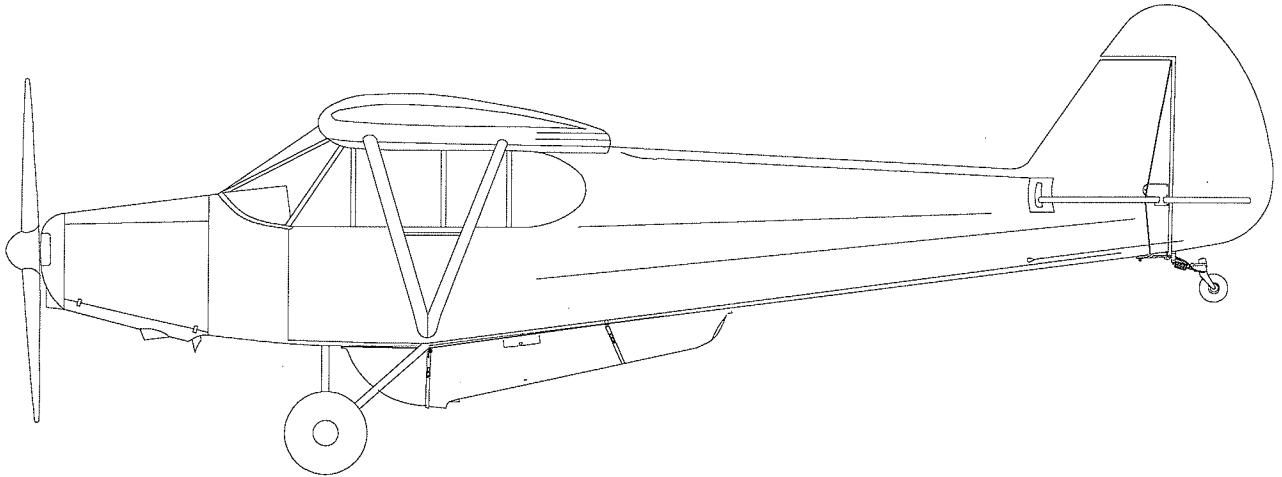


*Airglas, Inc.* ®

LC18XL CARGO POD

INSTALLATION AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS MANUAL LC18XL-105



INSTALLATION, MAINTENANCE  
AND  
INSTRUCTIONS FOR CONTINUED AIRWORTHINESS (ICA)  
for

*Airglas, Inc.* ® LC18XL CARGO POD

**Document No: LC18XL-105**

**Date: December 12, 2017**

**Revision: D**

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Document No: LC18XL-105  
Date: December 12, 2017  
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*Airglas, Inc.* ®  
ANCHORAGE, ALASKA

**AIRWORTHINESS LIMITATIONS**

The Airworthiness Limitations section is FAA approved and specifies maintenance required under §§43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved.

**Limitations:**

- *Currently there are no components of the LC18XL cargo pod that have a time limited mandatory service interval.*

**LOG OF REVISIONS**

<b>REV</b>	<b>Pages Affected</b>	<b>Description</b>	<b>By</b>	<b>Date</b>
Original	All	Original Document	CDB	06/05/2012
A	4	Added aft baggage limitation	CDB	10/07/2016
B	7	Revised weight and balance information.	CDB	08/22/2017
C	5, 7	Removed S-18-180, and CC18-180 models	CDB	10/30/2017
D	All	Minor administration error	JDH	12/12/2017

**Distribution of Changes**

*A current copy of this manual will be available on the Airglas, Inc. ®*

*Web-site available for download.*

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## 1.0 Introduction and Description

The cargo pod can carry up to 175 lbs. of baggage or cargo. The cargo pod is constructed of composite materials. Attachment is accomplished by means of two straps that cradle the pod and attach to the rear landing gear bolts, and clamp to the longerons. The pod has two doors to access the interior. One door is on the right side and one is at the rear. The interior of the cargo compartment has a coating that is chip resistant, and the compartment is designed for easy cleanup. A drain hole has been provided at the sump of the cargo compartment. The cargo pod is therefore ideal for carrying fish, meat, or any other cargo from which liquids may drain or which may require that the compartment to be cleaned after they have been removed.

The cargo area is intended to carry general baggage or cargo in addition to items carried in the load-carrying spaces of the fuselage but, sharp, pointed, or heavy metal objects should not be put in the cargo area of the pod. The cargo pod is not designed to resist the effects of detonating explosives, bullets discharged from loaded firearms, or other high-energy impacts. Exercise extreme caution when selecting items to be carried in the cargo compartment.

## 2.0 Placards and Markings

### PLACARDS:

The following information must be displayed in the form of composite or individual placards in addition to those specified in the basic handbook.

DO NOT EXCEED **138 MPH IAS**  
WITH AIRGLAS POD INSTALLED

Place Airspeed Limitation Placard on instrument panel adjacent to airspeed indicator.

ONLY NORMAL CATEGORY OPERATIONS APPROVED  
WITH AIRGLAS POD INSTALLED  
SPINS ARE PROHIBITED.

Place Operations Placard on instrument panel **in full view of pilot.**

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## LC18XL CARGO POD

### INSTALLATION AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS MANUAL LC18XL-105

175 LBS. MAXIMUM BAGGAGE  
BAGGAGE LOCATED AFT OF THE SIDE DOOR  
OPENING IS LIMITED TO 95 LBS.  
WARNING-  
FLIGHT NOT PERMITTED WITH DOOR OPEN

Place pod baggage Limitation Placard on inner side of pod baggage side door & aft door.

**Instrument Markings:** The airspeed indicator is marked as follows:  
The red radial line is located at 138 MPH.

### 3.0 Airplane Installation Eligibility

The *Airglas, Inc.* ® Model LC18XL cargo pod may be installed on any Piper Model PA-18 "150", PA-18S "150", PA-18A "150", and PA-18AS "150" airplane that:

Does not; incorporate any other modifications that are incompatible with the cargo pod installation.

### 4.0 REQUIRED EQUIPMENT

No special tools or equipment are needed to remove or install the *Airglas, Inc.* ® model LC18XL cargo pod. Only standard shop tools for working with aircraft sheet metal and fabric are required. It is helpful to have two persons to locate the pod while attaching it to the aircraft.

If any trimming of the pod is needed a dust mask, disposable coveralls (Tyvek®), and a vacuum are required.

**CAUTION:** These parts are constructed of carbon fiber. Carbon fiber dust is hazardous to your respiratory system. Wear approved dust mask or respirator. Vacuum up all dust and/or wipe up with damp paper towel to keep it from getting airborne.

### 5.0 Initial Pod Installation

STEPS	INSTRUCTIONS
1	Remove the landing gear step assembly if it is present, in accordance with Drawing No. LC18XL Cargo Pod Installation.
2	Install the two (2) P/N LTC18-8 clamps in accordance with Drawing No. LC18XL.
3	Install the two (2) P/N LTC18-5 strap assemblies in accordance with Drawing No. LC18XL.
4	Install the two (2) P/N LTC18-6 strap assemblies in accordance with Drawing No. LC18XL.
5	Lift the cargo pod into place and attach the P/N LTC18XL-3 and P/N LTC18XL-4 strap assemblies loosely, using the attaching hardware specified in Drawing No. LC18XL.
6	Adjust the cargo pod to obtain a proper fit against the bottom of the fuselage.
7	Tighten the strap attaching hardware to the torque values specified on Drawing No. LC18XL. (CAUTION: DO NOT OVER TIGHTEN)
8	File FAA form 337. Insert FAA Approved Flight Manual Supplement in Airplane Flight Manual. Apply all placards and instrument markings in accordance with FAA Approved Flight Manual Supplement. Revise aircraft weight and balance and equipment list.

### 5.1 Re-Marking of Airspeed Indicator

STEPS	INSTRUCTIONS
1	Re-mark the existing airspeed indicator so that: The red radial line is located at 138 mph.

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NOTE: Markings may be placed on the cover glass of the airspeed indicator. If you choose this method, however, you must add an index mark or other means to maintain the correct alignment of the glass cover with the face of the dial if such means do not already exist. The line must also be wide enough and be located so as to be clearly visible to the pilot, and must allow for parallax so that it will indicate correctly when viewed by the pilot.

**6.0 Pod Removal**

STEPS	INSTRUCTIONS
1	Gently support the pod with padded floor jack, and loosen mounting straps.
2	Remove mounting straps from one side, gently lower the pod, and remove pod from under the aircraft. After the pod is clear of aircraft, remove remaining straps. The LTC18-8 clamps may be left on the aircraft if desired.
3	If the aircraft is to be flown with pod removed: 1. Revise aircraft weight and balance and equipment list. 2. Make log book entry, describing work performed.

**7.0 Pod Re-installation after Removal**

STEPS	INSTRUCTIONS
1	Remove the landing gear step assembly if it is present, in accordance with the LC18XL pod installation drawing.
2	Install the two (2) P/N LTC18-8 (if removed) clamps in accordance with the LC18XL pod installation drawing.
3	Install the two (2) P/N LTC18-5 strap assemblies in accordance with the LC18XL or LC18 Pod Installation Drawing.
4	Install the two (2) P/N LTC18-6 strap assemblies in accordance with the LTC18 pod installation drawing.
5	Gently support cargo pod/belly tank with padded floor jack. Raise the cargo pod/belly tank into place, install the LTC18XL-3 and P/N LTC18XL-4 strap assemblies and tighten the mounting straps.

6	Revise aircraft weight and balance and equipment list. Make log book entry, describing work performed.
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### 8.0 Weight and Balance

The net weight change produced by the installation of the *Airglas, Inc.* ® MODEL LC18XL CARGO POD kit is as follows:

Aircraft	Pod Model	Datum Location	Pod Installation Weight and Arm
Piper: PA-18 "150", PA-18A "150", PA-18S "150", PA-18AS "150"	LC18XL	Wing Leading Edge	21.5 lbs. +/- 1 lbs. @ +41.5"

### 9.0 Inspections:

Interval	Description	Notes
Daily Preflight*	<ul style="list-style-type: none"> <li>• Check pod retention straps for damage and tension.</li> <li>• Check pod for damage.</li> <li>• Check pod doors for security. Flight with doors removed is prohibited.</li> </ul>	Replace damaged components before flight.
100 hour or Annual Inspection	<ul style="list-style-type: none"> <li>• Check pod retention straps for damage and tension.</li> <li>• Check pod for damage.</li> <li>• Check pod doors for worn hinges and damaged fasteners.</li> <li>• Verify placards, and airspeed range marks are in accordance with AFMS.</li> </ul>	Repair or replace damaged components before flight.



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\* Preventative maintenance, as defined in 14CFR43 Appendix A Section (c), may be performed by an appropriately rated pilot.

Damage Inspection:

- a) **Composite Doors Inspection:** Inspect the doors for cracks, gouges, scrapes or punctures. None are permitted within 3" of the perimeter. Gouges, cracks, and scrapes less than 2" long (Punctures less than 1" diameter) are permitted elsewhere. For any damage that exceeds these limits, either replace the door with a serviceable bulkhead or contact the manufacturer for proper repair procedures.

**9.0 Inspections: (Cont.)**

- b) **Composite Pod Inspection:** No scrapes, gouges, cracks, or punctures are permitted in the top flanges and within 3" of the door openings. Scrapes, cracks, and gouges less than 2" long (Punctures less than 1" diameter) are permitted elsewhere. For any damage that exceeds these limits, either replace the pod with a serviceable pod or contact the manufacturer for proper repair procedures.

Definitions:

**Scratch:** A mark on the painted surface that does not penetrate the paint, into the carbon fiber material.

**Scrape:** Penetrates the paint but does not disturb or break the carbon fiber material.

**Gouge:** Damages the carbon fiber material but is not detected on the back side.

**Puncture:** Damages the carbon fiber material and is detectable on the back side.

**Crack:** Damages the carbon material due flexing. Cracks in the gelcoat (that do not involve cracks in the carbon fiber) are permissible in any location.

END