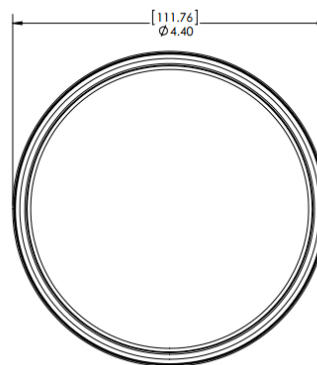
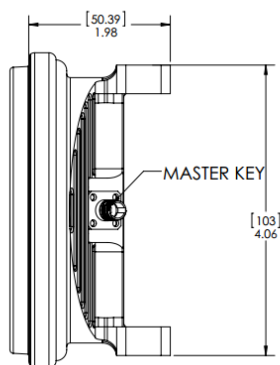


Document 3000-0010
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Installation Guide:
Landing/Taxi Lights for Pilatus PC-7/9/12/21
P/N 900-01-100-A, 900-01-100-B, 900-01-100-C
LED Landing or Taxi light



OPERATING INSTRUCTIONS:

Operational Voltage: 28 Volt Systems
Input Current: 3.6A at 28V

EQUIPMENT LIMITATIONS:

Mount using approved hardware with circuit breaker or fuse appropriate for rated current. The procedures contained herein are not intended to conflict with the procedures set forth by aircraft and engine manufacturers, nor do they supersede the FAA approved manuals and FAA regulations. If necessary, consult AC 43.13-1B for guidance on acceptable methods, techniques, and practices.

AIRWORTHINESS LIMITATIONS:

The Airworthiness Limitations section is FAA approved and specifies maintenance required under Secs. 43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved. There are no new (or additional) airworthiness limitations associated with this equipment and/or installation.

INSTRUCTIONS FOR CONTINUED AIRWORTHINESS

The landing or taxi light assembly is designed with 15 high power LEDs mounted behind a lens. The lights contain no user repairable items. The design is fault-tolerant, and individual LED failures will not affect the functionality of the unit. It is recommended that the assembly be replaced should more than two LEDs fail.

The lights should be inspected by the operator as part of the pre-flight check of the aircraft to ensure that the lights are operational. The lights should be inspected at intervals outlined in Table 1 or more frequently. Eye protection such as welding goggles should be worn when inspecting individual LEDs for safety from high intensity light.

Troubleshooting: Check for bus voltage at power input wire to the light, reestablish power if inadequate power is found. Check for excessive resistance at light ground and repair if necessary. Remove and bench check light if wiring is verified good.

Table 1: Maintenance Intervals

Interval	Description	Notes
50 hr.	<ul style="list-style-type: none"> Perform functional check on landing light(s) Replace components as required 	Landing and taxi lights are not field repairable and should be sent to manufacturer for repair/replacement if defective
100 hr.	<ul style="list-style-type: none"> Perform functional check on landing light(s) / replace unit if defective Inspect for discoloration of lens Inspect mounting for security Inspect all connectors for good engagement Inspect wiring for chaffing / defects Replace components as required 	Landing and taxi lights are not field repairable and should be sent to manufacturer for repair/replacement if defective
Annually	--SAME AS 100 HOUR--	Landing and taxi lights are not field repairable and should be sent to manufacturer for repair/replacement if defective

INSTALLATION PROCEDURES:

- The installation procedure described in the following text is for a single light installation, and multiple light installations. Wiring diagrams are provided for single light installations to illustrate typical wiring. **Please read through all instruction steps before performing light system installation.**
- Refer to the aircraft manufacturer's service manual and/or illustrated parts catalog: Locate the landing and/or taxi light system installed in your aircraft. This will provide details on the location of the components and the assembly details.
- WARNING:** If the aircraft being modified incorporates a remote sensor (flux gate) compass: DO NOT mount the LED light within 24 inches of the remote compass components. After installation of the LED lighting system, a compass swing MUST be performed with the landing/taxi lights ON & OFF and the position error card must be annotated accordingly.
- WARNING:** DO NOT mount the LED light with less than 4 inches clearance to exhaust system components unless an adequate heat shield is utilized to block radiant heat.
- WARNING:** On all aircraft that are being modified it is IMPORTANT to check the size of the power supply wire to the landing lights. Confirm that wire of sufficient wire gauge is installed for the wire length:
28 Volts: 16GA for up to 100 feet, 18GA for up to 80 feet, 20GA for up to 50 feet.
If the aircraft power supply wire is undersize it MUST be removed and a new wire installed in its place. Reference: AC43.13-1B Paragraph 11-66(d) and Figure 11-2.
- REMOVAL:**
 - Prepare the aircraft for maintenance: Make sure all switches are in the OFF/NORMAL position, disconnect the aircraft battery(s), disconnect power from the aircraft, attach maintenance warning tags, pull landing/taxi light circuit breakers.
 - Reference airframe manufacturers current maintenance manual to remove any light covers to gain access to lamp assembly(s) and bracket(s).

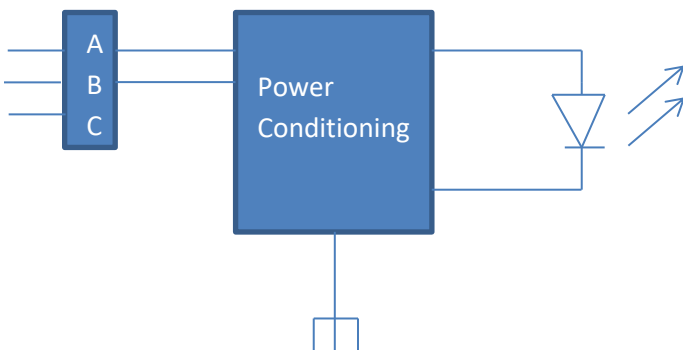
- c. Disconnect connector from aircraft power.
- d. Remove existing lamp(s) from brackets, mark and retain hardware.

7. INSTALLATION:

- a. Reference airframe manufacturer's current maintenance manual and install LED light(s) in brackets using proper hardware (#10-32 bolts).
- b. Install suitable aircraft approved connectors to connector on the landing/taxi light assembly and wires routed from switch using appropriate wiring following the pinout shown in figure 1. Consult the 3000-0003 ICD document for connector details.
- c. If necessary, install an appropriate aircraft approved switch and circuit breaker of correct rating.
- d. Placard switches appropriately.
- e. Power up aircraft and verify proper operation of LED light(s).
- f. Using the appropriate aircraft maintenance manual, verify that the light angle has not changed, and is oriented & aimed in accordance with manufacturer's instructions.
- g. Perform EMI test to verify there is no interference caused by light installation, sweep VHF frequencies between 108.00MHz and 137.0MHz to test for interference by turning the lights on and off at each frequency.
- h. Reinstall any light cover(s) removed to gain access to lamp assembly(ies) and bracket(s).
- i. Fill out and submit appropriate forms for work accomplished and enter appropriate logbook entry detailing work.

Figure 1

Connector Pinout Diagram for single LED landing/taxi light



INSTALLATION INSTRUCTIONS REVISION RECORD SHEET

Revision Number	Effective Date	Inserted By	Page Numbers Revised
B	1/24/2019	M. McCormack	1, 2
A	02/10/2017	Dean Wilkinson	1
IR	08/10/2015	Dean Wilkinson	All