



Installation Instructions

Pulsar N-Series (Experimental)



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Approval	Name	Intent	
Author	Jennifer Blanchfield	Installation instructions for Experimental Pulsar N-series light assemblies (01-1280-B/C)	
Check	Nate Calvin		
Quality	Mark McCormack		
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1 System Description

The Pulsar N-Series LED lights offer the capability to have three functions in one unit: Navigation, Anti-Collision Strobe, and Position. These lights are designed for installation on any aircraft wingtip, aft stabilizer, or fuselage.

TSO-C30c TYPE I, II & III – APPROVED

TSO-C96a CLASS II – APPROVED

2 Model Numbers

Model	Part Number	Description	Voltage (VDC)	Current (Amps)			Weight (oz)
				Strobe		Nav	
				AVG	Peak		
Pulsar NS-(12V) 01-1280-B-12	01-1280-B-12-L	Navigation, Anti-collision	9-15	1.3	9.8	1.6	7.6*
	01-1280-B-12-R						
Pulsar NSP-(12V) 01-1280-C-12	01-1280-C-12-L	Navigation, Position, Anti-collision					
	01-1280-C-12-R						
Pulsar NS-(24V) 01-1280-B-24	01-1280-B-24-L	Navigation, Anti-collision	18-30	0.8	6.1	0.8	
	01-1280-B-24-R						
Pulsar NSP-(24V) 01-1280-C-24	01-1280-C-24-L	Navigation, Position, Anti-collision					
	01-1280-C-24-R						

Table 1

Note: All listed specifications shown are per pair

*Includes weight of two mounting brackets (.5 oz)

3 Airworthiness Limitations

The Airworthiness Limitations section is FAA approved and specifies maintenance required under **14 CFR, §43.16** and **14 CFR, §91.403** of the Federal Aviation Regulations unless an alternative program has been FAA approved. There are no additional airworthiness limitations.

3.1 Instructions for Continued Airworthiness

Pulsar light assemblies contains no user serviceable items. Should any LED fail, unit must be replaced.

Interval	Inspection	Remedy	Notes
Pre-Flight	<ul style="list-style-type: none">Perform a functional check and observe that all LEDs are illuminated	<ul style="list-style-type: none">If all LEDs are not illuminated replace light as soon as is practicable	<ul style="list-style-type: none">Lights are not user serviceable.Lights are very bright and to reduce eye strain during inspection use an optical filter such as dark glasses or welding goggles.
Annually, unless the OEM specifies a shorter interval	<ul style="list-style-type: none">Perform a functional check and observe that all LEDs are illuminatedCheck mounting, connections, and wire integrity	<ul style="list-style-type: none">If all LEDs are not illuminated, the light must be replacedAdjust or replace wiring, and connectors as required	

Table 2

4 Installation

Consult **14CFR, §43.13-1B** for guidance on acceptable methods, techniques, and practices. Pulsar lights mount onto a supplied bracket, which mounts into existing holes on aircraft (see mounting diagram). For retrofit installation existing circuit breaker or fuse may typically be used. Procedures contained herein are not intended to conflict with procedures set forth by aircraft OEM, nor do they supersede FAA approved manuals and FAA regulations.

4.1 Installation Procedures

1. Disconnect aircraft power or disable applicable circuit breakers
2. Ensure all switches are in the OFF position
3. Reference OEM manual
 - a. Remove existing light assembly (retain hardware)
 - b. Bypass or remove existing high voltage power supply (if applicable)

NOTE: Connecting light to high voltage power supply will result in permanent damage and will void warranty

4. Install suitable connectors and/or splices to connect light assemblies in accordance with wiring diagram(s)
5. Using the appropriate hardware install as per section **5.1 Mounting diagram**
6. Re-connect aircraft power or enable applicable circuit breakers
7. Verify proper operation of LED light(s)
8. Record installation with logbook entry

Note: Shielded cable is recommended although not required for installation.

It is recommended that ground connections for all lights be made at a single location on aircraft central ground bus. This “single point ground” scheme helps to eliminate ground loops and ground bounce that can occur when using airframe as a ground.

4.2 Troubleshooting

1. Check for proper voltage at power input wire to light
2. Ensure light is adequately grounded
3. Check for continuity in wiring and connections
4. If wiring is verified, remove light and bench-check with appropriately sized power supply

If above actions do not correct problem, contact AeroLEDs tech support at 1-208-850-3294 for a resolution.

5 Diagrams

5.1 Mounting diagram

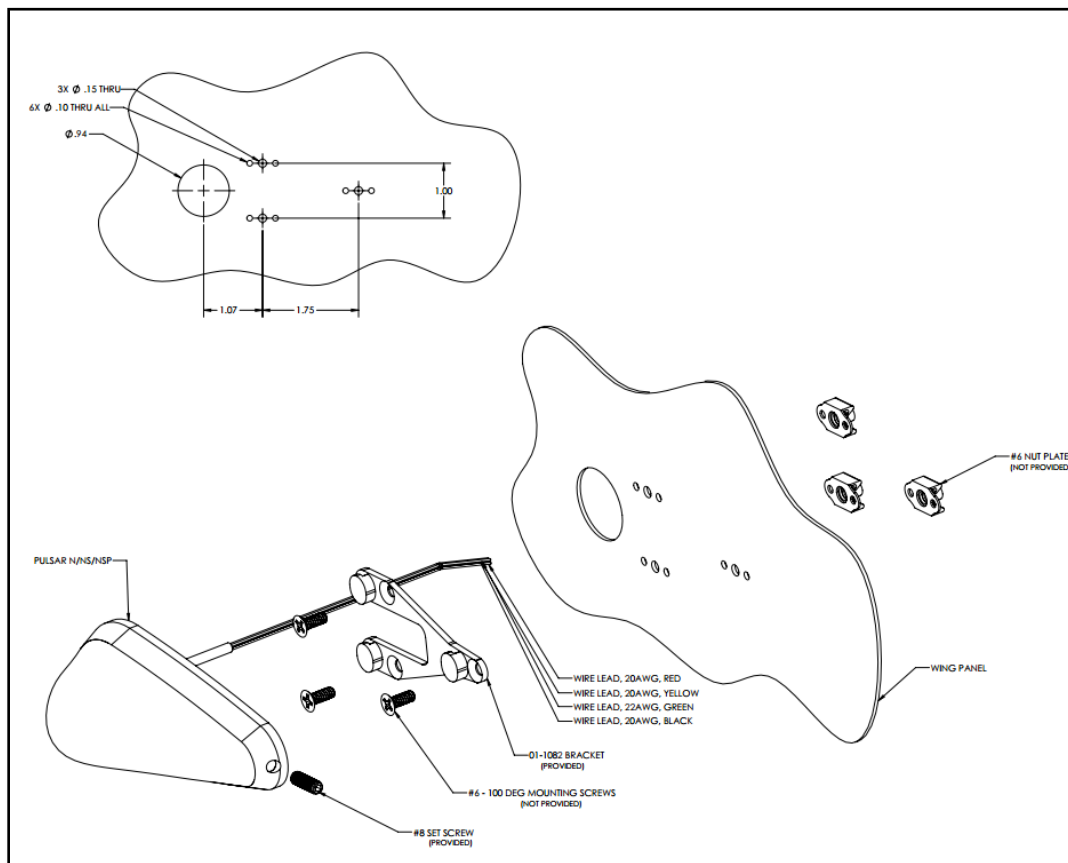


Image 1

5.2 Bracket diagram

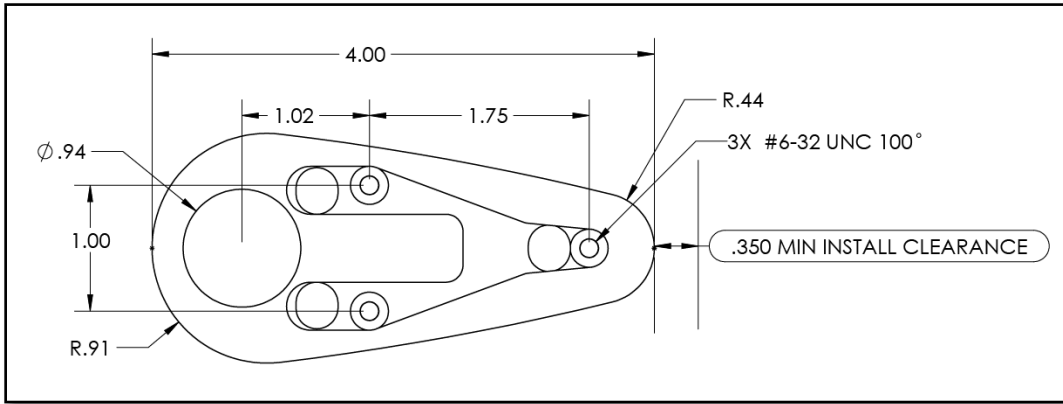


Image 2

5.3 Wiring diagram

WARNING: Do not connect the strobe power wire to a Xenon strobe power pack. This will damage light and voids warranty.

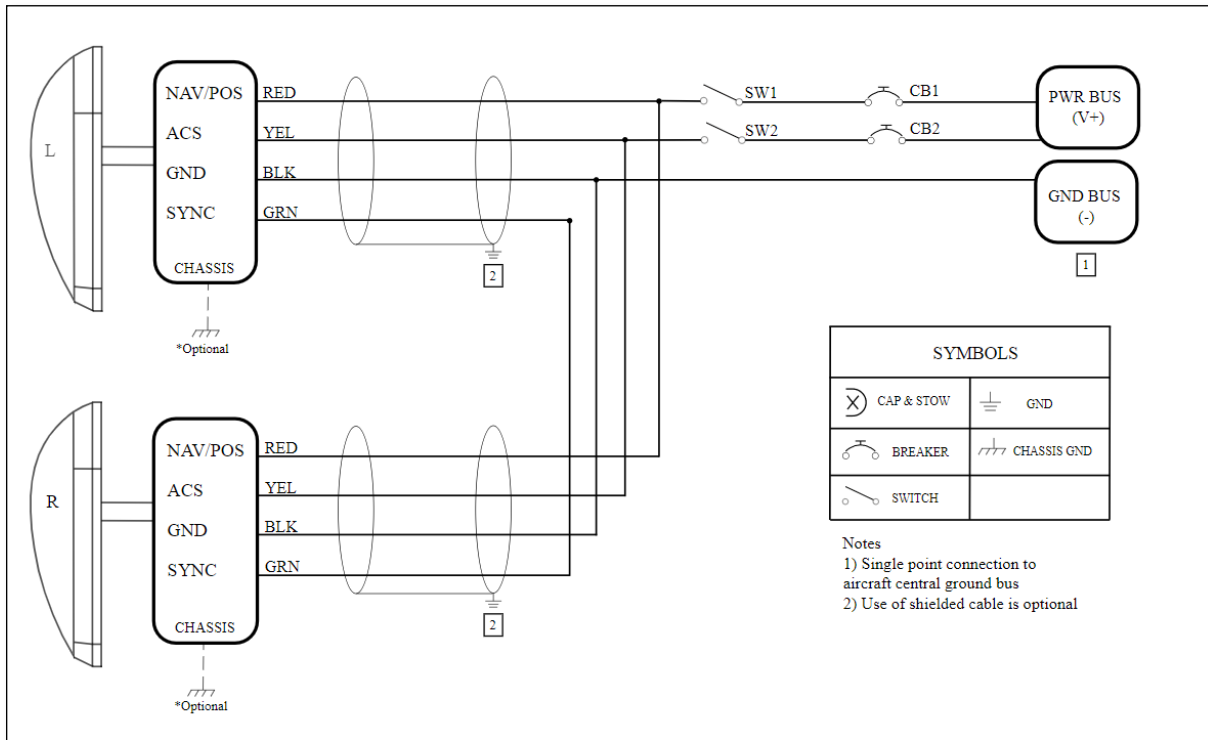


Image 3