

Service Bulletin

Subject:

Instructions for:

GA8-255004-11 or GA8-255004-17 - Cargo Pod Installation;

or

GA8-255004-15 or GA8-255004-19 Cargo Pod with Rear Door Installation.

Applicability:

Serial Numbers	Installation
004 through 127	GA8-255004-11 or GA8-255004-15
128 onward or Serial Numbers with Service Bulletin SB-GA8-2008-40 incorporated.	GA8-255004-17 or GA8-255004-19

Amendments:

This amendment clarifies aspects of the installation instructions and corrects minor drawing errors. Sealing of the fuel strainer area has been added to reduce the likelihood of spilt fuel entering the cargo pod during servicing of the fuel strainers. It is recommended that aircraft previously modified to Issue 1 of this Service Bulletin have the changes from Issue 2 incorporated when the fuel strainers are next serviced.

Background:

An under-fuselage cargo pod has been developed by Gippsland Aeronautics to further enhance the cargo utility of the GA8 Airvan aircraft.

The pod has a maximum cargo capacity of 200kg (440lbs) distributed between two separate compartments. The cargo pod has two side doors for loading and is available with an optional rear door.

Operators who wish to incorporate the cargo pod may purchase the cargo pod, installation drawings and documentation from Gippsland Aeronautics.

This Service Bulletin documents the installation of the cargo pod on the GA8 aircraft.

Weight and Balance:

Amend the aircraft weight and balance data to reflect the installed cargo pod. The cargo pod weight and balance data can be found on the cargo pod data plate.

Flight Manual Supplement *C01-04-34* or *C01-04-87*¹ *Cargo Pod* contains loading trim sheets for cargo pod operations.

¹ When aircraft is operated with FAA Airplane Flight Manual C01-01-09

Approval:

The technical aspects of this Service Bulletin have been approved under a CASA Authorisation.

Parts:

All parts supplied with the cargo pod are defined in GA8-255004 Sheet 1 of the cargo pod installation drawing.

The following parts list has been extracted from the specified drawing and covers both versions of the cargo pod.

GA8-255004-11 Cargo Pod

Item	Part Number	Description	Qty
31	GA8-255014-11	Cargo Pod Assembly	1
59	MS21061L	Floating Anchor Nut	14
61	CCR264CS3-4	Cherrymax Rivet	28
63	AN525-10R12	Screw	16
65	AN970-3	Penny Washer	16
21	GA8-282042-11	Drain Manifold Assembly	1
23	GA8-282042-13	Drain Pipe Assy. Fwd	1
25	GA8-282042-15	Drain Pipe Assy. Aft	1
27	GA8-282042-17	Drain Manifold Fairing Assy	1
29	GA8-282052-23	Drain Manifold Packer	1
51	AN3-13A	Bolt	2
53	MS21042-3	Nut	2
55	AN960-10	Washer	2
57	AN526-832-6R	Screw	4
67	AN822-4D	Elbow	2
69	SS48155	Blanking Plate	4
81	P580001	White Rubber Edging	A/R
83	A10k140	Rivnut	2
85	AN526-1032-R6	Washer Head Screw	4
87	AN525-10R16	Washer Head Screw	4
89	MS21042-08	Stop Nut	4
91	AN960-08	Flat Washer	8

GA8-255004-15 Cargo Pod with Rear Door

Item	Part Number	Description	Qty
33	GA8-255014-15	Cargo Pod / Rear Door Assembly	1
59	MS21061L	Floating Anchor Nut	16
61	CCR264CS3-4	Cherrymax Rivet	32

Item	Part Number	Description	Qty
63	AN525-10R12	Screw	16
65	AN970-3	Penny Washer	16
21	GA8-282042-11	Drain Manifold Assembly	1
23	GA8-282042-13	Drain Pipe Assy. Fwd	1
25	GA8-282042-15	Drain Pipe Assy. Aft	1
27	GA8-282042-17	Drain Manifold Fairing Assy	1
29	GA8-282052-23	Drain Manifold Packer	1
51	AN3-13A	Bolt	2
53	MS21042-3	Nut	2
55	AN960-10	Washer	2
57	AN526-832-6R	Screw	4
67	AN822-4D	Elbow	2
69	SS48155	Blanking Plate	4
81	P580001	White Rubber Edging	A/R
83	A10k140	Rivnut	2
85	AN526-1032-R6	Washer Head Screw	4
87	AN525-10R16	Washer Head Screw	4
89	MS21042-08	Stop Nut	4
91	AN960-08	Flat Washer	8

GA8-255004-17 Cargo Pod

Item	Part Number	Description	Qty
31	GA8-255014-17	Cargo Pod Assembly	1
63	AN525-10R12	Screw	16
65	AN970-3	Penny Washer	16
87	AN525-10R16	Washer Head Screw	4

GA8-255004-19 Cargo Pod with Rear Door

Item	Part Number	Description	Qty
31	GA8-255014-19	Cargo Pod Assembly	1
63	AN525-10R12	Screw	16
65	AN970-3	Penny Washer	16
87	AN525-10R16	Washer Head Screw	4

Tools Required:

- 0.875" Hole saw (-13 and -15 cargo pods only)
- Phillips head or unibit screwdriver or equivalent
- Sockets & ratchet or spanners
- Jacks and/or wood as appropriate
- Rivet puller (-13 and -15 cargo pods only)
- Drill & Drill Bits (#10, #40 and 7/32")

Parts Availability

New parts can be obtained directly from Gippsland Aeronautics.

Tel.: +61 03 5172 1200

Fax.: +61 03 5172 1201

Email: spares@gippsaero.com

Labour:

It is recommended that at least 2 people are available to install the cargo pod. It is anticipated that the initial cargo pod installation will require 3 hours with two people for the -13 and -15 installation and 1 hour for the -17 and -19 .

Instructions:

The cargo pod must be installed in accordance with Gippsland Aeronautics drawing GA8-255004 and instructions outlined in this Service Bulletin.

Flight Manual Supplement *C01-04-34 Cargo Pod* must be inserted into the flight manual.

Please refer to the relevant sections of the GA8 Service Manual for further clarification.

Fuel/Water Drain Installation (for -13 and -15 installation only)

1. Remove RH crew seat.
2. Remove fuel system cover plate.
3. Turn off fuel service taps and drain fuel from fuel strainers bowls - refer to GA8 Service Manual - Chapter 28.
4. Install GA8-282042-11 Drain Manifold Assembly – refer GA8-255004 Sheets 2,3 & 4.
5. Remove existing fuel strainer drains from underside of fuselage.
6. Install elbows (part GA8-255004-67) and Drain Pipe Assemblies (parts GA8-282042-13 & -15) – refer GA8-255004 Sheet 3.
7. Turn on fuel service taps – check for leaks.
8. Temporally fit GA8-282042-17 Drain Manifold Fairing assembly – refer GA8-255004 Sheet 2.
9. Drill mounting holes in fuselage skin for attachment of Drain Manifold Fairing, using the fairing as a template for hole positions – refer GA8-255004 Sheets 3 & 4.
10. Drill new drain hole through fuselage skin as shown in drawing GA8-255004 sheet 5.

SB-GA8-2004-14	Issue: 3	Date of Issue: 31 July 2009	Page 4 of 8
----------------	----------	-----------------------------	-------------

Instructions cont:

11. Deburr holes and remove swarf.
12. Apply PR1422B 1/2 sealing compound around overlapping joints in the fuel bowl compartment and all lap joints in the rear of the manifold fairing to prevent fuel leakage into the cargo pod. Fill existing fuel drain hole. (Refer drawing GA8-255004 sheet 4).
13. Secure White Edge Capping (item 81) to sides of fairing around stringer area and at rear of fairing (refer drawing GA8-255004 sheet 4).
14. Fit Drain Manifold Fairing – refer GA8-255004 Sheet 3.
15. Replace fuel strainer hardware, fuel system cover plate and RH crew seat.

Anchor Nut Installation - applicable prior to aircraft S/N GA8-05-075.

Note: Aircraft S/N GA8-05-075 and subsequent have the anchor nut installation carried out during production.

1. Remove all passenger seats from the cabin.
2. Remove carpet / vinyl from the cabin.
3. Remove inspection covers on cabin floor that correspond to the relevant cargo pod attachment points – refer GA8-255004 Sheet 5.
4. The cargo pod can be offered up to the underside of the fuselage in assisting with the information presented in drawing GA8-255004 Sheet 5 to identify the rivets that will be required to be removed. The cargo pod is supplied with the mounting hole pre-drilled from the manufacturer.
5. Drill two Ø0.250" holes on the front of the fuselage in positions shown in drawing GA8-255004, sheet 5, and insert two nutserts (item 83).
6. Access to the 4 mounting points in the vicinity of the main landing gear will require four 0.875" diameter holes to be cut into the floor. After cutting the holes, deburr and remove any swarf – refer GA8-255004 Sheet 7.
7. Remove the identified rivets using a #10 drill, use an anchor nut to reference the holes for the anchor nut tail. Drill the anchor nut tail holes using a #40 drill – refer drawing GA8-255004 Sheet 5
8. Re-drill the screw holes to 7/32". deburr all holes and remove any swarf.
9. Install supplied anchor nuts – refer drawing GA8-255004 Sheet 5.
10. Cap the 0.875" access holes using the supplied blanking grommet, replace carpet / vinyl and passenger seats

Cargo Pod Installation (all serial numbers)

1. Place the cargo pod under the fuselage of the aircraft.
2. Offer the cargo pod to the underside of the fuselage by supporting the rear of the cargo pod with a wooden block or similar, whilst an assistant supports the forward section. The fuel/water drain cover plate will aid location of the pod.
3. Whilst the pod is held in position, the two most forward AN525 screws and washers can be installed, do not fully tighten fasteners. The person holding the pod should be able to jiggle the pod longitudinally to align the mounting holes
4. Install the two most rearward screws. Remove packer. Install the remaining 12 fasteners – refer GA8-255004 Sheet 6 and tighten all fasteners in accordance with GA8 Service Manual Chapter 20 - Torquing Procedures
5. Note that mounting holes on the GA8-255014-11/15 may be enlarged to a max of Ø0.375" on final installation to ensure correct alignment of screw installation (refer to note 6 on drawing GA8-255004 sheet 6).

SB-GA8-2004-14	Issue: 3	Date of Issue: 31 July 2009	Page 5 of 8
----------------	----------	-----------------------------	-------------

Final Checks

1. Check that there are no gaps between the cargo pod and the fuselage floor belly skin. Fill gaps using neutral cure silicone sealant per instructions on drawing GA8-255004, sheet 6.
2. Check operation of the doors for binding and clearances.
3. Check for fuel leaks in and around the vicinity of the fuel/water drain assembly.
4. Rectify deficiencies found.

Documentation:

Installation of the cargo pod will require the aircraft logbook to be updated to reflect the incorporation of this Service Bulletin.

Flight Manual Supplement *C01-04-34* or *C01-04-87***Error! Bookmark not defined.** *Cargo Pod* must be inserted into the flight manual.

The Load Data Sheet must be replaced in the Flight Manual to incorporate the cargo pod configurations.

Compliance Notice:

Complete the Document Compliance Notice and return to Gippsland Aeronautics by fax/mail

SB-GA8-2004-14	Issue: 3	Date of Issue: 31 July 2009	Page 6 of 8
----------------	----------	-----------------------------	-------------

DOCUMENT COMPLIANCE NOTICE



Document: Service Bulletin SB-GA8-2004-14

Aircraft Serial Number: GA8-_____

I/we have incorporated Service Bulletin SB-GA8-2004-14 for the above aircraft.

Signed

Print name _____

Please post or fax this compliance notice to:

Gippsland Aeronautics
Attn: Technical Services
P.O. Box 881
Morwell Victoria 3840
Australia
Fax.: +61 03 5172 1201