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L-861 Elevated Light Installation Manual



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Section 1.0 - Introduction

This manual provides the information to install and troubleshoot a Flight Light Incorporated L-861 light fixture. L-861 elevated lights are intended for illuminating airfield runways, taxiways and runway thresholds.

The following products have been certified by Intertek according to the requirements of FAA Advisory Circular 150/5345-46D:

- **L-861**: available with clear or clear/yellow lenses, used to illuminate the runway edge.
- **L-861E**: available with green/red lenses, used to illuminate the runway threshold or end.
- **L-861T**: available with blue lenses, used to illuminate the taxiway edge.

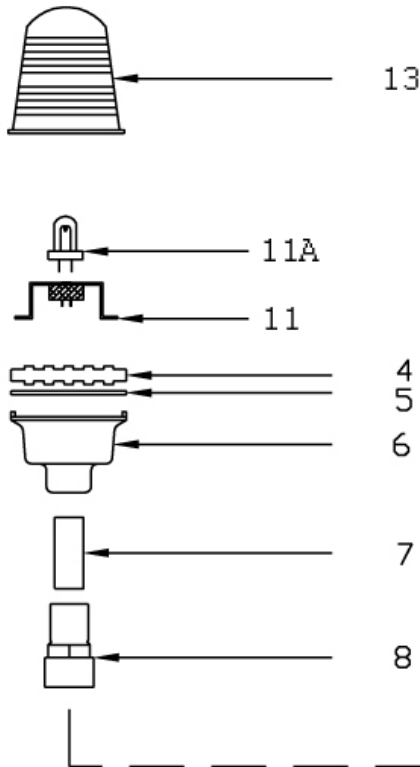
FAA Advisory Circulars are presently available online at:
http://www.faa.gov/regulations_policies/advisory_circulars/



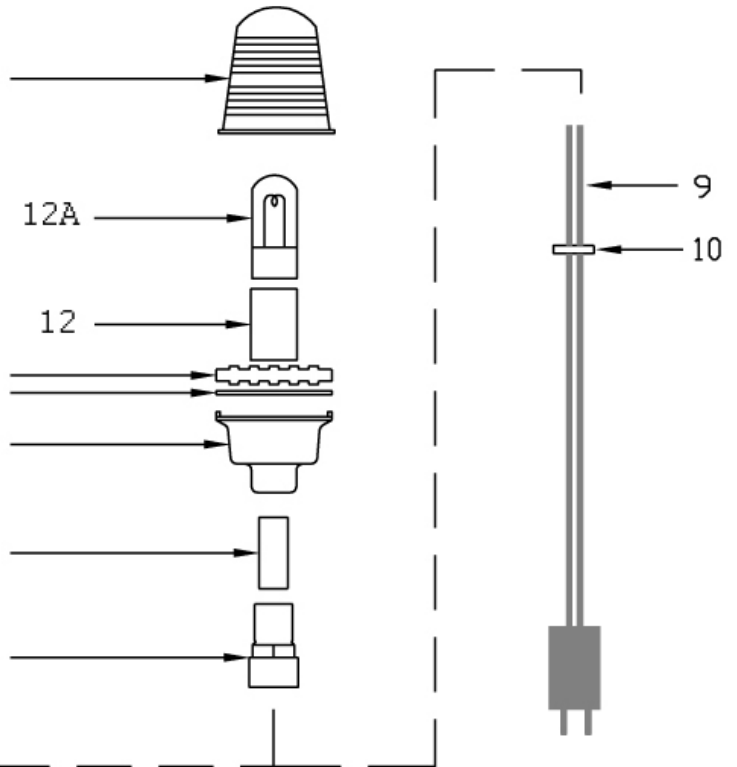
Section 2 – Parts Layout

The following exploded views depict the components which comprise the Flight Light L-861 light fixture. The numbers in the diagram refer to the parts list in section 3.

QTZ L861



T10 L861





Section 3 - L-861 Parts List

The following table lists the parts shown in section 2.0. All parts are supplied by Flight Light, Inc.; located at 2708 47th Ave. Sacramento, California.

Fig. #	P/N	Description
1	-	
2	-	
3	-	
4	61-80001	Clamp band - stainless steel
5	61-80002	O-ring seal
6	61-80003	Fixture Head
7	13-A5.5-14	5-1/2" riser for 14" fixture
	13-A15.5-24	15-1/2" riser for 24" fixture
	13-A21.5-30	21-1/2" riser for 30" fixture
8	13-FC1.5	Frangible metal coupling, 1.5"
	13-FC2.0	Frangible metal coupling, 2.0"
9	TRC-10518-01-031	L-823 style cord set connector for 14" to 30" fixture
10	68-GRIP-1F	Strain Relief
11	61-80000	Socket, quartz with bracket
11A	LA-11482	45W, 6.6A, quartz lamp
12	61-80005	Socket, T10, prefocus – for T10 lamp
12A	LA-7654H	45W, 6.6A T10 lamp
13	61-861(color)	Globe color: B: Blue, C: Clear, Y: Yellow, GR: Green/Red, CY: Clear/Yellow

The following parts are available as an assembly if required:

13-861T-XX* Head Assembly w/T10 socket & cord set

13-861Q-XX* Head Assembly w/quartz socket & cord set



Section 4 - L-861 Installation Instructions

Figure 1 represents an L-861 light fixture installed in the ground. The L-861 is intended for airfield 6.6A series circuits which use an L-830 isolation transformer to connect the light fixture.

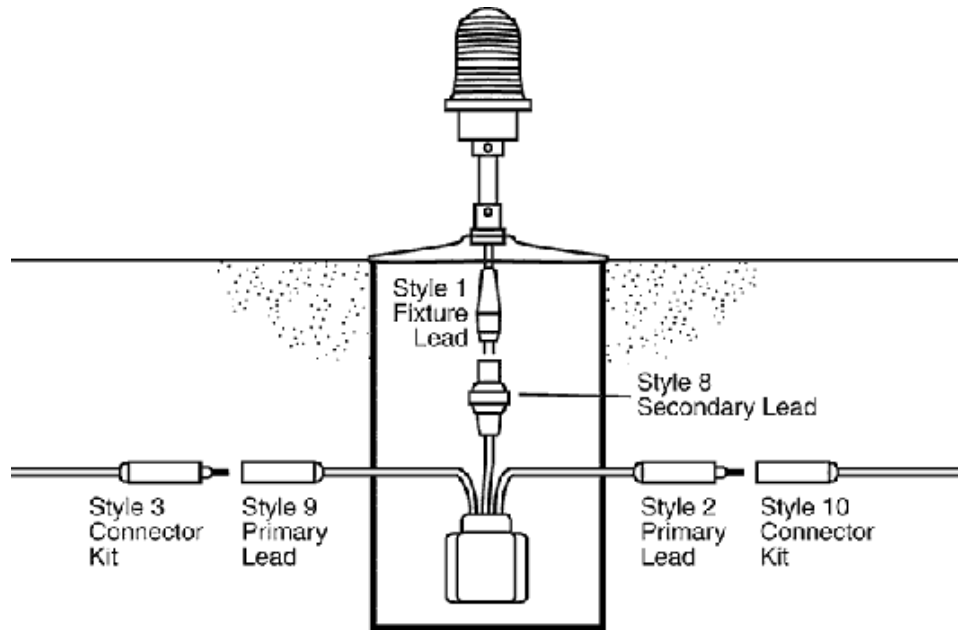


Figure 1 - Installation Diagram

To install the L-861 fixture in the ground with a base plate, use the following procedure:

1. Install an L-867 Base Can in the desired location.
2. Level the Base Can to ensure it is parallel with the grade surface.
3. Fill the area around the Base Can with about 4" of concrete while maintaining the level of the mounting surface.
4. Connect the isolation transformer per Figure 2.
5. Wrap the connector mating parts with a layer of rubber tape.
6. Connect the L-861 Base Plate to the Base Can with stainless steel bolts. Use Loktite on each bolt and tighten to the appropriate torque rating.

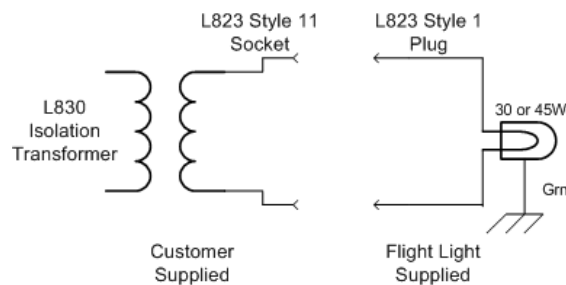


Figure 2 - Airfield Electrical Connection



Section 5 - Maintenance

This section is devoted to helping customers maintain their L-861 elevated lights in the best condition possible. It is recommended to create and follow a periodic maintenance schedule tailored for your facility.

Some of the typical problems which may occur with an L-861 and their course of action are:

- ❖ Reduced light intensity or burned-out lamp: Remove power and replace lamp. Measure series circuit current to ensure it is within FAA limits. Clean lens to allow maximum light output.
- ❖ At least once a year it is recommended to check the alignment of the fixture to ensure it is level with other fixtures.
- ❖ The fixture is outfitted with a frangible coupling that is designed to fail upon collision. In the event that this occurs, a new coupling needs to be ordered and installed.
 - Remove the set screw and discard the broken coupling.
 - Install new coupling onto the riser and secure by tightening the set screw.

To replace the lamp, ensure power is disconnected. Loosen the clamp band securing the lens to the housing. Remove the failed lamp and replace it with a new one lamp mentioned in the section 2 parts list. Re-install the lens and tighten the clamp band around the lens.