

# WHELEN<sup>®</sup>

ENGINEERING COMPANY INC.

51 Winthrop Road  
 Chester, Connecticut 06412-0684  
 Phone: (860) 526-9504  
 Fax: (860) 526-2009  
 Internet: [www.whelen.com](http://www.whelen.com)  
 Sales/Service e-mail: [aviation@whelen.com](mailto:aviation@whelen.com)

**Installation Guide:**  
**Model 90615( )-series**  
**Model(s) 9061500, 9061510**  
**P/N:01-0790615-00, 01-0790615-10**  
**LED Dual Color Anti-Collision**  
**Light Assembly**



*TSO-C96a*  
**CLASS II (White)**  
**Class III (Red)**  
**APPROVED**



*The conditions and tests required for TSO approval of this article are minimum performance standards. It is the responsibility of those installing this article either on or within a specific type or class of aircraft to determine that the aircraft installation conditions are within the TSO standards. TSO articles must have separate approval for installation in aircraft. The article may be installed only if performed under 14 CFR part 43 or the applicable airworthiness requirements.*

**SPECIFICATIONS:**

Nominal Operational Voltage:.....28 VDC  
 (Operation from 22-32 VDC)  
 LED Anti-Collision Light (Average): ..... 0.9 Amps  
 LED Anti-Collision Light (Pulse@0.25 sec.): ... 4.9 Amps  
 Flashrate..... 45± 5 per min.

Model 90615 is a combination White, Class II, and Red, Class III LED Anti-Collision Light.

**EQUIPMENT LIMITATIONS:**

The baseplate must be mounted parallel to the vertical and horizontal centerlines of the aircraft to project the patterns properly.

An upper and lower unit is required to comply with the TSO-C96a requirements for a Class II Anti-Collision light system below the horizontal plane.

The white LED anti-collision light and red LED anti-collision light are not designed to be on at the same time.

Certain types of installations may require additional testing.

**CONTINUED AIRWORTHINESS:**

The anti-collision light is designed with 8 vertical columns. Each column consists of 6 white and 6 red LEDs. Should any one LED fail the unit must be repaired or replaced. Inspect the lens. Replace if there is excessive scratching, pitting, discoloration or cracking.

Note: The unit has an internal diagnostic circuit to detect failures. The anti-collision light will automatically shut off after 9-10 flashes if a failure is detected.

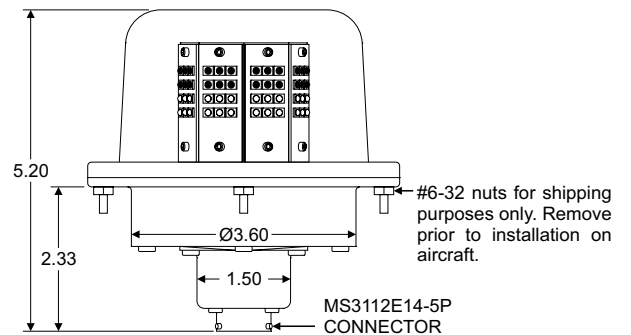
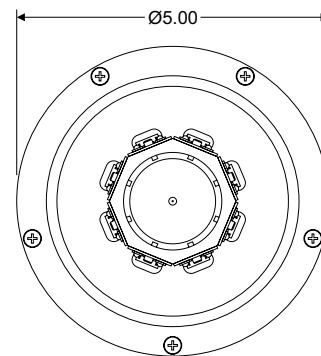
**INSTALLATION PROCEDURES:**

The following information is to assist in the installation of a Whelen Anti-collision light system.

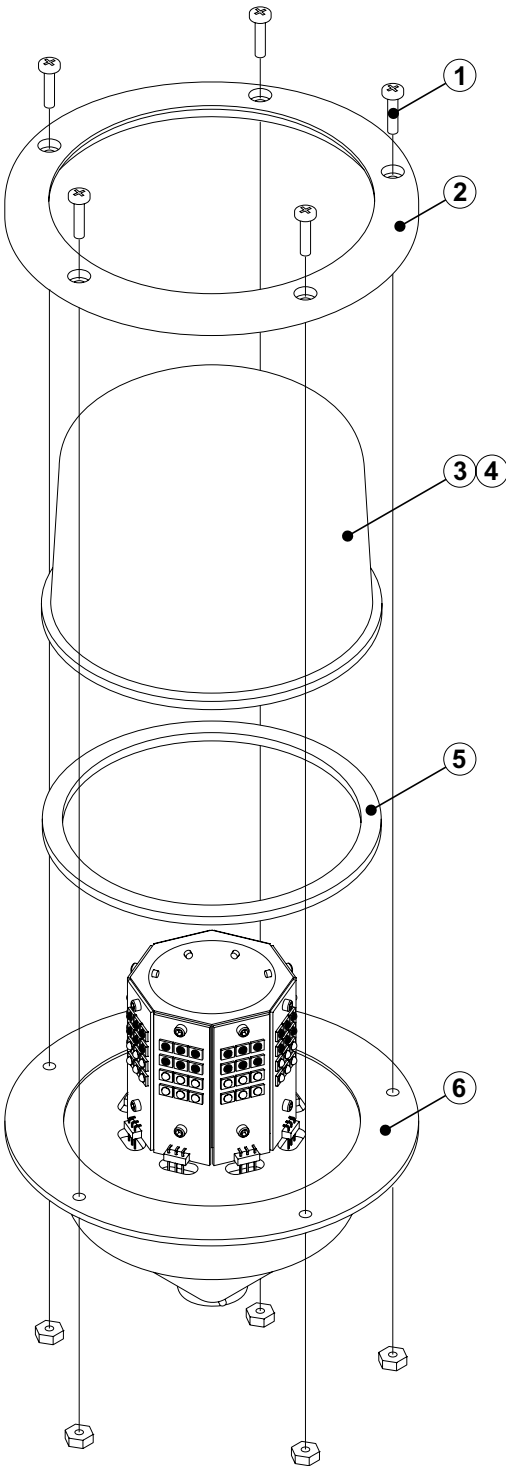
1. The installation procedure described in the following text will be confined to a single light installation, but is identical for multiple light installations.
2. Connect the anti-collision inputs according to the chart shown. Connect the power leads to an appropriately

sized breaker. Connections to be in accordance with FAA approved methods.

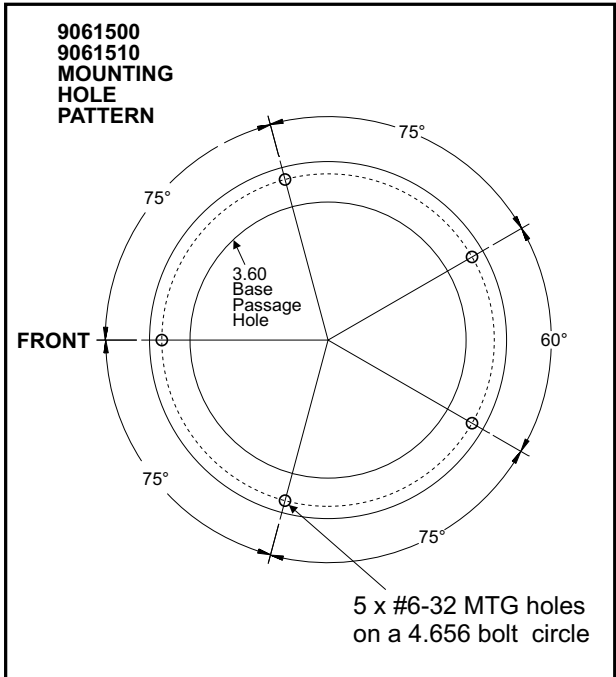
3. Using appropriate hardware, install the light assembly and insure that all leads are clear of any obstructions and secured as required. Secure light assembly using vibration resistant threaded fasteners.
4. Check all avionics systems for interference from this installation.
5. A flight check should be performed by a properly certified pilot.
6. When necessary, waterproof the light base to the aircraft. Apply single part silicone (RTV) or equivalent around any open area where water could get in.
7. Update aircraft records, complete Form 337 and obtain FAA field approval for installation, as required.



**Aviation**



QTY	QTY	ITEM	PART NUMBER	DESCRIPTION
	*		01-0790615-00	MODEL 9061500 ANTI-COLLISION LIGHT ASS'Y (UPPER)
*			01-0790615-10	MODEL 9061510 ANTI-COLLISION LIGHT ASS'Y (LOWER)
5	5	1	14-0050503-34	SCREW, 6-32 X 1" PPHMS MS51957-34
1	1	2	19-171564-100	RETAINER, LENS
-	1	3	68-4150061A30	LENS, HARDCOAT
1	-	4	68-4151019A30	LENS, HARDCOAT w/DRAIN
1	1	5	38-0251018-00	GASKET, LENS
1	1	6	01-0290620-00	ASSY, ANTI COLLISION LIGHT 90615



MS3112E14-5P CONNECTOR WIRING	
POS A	+28V A/C WHT
POS B	GROUND
POS C	+28V A/C RED
POS D	N/C
POS E	SYNCHRONIZE*

\*Low power Bi-directional control signal. Connecting to the synchronize signal of any Whelen LED anti-collision assembly will cause the lights to flash at the same time.

If synchronization is not necessary, the connection may be left open.