

Airglas, Inc.®

LC18-ACA CARGO POD

INSTALLATION AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS MANUAL LC18-ACA-105



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

Airglas, Inc.® LC18-ACA SERIES CARGO POD

Document No: LC18-ACA-105

Date: July 25, 2016

Revision: D

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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 new (or additional) airworthiness limitations associated with the components of the LC18-ACA cargo pod and/or its installation.

LOG OF REVISIONS

REV	Pages Affected	Description	By	Date
Original	All	Initial Release	CDB	3/31/2014
A		Revised Airworthiness Limitations section. Added document number and revision information to footers. Revised introduction and description, table of contents, placards and markings, initial installation, pod removal, pod reinstallation, inspection and damage classification.	CDB	04/04/2016
B	Page 9	Revised weight and balance information	CDB	06/21/2016
C	Page 6	Corrected typo in step 5.	CDB	07/05/2016
D	Pages 6, 7, 8, & 9	Added an alternate clamp part number (LTC18-8-7/8) for 8GCBC and 8KCAB aircraft in step 4. Required removal of LTC18-5-ACA for flight with pod removed.	CDB	07/25/2016

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 94 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 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 **145 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.**

94 LBS. MAXIMUM BAGGAGE

Place pod baggage Limitation Placard on inner side of pod baggage side door.
(All models except 8KCAB)

2.0 Placards and Markings-Continued:

64 LBS. MAXIMUM BAGGAGE

Place pod baggage Limitation Placard on inner side of pod baggage side door.
(8KCAB)

94 LBS. MAXIMUM BAGGAGE

-WARNING-

FLIGHT NOT PERMITTED WITH DOOR OPEN

Located on the aft door of the Pod.

(All models except 8KCAB)

64 LBS. MAXIMUM BAGGAGE

-WARNING-

FLIGHT NOT PERMITTED WITH DOOR OPEN

Located on the aft door of the Pod.

(8KCAB)

3.0 Airplane Installation Eligibility:

The **Airglas, Inc.®** Model LC18-ACA cargo pod was developed for; American Champion Aircraft (formerly Bellanca and Aeronca) 7 series and 8 series incorporating flat spring type landing gear. Aircraft with the pod installed are limited to normal category operations, aerobatics including spins are prohibited with the pod installed.

4.0 Required Equipment:

No special tools or equipment are needed to remove or install the **Airglas, Inc.®** model LC18-ACA Series 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.

5.0 Initial Installation (Installation on Scout aircraft serial No.: 2-74 THRU 36-74, 38-74 THRU 119-74, 120-75 THRU 128-75, and 130-75 THRU 134-75. Installation on all 7 and 8 series aircraft without welded float fitting attach gussets.) **Refer to drawing LC18-ACA sheets 1 and 2 for fastener information and torque values.:**

STEP	INSTRUCTIONS
1	Remove metal belly panels from beneath cockpit if installed.
2	Install the four (4) P/N LTC18-8 and three (3) LTC18-8-7/8 clamps around lower longerons in accordance with Drawing No. LC18-ACA sheets 1 and 2. Pay particular attention to notes 2, 3, and 4.
3	Install two (2) LTC18-8-3 strap assemblies at the aft locations.
4	Remove interior panels/fabric along left hand longeron approximately 43" aft of firewall. Install one (1) LTC18-8 (LTC18-8-7/8 for 8GCBC & 8KCAB) clamp on the fuselage diagonal and install one (1) LTC18-8-2 strap in accordance with Drawing No. LC18-ACA sheet 1 detail A LH side.
5	Insert all four (4) MS90727-16MOD bolts into the four(4) LTC18-5 straps and install the straps onto the LTC18-8-7/8 at the forward locations and the LTC18-8-3 strap assemblies at the aft locations.
6	Reinstall the metal belly panels if equipped.
7	Lift the cargo pod into place and attach the P/N LC18-ACA-3 (front) and P/N LC18-ACA-4 (Rear) strap assemblies loosely, using the attaching hardware specified in Drawing No. LC18-ACA.
8	Adjust the cargo pod to obtain a proper fit against the bottom of the fuselage.
9	If the brake master cylinder overboard drains will contact the pod, push them up into the fuselage belly and reposition them forward to clear.
10	Tighten the strap attaching hardware to the torque values specified on Drawing No. LC18-ACA. (CAUTION: DO NOT OVER TIGHTEN)
11	Re-attach any interior panels/fabric that were removed using the same fasteners as removed.
12	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.

Airglas, Inc.®
LC18-ACA CARGO POD

INSTALLATION AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS MANUAL LC18-ACA-105

5.0A Initial Installation (Installation on Scout aircraft serial No.: 1-74, 37-74, 129-75, and 135-75 and up. Installation on all 7 and 8 series aircraft with welded float fitting attach gussets.) **Refer to drawing LC18-ACA sheets 1 and 2 for fastener information and torque values.:**

STEP	INSTRUCTIONS
1	Remove metal belly panels from beneath cockpit if installed.
2	Install the three (3) LTC18-8-7/8 clamps around lower longerons in accordance with Drawing No. LC18-ACA sheets 1. Pay particular attention to note 2.
4	Remove interior fabric along left hand longeron approximately 43" aft of firewall. Install one (1) LTC18-8 (LTC18-8-7/8 for 8GCBC & 8KCAB) clamp on the fuselage diagonal and install one (1) LTC18-8-2 strap in accordance with Drawing No. LC18-ACA sheet 1 detail A LH side.
5	Insert the two (2) MS90727-16MOD bolts into the two (2) LTC18-5 straps and install the straps onto the LTC18-8-7/8 at the forward locations in accordance with Drawing No. LC18-ACA sheet 1 detail A.
6	Remove interior panels/fabric along both left and right longerons approximately 84" aft of firewall. Insert the two (2) MS90727-16MOD bolts into the two (2) LTC18-5-ACA straps and install the straps onto the aft locations in accordance with Drawing No. LC18-ACA sheet 2 detail B and notes 2 and 3.
7	Reinstall the metal belly panels if equipped.
8	Lift the cargo pod into place and attach the P/N LC18-ACA-3 (front) and P/N LC18-ACA-4 (Rear) strap assemblies loosely, using the attaching hardware specified in Drawing No. LC18-ACA.
9	Adjust the cargo pod to obtain a proper fit against the bottom of the fuselage.
10	If the brake master cylinder overboard drains will contact the pod, push them up into the fuselage belly and reposition them forward to clear.
11	Tighten the strap attaching hardware to the torque values specified on Drawing No. LC18-ACA. (CAUTION: DO NOT OVER TIGHTEN)
12	Re-attach any interior panels/fabric that were removed using the same fasteners as removed.

5.0A Initial Installation-Continued:

13	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.
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5.1 Re-Marking of Airspeed Indicator:

STEP	INSTRUCTIONS
1	Re-mark the existing airspeed indicator so that: The red radial line is located at 145 mph.

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. Each 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:

STEP	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.
3	If the aircraft is to be flown with pod removed: 1. The LTC18-8 clamps and LTC18-8-7/8 clamps straps may remain on the aircraft provided they are secured with an AN3-4A bolt and MS21044N3 nut. 2. Revise aircraft weight and balance and equipment list. 3. Make log book entry, describing work performed.

7.0 Pod Re-installation after Removal:

Refer to drawing LC18-ACA sheets 1 and 2 for fastener information and torque values.

STEPS	INSTRUCTIONS
1	Install the LTC18-8 clamps (If removed), and LTC18-8-7/8 clamps (If removed), and the LTC18-5-ACA straps in accordance with LC18-ACA Pod Installation Drawing.
2	Lift the cargo pod into place and attach the P/N LC18-ACA-3 (front) and P/N LC18-ACA-4 (Rear) strap assemblies loosely, using the attaching hardware specified in Drawing No. LC18-ACA.
3	Tighten the strap attaching hardware to the torque values specified on Drawing No. LC18-ACA. (CAUTION: DO NOT OVER TIGHTEN)
4	Confirm that the FAA Approved Flight Manual Supplement is in the Airplane Flight Manual and that all placards and instrument markings are in place in accordance with FAA Approved Flight Manual Supplement. Revise aircraft weight and balance and equipment list. Make log book entry, describing work performed.

8.0 Weight and Balance:

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

Aircraft	Pod Model	Datum Location	Pod Installation Arm	Pod Installation Weight
7GC, 7GCA, 7GCAA, 7GCB, 7ECA, 7GCBC, 7KC, 7KCAB, 8KCAB, 8GCBC	LC18-ACA	Wing Leading Edge	+40.94"	32.25 lbs. +/- 1 lbs.

9.0 Inspection:

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

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

10.0 Fiberglass Damage Classification:

Definitions:

- Scratch- A mark on the surface that does not penetrate the gelcoat.
- Scrape- Penetrates the gelcoat but does not disturb or break the fiber material.
- Gouge- Damages the fiber material but is not detected on the back side.
- Puncture- Damages the fiber material and is detectable on the back side.

Damage Limits:

Scratches, scrapes, and cracks in the gelcoat that do not damage the underlying fiberglass cloth are cosmetic damage and may be repaired at the operators discretion. For any damage that exceeds these limits, either replace the pod with a serviceable pod or contact the manufacturer for proper repair procedures.

END