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INSTALLATION, MAINTENANCE AND INSTRUCTIONS FOR CONTINUED AIRWORTHINESS (ICA) for EB-180 All Composite Extended Baggage Installed in Cessna 100 Series Aircraft

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Revision: A

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.

No additional airworthiness limitations apply.

LOG OF REVISIONS

Revision	Pages Affected	Description	FAA Approved	Date
Original	1	Initial Release of ICA		07/29/2002
A	All	Combined Installation instructions and ICA. Re-formatted document. Document number added.		21 July 2011

Distribution of Changes

A current copy of this manual will be available on the *Airglass, Inc.* ® web-site available for download.

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1.0 Specifications:

The 180EB is an all composite extended baggage for installation in the aft fuselage of Cessna 100 series aircraft between fuselage station 108 and fuselage station 140. The baggage kit contains a floor panel (P/N 2000-2) and an aft bulkhead (P/N 2000-1). The baggage area is limited to 50 lbs. of baggage.

2.0 Limitations:

The 180EB installation is limited to:

a) Maximum baggage weight of 50 lbs.
b) A cargo net (Cessna P/N 2015009-3 or equivalent) is required for installation.
c) The installation aircraft must have the battery previously relocated from the fuselage station 108 area. (AC43.13-2B Chapter 10, STC SA02333AK-D, or other)

3.0 Airplane Installation Eligibility

The 180EB is approved for installation in Cessna aircraft models 180 through 180K, 182 through 182D, and 185 through 185E.

4.0 Required Equipment:

a) Cordless drill.
b) 3/16" drill bit.
c) Rivnut® installation tool.
d) # Phillips screwdriver.
e) Small round file.
f) Adjustable open end wrench.
g) 3/8" wrench.
h) 3M® Super 77 (or equivalent) spray adhesive.
i) Dust mask.
j) Vacuum

CAUTION: These parts are constructed of carbon fiber and epoxy. 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 Installation:

This installation is for all aircraft that have had the battery removed from behind F.S.108 and moved forward under the pilot seat or on the firewall. If your battery is still behind F.S.108 you must move the battery. Do not attempt to cut the floor to clear the existing battery.

1.	Remove fuselage interior panels to expose the front side of the bulkhead assembly @ fuselage station (F.S.) 108.
2.	Remove the headliner from the stringer that goes across the middle of the opening in the bulkhead assembly @ F.S.108. Remove the stringer from across the middle and the doublers on both sides of the opening in F.S.108 by drilling out the rivets that attach them to the bulkhead assembly (See Note 3 on ACI Installation Dwg. #2000-3). Trim the headliner material so that it wraps around the bulkhead assembly and glue it to the aft side of the bulkhead assembly using 3M Super 77 spray adhesive or equivalent.
3.	Take the composite bulkhead (ACI P/N2000-1) and place it against the FWD side of the bulkhead assembly @ F.S.140 (See Notes 2 and 4 on ACI installation drawing 2000-3).
4.	Using the composite bulkhead as a template, mark and drill six mounting holes in the F.S.140 bulkhead assembly with a ¼" drill bit.
5.	Remove the composite bulkhead and install six (6) size A10-80 B.F. Goodrich Rivnuts® provided, one in each of the six mounting holes (See Note: 4 on ACI Installation Dwg. #2000-3 for optional anchor nuts).
6.	Measure and mark the locations for two (2) Cessna I-bolts on theF.S.140 bulkhead assembly (Ref.: Detail 1 on installation drawing). Drill the holes using a 3/16" drill bit, and install 2 Cessna I-bolts using 2 (ea.) AN970-3 washers, and an AN365-1032 lock nut. (Ref.: section B-B on installation drawing)
7.	Install the composite bulkhead on the F.S. 140 bulkhead assembly using six (6) AN526-1032R8 recessed truss head screws provided.
8.	Set the floor panel (ACI P/N 2000-2) in place so that it rests on the bottom flanges of the F.S. 108 and composite bulkhead flange. Using the floor panel as a template, mark and drill seven (7) mounting holes in the bulkhead assemblies (4 in F.S. 108 doubler – 3 in the composite bulkhead

	flange) using a ¼" drill bit. Remove the floor panel and install seven (7) size A10-80 B.F. Goodrich Rivnuts®, one in each of the mounting holes.

5.0 Initial Installation-Continued:

9.	Install the composite floor panel using seven (7) AN526-1032R8 recessed truss head screws.
10.	Measure and mark the locations for two (2) Cessna I-bolts on the F.S. 108 bulkhead assembly (Reference Detail 2 on Installing Drawing). Drill the holes using a 3/16" drill bit, and install two (2) Cessna I-bolts using 2 (ea.) AN970-3 washers, and an AN365-1032 lock nut. (Reference Section A-A on Installation Drawing).
11.	Install the following placard is required to be located on the face of the bulkhead assembly at fuselage station 108, or on the inside of the baggage door. **50 POUND MAXIMUM LOAD REFER TO WEIGHT & BALANCE DATA FOR BAGGAGE/CARGO LOADING**
12.	Ensure that a cargo net (Cessna P/N 2015009-3 or equivalent) is available for utilization in the aircraft.
13.	Revise aircraft weight and balance and equipment list. Place a copy of SAFMS-180EB in aircraft flight manual.
14.	Prepare and file FAA form 337.

6.0 Removal:

1.	Remove the seven (7) AN526-1032R8 recessed truss head screws securing the floor panel (ACI P/N 2000-2) to the aircraft. Remove floor panel from aircraft. (Ref: ACI Installation Dwg. #2000-3)
2.	Remove the six (6) AN526-1032R8 recessed truss head screws securing the composite bulkhead (ACI P/N 2000-1) on the F.S. 140 bulkhead assembly. Remove composite bulkhead from aircraft. (Ref: ACI Installation Dwg. #2000-3)

7.0 Re-installation:

1.	Install the composite bulkhead (ACI P/N 2000-1) in the aircraft on the F.S. 140 bulkhead using six (6) AN526-1032R8 recessed truss head

	screws. (Ref: ACI Installation Dwg. #2000-3)

7.0 Re-installation-Continued:

2.	Install the floor panel (ACI P/N 2000-2) in the aircraft between F.S. 108 and F. S.140 using seven (7) AN526-1032R8 recessed truss head screws. (Ref: ACI Installation Dwg. #2000-3)

8.0 Weight and Balance:

Use actual weight of installed components.

Component	Weight	Arm
180-EB		+124

9.0 Scheduled Inspection:

At each annual or 100 hour inspection, or when damage occurs; inspect as follows:

a) Installation Inspection: Remove the extended baggage and inspect all aluminum mounting surfaces for possible corrosion. If corrosion is detected, treat and/or repair in accordance with AC43.13-1B or the appropriate Cessna Service Manual.

b) Composite Bulkhead Inspection: Inspect the bulkhead for cracks, gouges, scrapes or punctures. None are permitted within 3" of the bottom flange. Gouges and scrapes less than 2" long are permitted elsewhere. For any damage that exceeds these limits, either replace the bulkhead with a serviceable bulkhead or contact the manufacturer for proper repair procedures.

c) Composite Floor Inspection: No scrapes, gouges, cracks, or punctures are permitted in the side flanges and within 3" of the flanges. Scrapes and gouges less than 2" long are permitted elsewhere. Punctures less than 1" are allowed in the center. For any damage that exceeds these limits, either replace the floor with a serviceable floor 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.

9.0 Scheduled Inspection-Continued:

Definitions-Continued:

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.

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