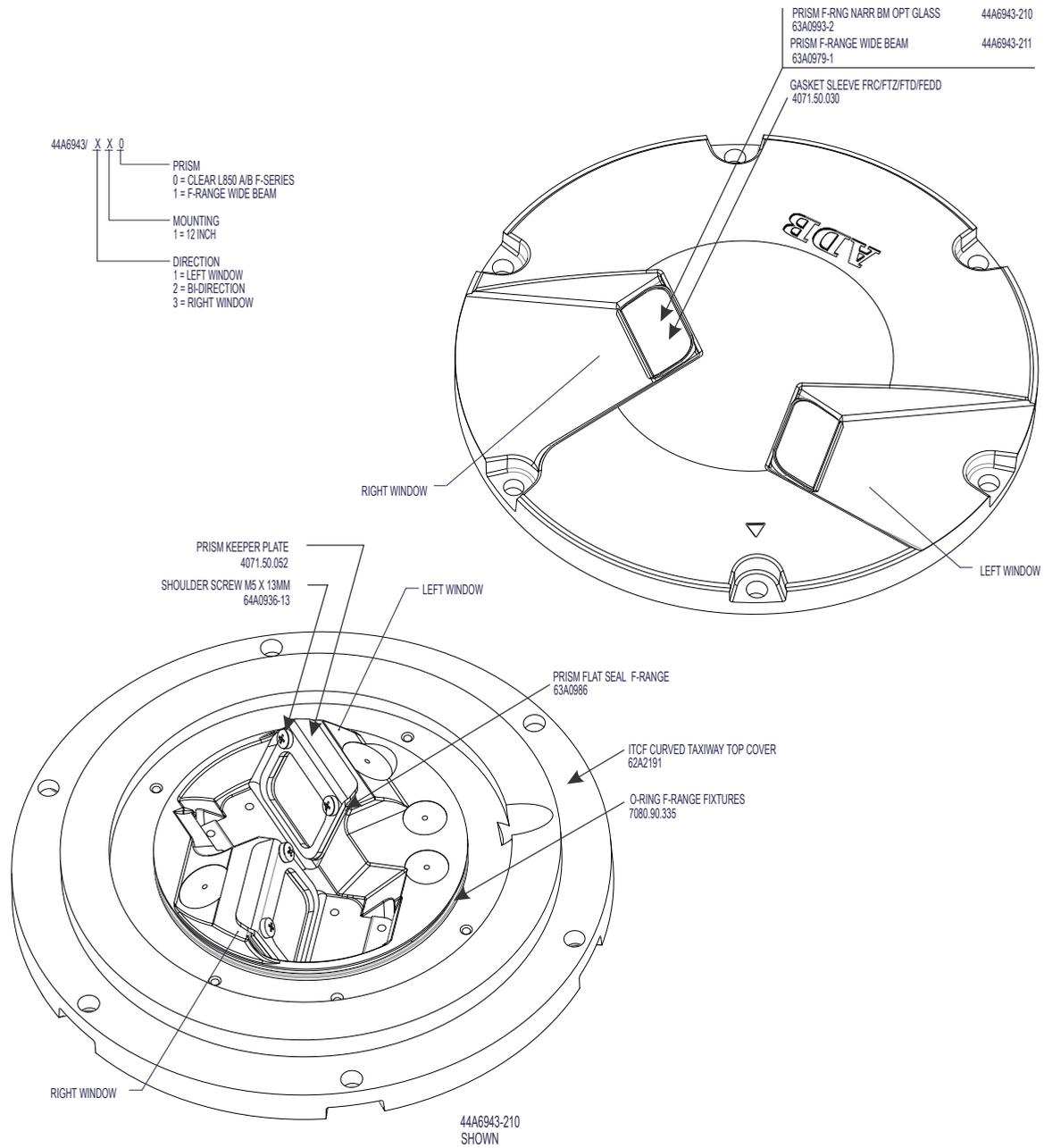
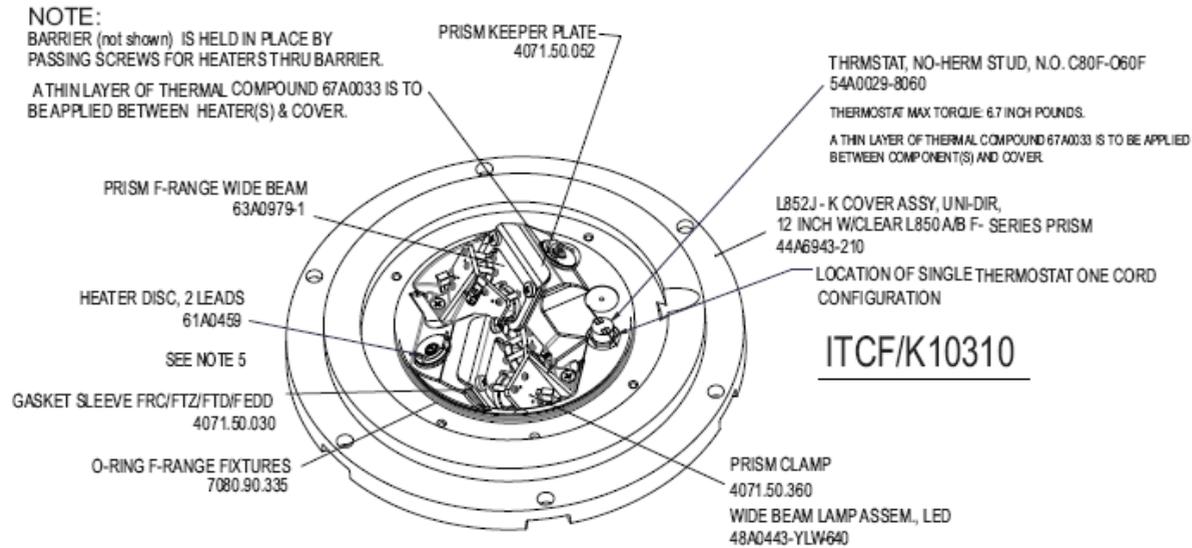


Figure 9: L-852K(L) Top Cover Parts



2.2 ITCF Spare Parts

Use the table below to create a sufficiently large stock of spare parts to maintain the IRGL unit. Consider acquiring approximately 10% spare final assemblies (with a minimum quantity of 1) for the total amount of equipment in the field. This allows for repairs to be made in the shop. Components that are more likely to need replacement, such as prisms, should be stocked at higher quantities, while PCB assemblies should be stocked in smaller quantities. If you have questions, contact your ADB representative.

Table 1: ITCF Parts

Part No.	Description	Figure	Note
61A0459	Arctic kit heater, Heater Disc, 2 Leads	Figure 5	
44A7387-10	Small Pan - cord set	Figure 2, Figure 4	
4072.42.351	Intermediate Pan cord set 2 Pin 18"	Figure 5	
70A0329	Cord set terminal, female disconnect	Figure 2, Figure 4	
48A0444-XXX-XXX	LED light engine, L-852A-C(L), J(L), green	Figure 2	
48A0443-XXX-XXX-XX	LED light engine, L-852D(L), K(L), green	Figure 2	
4072.42.380	AD Light Plug Bracket	Figure 5	
63A1285	O-ring, inner cover seal	Figure 7	
MS00001-376-01	O-ring, Top Inner Cover	Figure 5	
63B0267-011	O-ring, pressure release screw	Figure 2	
60A2602	Pressure release screw	Figure 2	
63A0979-1	Prism, L-852A(L), B(L), and J(L)	Figure 7	
63A0993-2	Prism, L852C(L), D(L), and K(L)	Figure 7	
4071.50.030	Prism gasket sleeve	Figure 7	

Table 1: ITCF Parts (continued)

Part No.	Description	Figure	Note
4071.50.052	Prism keeper plate	Figure 7	
63A0986	Seal, prism keeper plate	Figure 7	
54A0022-8060	Thermostat	Figure 6	

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**

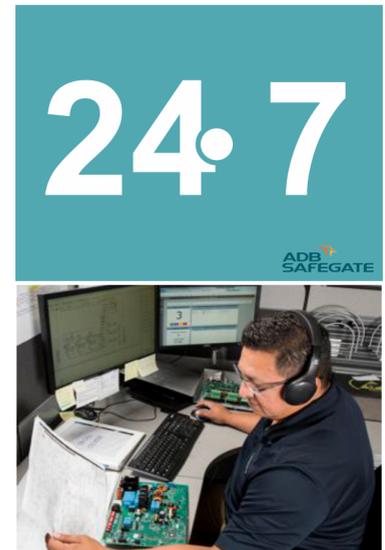
ADB SAFEGATE Americas Technical Service & Support (International): +1-614-861-1304

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

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.

Company Addresses

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