

DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

A00011LA  
Revision 5  
GA8 Airvan (Pty) Ltd  
GA8  
GA8-TC320  
July 3, 2012

TYPE CERTIFICATE DATA SHEET A00011LA

This data sheet, which is part of the Type Certificate No. A00011LA, prescribes conditions and limitations under which the product for which the type certificate was issued meets the airworthiness requirements of the Federal Aviation Regulations.

Type Certificate Holder                      GA 8 Airvan (Pty) Ltd  
C/O GippsAero Pty Ltd. (ACN 119 523 830)  
Latrobe Regional Airport, Traralgon, VICTORIA 3844, Australia  
**Mail Correspondence:** P.O. Box 881 Morwell, Victoria 3840, Australia

Type Certificate Holder record              Gippsland Aeronautics Pty. Ltd. transferred TC A00011LA to GA8 Airvan (Pty) Ltd on 8 August 2006.

I. GA8 (Normal Category) Approved May 30, 2003

Engine    Textron Lycoming IO-540-K1A5  
Type Certificate: 1E4

Engine Limits                                    Maximum Takeoff Power                      2700 R.P.M. and 300 HP  
Maximum Continuous Power                      2500 R.P.M. and 275 HP

Propeller and Propeller Limits              Hartzell HC-C2YR-1BF/F8475R metal constant speed  
Type Certificate: P920  
Not over 84 inches (2134 mm) diameter  
Not under 78 inches (1981 mm) diameter  
No further reduction permitted  
Pitch settings at 30 in. sta.:  
    High: 29±1°  
    Low: 12±0.2°

Airspeed Limits (IAS)                        Never Exceed                                    V<sub>ne</sub> 185 kts  
Max structural cruise                            V<sub>no</sub> 143 kts  
Manoeuvring                                      V<sub>a</sub> 121 kts  
Max flaps extended                              V<sub>fe</sub> 97 kts

Maximum Weight                                Take-off    4000 lbs. (1814 kg.)  
Landing    4000 lbs. (1814 kg.)

Center of Gravity  
(C.G.) Range                                      Forward Limit:  
    +48.0 inches (+1219 mm) aft of datum at 2400 lbs. (1089 kg.) or less.  
    +56.0 inches (+1422 mm) aft of datum at 4000 lbs. (1814 kg.)  
    Variation is linear between 2400 lbs. (1089 kg) and 4000 lbs. (1814 kg.)  
Aft Limit:  
    +64.0 inches (+1626 mm) aft of datum at 4000 lbs. (1814 kg) or less

II. GA8-TC 320 (Normal Category) Approved September 11, 2009

Engine    Textron Lycoming TIO-540-AH1A  
Type Certificate: E14EA dated 08/05/2008

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Engine Limits	Normal Takeoff	2500 RPM and 38 in HG (MAP (300 HP)
	Alternate Takeoff	2500 R.P.M. and 40 in HG MAP below 5,000 Feet Pressure Altitude (See Note 7)
	Maximum Continuous Power	2500 R.P.M at 38 in HG (300 HP)
Propeller and Propeller Limits	Hartzell HC-C3YR-1RF/F8068 metal constant speed Type Certificate: P25EA Not over 82 inches (2083 mm) diameter Not under 78 inches (1981 mm) diameter No further reduction permitted Pitch settings at 30 in. sta.: High: 29±1° Low: 14.5±0.2°	
Airspeed Limits (IAS)	Never Exceed	V <sub>ne</sub> 185 kts
	Max structural cruise	V <sub>no</sub> 143 kts
	Manoeuvring	V <sub>a</sub> 121 kts
	Max flaps extended	V <sub>fe</sub> 97 kts
Maximum Weight	Take-off	4000 lbs. (1814 kg.)
	Landing	4000 lbs. (1814 kg.)
Center of Gravity (C.G.) Range	Forward Limit: +48.0 inches (+1219 mm) aft of datum at 2400 lbs. (1089 kg.) or less. +56.0 inches (+1422 mm) aft of datum at 4000 lbs. (1814 kg.) Variation is linear between 2400 lbs. (1089 kg) and 4000 lbs. (1814 kg.) Aft Limit: +64.0 inches (+1626 mm) aft of datum at 4000 lbs. (1814 kg) or less	

For Aircraft incorporating Service Bulletin SB-GA8-2011-65 (AFMS C01-04-78 dated 6 Jul 2011 and ICA C01-00-06 dated 17 Jun 2011 or later approved versions) the following limits apply

Airspeed Limits (IAS)	Never Exceed	V <sub>ne</sub> 190 kts
	Max structural cruise	V <sub>no</sub> 147 kts
	Manoeuvring	V <sub>a</sub> 121 kts
	Max flaps extended	V <sub>fe</sub> 100 kts
Maximum Weight	Take-off	4200 lbs. (1905 kg.)
	Landing	4000 lbs. (1814 kg.)
Center of Gravity (C.G.) Range	Forward Limit: +48.0 inches (+1219 mm) aft of datum at 2400 lbs. (1089 kg.) or less. +57.0 inches (+1448 mm) aft of datum at 4200 lbs. (1905 kg.) Variation is linear between 2400 lbs. (1089 kg) and 4200 lbs. (1905 kg.) Aft Limit: +64.0 inches (+1626 mm) aft of datum at 4200 lbs. (1905 kg) or less	

DATA PERTINENT TO BOTH MODELS – GA8 and GA8-TC 320

Fuel	100LL or 100/130 aviation gasoline.
Empty Weight C. G. Range	None.
Datum	Aft face of Fuselage firewall at fuselage station 0 (stated arms are positive aft; negative forward).
Leveling Means	Longitudinal: Level between pop rivets so marked, on left hand side of fuselage.
	Lateral: Level across floor at rear door.



revision, and GippsAero (See Note 9) Service Bulletins SB-GA8-2003-04 (if applicable) and SB-GA8-2003-05, approved under U.S. Type Certificate No. A00011LA and to be in a condition for safe operation.”

GippsAero (See Note 9) Service Bulletins SB-GA8-2003-04 (if applicable) and SB-GA8-2003-05 must be accomplished, before the U.S. Type Certificate No. A00011LA can be added to the aircraft data plate by the manufacturer.

Model GA8: Serials GA8-00-026 and subsequent:

A United States airworthiness certificate may be issued on the basis of an Australian Export Certificate of Airworthiness signed by a representative of the Civil Aviation Safety Authority (CASA) containing the following statement:

“The airplane covered by this certificate has been examined, tested and found to comply with the Master Drawing GA8-010001 and Engineering Release GA8-97002 at latest revision, and GippsAero (See Note 9) Service Bulletins SB-GA8-2003-05, approved under U.S. Type Certificate No. A00011LA and to be in a condition for safe operation.”

GippsAero (See Note 9) Service Bulletins SB-GA8-2003-05 must be accomplished, before the U.S. Type Certificate No. A00011LA can be added to the aircraft data plate by the manufacturer.

Model GA8 with turbocharged engine installation option:

A United States airworthiness certificate may be issued on the basis of an Australian Export Certificate of Airworthiness signed by a representative of the Civil Aviation Safety Authority (CASA) containing the following statement:

“The airplane covered by this certificate has been examined, tested and found to comply with the Master Drawing GA8-010001 CASA approved revisions, and GippsAero (See Note 9) Engineering Release GA8-9671140 at latest issue has been implemented by GippsAero, approved under U.S. Type Certificate No. A00011LA and to be in a condition for safe operation.”

GippsAero (See Note 9) Engineering Release GA8-961140 at latest issue must be accomplished, before the U.S. Type Certificate No. A00011LA can be added to the aircraft data plate by the manufacturer.

Model GA8-TC 320:

A United States airworthiness certificate may be issued on the basis of an Australian Export Certificate of Airworthiness signed by a representative of the Civil Aviation Safety Authority (CASA) containing the following statement:

“The airplane covered by this certificate has been examined, tested and found to comply with the GippsAero (See Note 9) Engineering Release GA8-970004, Issue 1 or later as approved under U.S. Type Certificate No. A00011LA and to be in a condition for safe operation.”

The U.S. airworthiness certification basis for this airplane type certificated under FAR 21.29 and exported by the country of manufacture is FAR 21.183(c).

Certification Basis

GA8 Model:

FAR 23, dated December 18, 1964, with amendments 1 through 54 “Airworthiness Standards for Normal Category Airplanes”:

FAR 36.1(a)(2), dated December 1, 1969 with amendments 1 through 24 “Noise Standards: Aircraft Type and Airworthiness Certification”

TC A00011LA issued on May 30, 2003.

	For aircraft eligible for IFR operations the certification basis is FAR 23 dated December 18, 1964 with amendments 1 through 55 "Airworthiness Standards for Normal Category Airplanes"
GA8-TC 320	<p>FAR 23, dated December 18, 1964, with amendments 1 through 55 "Airworthiness Standards for Normal Category Airplanes":</p> <p>FAR 36.1(a)(2), dated December 1, 1969 with amendments 1 through 28 "Noise Standards: Aircraft Type and Airworthiness Certification"</p> <p>Amended TC for GA8-TC 320 issued September 11, 2009</p> <p>For aircraft eligible for IFR operations the certification basis is FAR 23 dated December 18, 1964 with amendments 1 through 55 "Airworthiness Standards for Normal Category Airplanes"</p>
Equipment	The basic required equipment as prescribed in the applicable airworthiness regulations (see Certification Basis) must be installed in the airplane for certification.
For GA8 Model:	<p>In addition the approved Aircraft Flight Manual Report No C01-01-04 dated May 29, 2003, or later approved version, must be carried. (See Note 5)</p> <p>To be eligible for IFR operations AFM Report No. C01-01-04, dated December 22, 2003, or later CASA approved versions, must be carried.</p> <p>IFR required equipment is shown in AFM Limitations section 2, table 2-11, dated December 22, 2003, or later revisions.</p> <p>Instructions for Continued Airworthiness (ICA) {Service Manual} document C01-00-04 (See Note 3 and 4)</p>
For GA8-TC 320 Model:	<p>Aircraft Flight Manual Report No C01-01-09 dated July 31, 2009 or later approved version must be carried (See Note 5)</p> <p>Instructions for Continued Airworthiness (ICA) {Service Manual} document C01-00-06 dated March 20, 2009 or later revisions (See Note 3 and 4)</p> <p>For Airplanes with SB-GA8-2011-65 (increase MTOW to 4200 lbs), AFMS document C01-04-78 dated 6 Jul 2011 or later approved version must be carried (See Note 5) and ICA {Service Manual} document C01-00-06 chapter 4 dated 17 Jun 2011 or later approved version must be followed (See Note 3).</p>
Service Information	<p>Each of the documents listed below must state that it is approved by the Civil Aviation Safety Agency (CASA):</p> <ul style="list-style-type: none"> <li>• Aircraft flight manuals, and</li> <li>• Airworthiness Limitations Section of the Service Manual.</li> </ul> <p>The FAA accepts such documents and considers them FAA-approved for type design data only unless one of the following conditions exists:</p> <ul style="list-style-type: none"> <li>• The documents change the limitations, performance, or procedures of the FAA approved manuals; or</li> <li>• The documents make an acoustical or emissions changes to this product's U.S. type certificate as defined in 14 CFR § 21.93.</li> </ul>

The FAA uses the post type validation procedures to approve these documents. The FAA may delegate on case-by-case to CASA to approve on behalf of the FAA for the U.S. type certificate. If this is the case it will be noted on the document.

## Notes

- Note 1. A current weight and balance report, including a list of equipment included in the certificated empty weight, and loading instructions when necessary, must be provided for each airplane at the time of original certification.
- The certificated empty weight and the corresponding center of gravity location must include full oil [22.5 lbs. (10.3 kg) at -21.3 inches (-540 mm)] and unusable fuel [12.7 lbs. (5.7 kg) in main tanks at +79.6 inches (+2022 mm) and 14.3 lbs. (6.5 kg) in collector tank at +27.75 inches (+705mm)].
- Note 2. All required placards are contained in Chapter 2 of the Airplane Flight Manual, Report C01-01-04 and C01-00-09, and must be installed in the appropriate locations.
- Note 3. Service life of structural components are listed in the Airworthiness Limitations Section, Chapter 4, of the Airplane Service Manual, Report No. C01-00-04 and C01-00-06 (GA8-TC 320). The Airworthiness Limitations Section was approved by CASA and the FAA. Revisions to this section must be approved by CASA and the FAA.
- Note 4. Instructions for continued airworthiness are contained in the Airplane Service Manual, Report No. C01-00-04. The instructions for continued airworthiness for aircraft eligible for IFR operations are contained in the Airplane Service Manual, Report No. C01-00-04 dated December 22, 2003 or later CASA approved version.
- Note 5. The Airplane Flight Manual, Report No. C01-01-04 (GA8) and C01-00-09 (GA8-TC 320), was approved by CASA and the FAA. Revisions to this report may be approved by CASA on behalf of the FAA, unless they are changes to the limitation section. These changes require FAA approval for the US version.
- Note 6. Airplanes must comply with the requirements of GippsAero Service Bulletin SB-GA8-2003-08 Issue 2, dated December 22, 2003 or later CASA approved revisions, to be eligible for IFR operations.
- Note 7. The TIO-540-AH1A has an alternate takeoff rating of 40.0 in Hg at 2500 RPM limited to 5000 feet pressure altitude.
- Note 8. Cargo Pod, part number GA8-255004-17 (standard) or GA8-255004-19 (Optional rear Door) is approved equipment on the Model GA8-TC 320 when installed in accordance with the latest issue of GippsAero Service Bulletin SB-GA8-2004-14 dated 31 July 2009 and when Flight Manual Supplement C01-04-87 dated 31 July 2009 or later issue is inserted into the aircraft's approved flight manual.
- Note 9. As of July 2012 all service documentation and engineering releases for the US type certificate now refer to GippsAero in place of Gippsland Aeronautics.

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