



LAA TYPE ACCEPTANCE DATA SHEET
TADS 056
GARDAN MINICAB GY201, GY201(modified),
JB-01 STANDARD

Issue 1	Initial issue	Dated 17/9/19	JH
---------	---------------	---------------	----

This TADS is intended as a summary of available information about the type and should be used during the build, operation and permit revalidation phases to help owners and inspectors. Although it is hoped that this document is as complete as possible, other sources may contain more up to date information, e.g. the manufacturer's website.

Section 1 contains general information about the type.

Section 2 contains information about the type that is **MANDATORY** and must be complied with.

Section 3 contains advisory information that owners and inspectors should review to help them maintain and operate the aircraft in a safe and airworthy condition. If due consideration and circumstances suggest that compliance with the requirements in this section can safely be deferred, is not required or not applicable, then this is a permitted judgement call. This section also provides a useful repository for advisory information gathered through defect reports and experience.

Section 1 - Introduction

1.1 UK contact

None known.

1.2 Description

The Gardan Minicab GY201 is an all wood, conventional, low wing, cantilever monoplane with fixed tailwheel undercarriage. Pilot and passenger sit side by side and access to the cockpit is provided via a one-piece Perspex canopy that swings forwards.

The aircraft was produced in France by Constructions Aéronautiques du Béarn in the early 1950's and later became available for amateur construction from the Arthur W. J. G. Ord-Hume GY-201 plans. The Minicab has also been rebuilt to the JB.01 standard developed by M. Jean Barritault.

The type has been fitted with the Continental A65, C85, C90 and O-200-A engines. The type is usually fitted with two bladed wooden propellers of between 68 and 70" diameter. Note that the only propeller(s) approved for an individual aircraft are those listed on the individual aircraft's Operating Limitations document or a Propeller Type List.

The Gardan Minicab GY201 is categorised as an SEP aeroplane (referred to as a 'group A') in the UK.

Section 2 – Mandatory information for owners, operators and inspectors

At all times, responsibility for the maintenance and airworthiness of an aircraft rests with the owner. A Condition of a Permit to Fly requires that: *"the aircraft shall be maintained in an airworthy condition"*.



LAA TYPE ACCEPTANCE DATA SHEET
TADS 056
GARDAN MINICAB GY201, GY201(modified),
JB-01 STANDARD

2.1 Fast Build Kit 51% Compliance

Not applicable: plans-built or factory-built aircraft.

2.2 Build Manual

Construction drawing set provides all required information, consisting of the following sheets.

Drg No.	Title
200	Jigs and Fixtures
201	Wing Layout
202	Assembly of Wing
203	Pitot Head
204	Wing Spars
205	Reinforcement to Front Spar
206	Wing Ribs & Wing Details
207	Aileron Details
208	Installation of Flaps
209	Flap Control Details
210	Ratchet Plate
211	"T" Piece
212	Control Lever
213	Flap Hinges
214	Installation of Trim Tab
215	Revised Wing Tip
216	Rib 'A' (Undercarriage)
217	Layout of Fuselage
218	Structure of Fuselage
219	Modified Front Decking
220	Fuselage Superstructure
221	Assembly of Flying Controls
222	Detail of Flying Controls
223	Elevator Lever Control Bracket
224	Rudder Pedal Bearing
225	Canopy Detail and Assembly
226	Instrument Panel
227	Brake Pedals
228	Wing-Fuselage Attachment
229	Tail plane & Elevators
230	Engine Installation
231	Continental C.65 engine mounting
232	Cowlings & Baffles
233	Fuel System & Pipelines
234	Exhaust and Hot-Air Muff
235	Fire Extinguisher Installation
236	Landing Gear
237	Steerable Tailwheel Assembly
238	Weight and Balance Data for Determining Centre of Gravity
239	Revised Instrument Panel
240	Revised Control Column
241	Modifications for Installation of 90hp Continental and increase of All-Up Weight to 560 kgs.



LAA TYPE ACCEPTANCE DATA SHEET
TADS 056
GARDAN MINICAB GY201, GY201(modified),
JB-01 STANDARD

2.3 Build Inspections

Build inspection schedule 1 (wooden aircraft).
Inspector approval codes A-A or A-W or V. Inspector signing off final inspection also requires 'first flight' endorsement.

2.4 Flight Manual

None known.

2.5 Mandatory Permit Directives

None applicable specifically to this aircraft type.:

Also check the LAA website for MPDs that are non-type specific ([TL2.22](#)).

2.6 LAA Required Modifications (including LAA issued AILs, SBs, etc)

None applicable.

2.7 Additional engine operating limitations to be placarded or shown by instrument markings

Notes:

- Refer to the engine manufacturer's latest documentation for the definitive parameter values and recommended instruments.
- Where an instrument is not fitted, the limit need not be displayed.

2.8 Control surface deflections

Taken from Arthur W. J. G. Ord-Hume drawings

Ailerons	Up: 20° Down: 20°
Elevators	Up: 27.5° Down: 27.5°
Elevator tab	Up: 19° Down: 12°
Rudder	Left: 30° Right: 30°
Flap	Down: 0° - 15° - 30° - 45°

2.9 Operating Limitations and Placards

(Note that the wording on an individual aircraft's Operating Limitations document takes precedence, if different.)

1. Maximum number of occupants authorised to be carried: two



LAA TYPE ACCEPTANCE DATA SHEET
TADS 056
GARDAN MINICAB GY201, GY201(modified),
JB-01 STANDARD

2. The aircraft must be operated in compliance with the following operating limitations, which shall be displayed in the cockpit by means of placards or instrument markings:
 - 2.1 **Aerobatic Limitations**
Aerobatic manoeuvres are prohibited.
Intentional spinning is prohibited.
 - 2.2 **Loading Limitations**
Maximum Total Weight Authorised GY201: 515 kg
Maximum Total Weight Authorised GY201 (Modified) and JB01: 560 kg
CG Range GY201: 12.76 in to 17.6 in aft of datum
CG Range GY201 (modified) and JB01: 14.9 in to 17.5 in aft of datum.
Datum Point is: The leading edge of the wing at a point 20.27 inches from the line of symmetry.
 - 2.3 **Engine Limitations**
As a range of engines are fitted to the Minicab see the relevant engine operating manual.
 - 2.4 **Airspeed Limitations**
Maximum Indicated Airspeed (V_{NE}) GY201: 112 mph/97 kn
Maximum Indicated Airspeed (V_{NE}) GY201(modified) and JB01: 142 mph/123 kn
Maximum Flap Operating Airspeed (V_{FE}): 56 mph/48 kn
 - 2.5 **Other Limitations**
The aircraft shall be flown by day and under Visual Flight Rules only.
Smoking in the aircraft is prohibited.

Additional Placards:

"Occupant Warning - This Aircraft has not been Certificated to an International Requirement"

A fireproof identification plate must be fitted to fuselage, engraved or stamped with aircraft's registration letters.

2.10 Maximum permitted empty weight

Not applicable.

Section 3 – Advice to owners, operators and inspectors

3.1 Maintenance Manual

None available. In the absence of a specific schedule, refer to LAMS schedule (CAP411) for guidance. For the engine, refer to the engine manufacturer's information.



LAA TYPE ACCEPTANCE DATA SHEET
TADS 056
GARDAN MINICAB GY201, GY201(modified),
JB-01 STANDARD

3.2 Standard Options

There are no standard options for these types.

Note: Any modifications to these types of aircraft require LAA Engineering approval for that specific modification and aircraft.

3.3 Manufacturer's Information (including Service Bulletins, Service Letters, etc)

None known.

3.4 Special Inspection Points

1. Mechanical undercarriage oleo.
Prone to rotational wear between the housing, the piston, and the piston to main undercarriage tube. It is prone to wear as rotational loads are contained by a relatively short moment arm. Include a thorough check of the undercarriage at each annual inspection and, as part of your Tailored Maintenance Programme, if you jack the aircraft you need to take the weight off the wheel. Time should be made for the undercarriage, as an assembly, to be removed, stripped down and serviced.
2. Tail plane attachment bolts
The original Minicab tail plane attachment bolts are 'home-made' constructed of 6mm mild steel rod threaded with a plane nut brazed 5mm onto the end. They are very prone to corrosion due to the plywood assembly they fit through and should be inspected as part of a TMS. These can be replaced by a commercially purchased equivalent length AN4 aircraft bolt.
3. Mild steel brackets and plates
As the Minicab is constructed with mild steel plates that are prone to corrosion it is recommended to include inspection of plates such as the wing attachments into your tailored maintenance schedule (TMS).
4. Wooden structures
Similar to Jodels, parts of the wooden structure particularly prone to damage are the engine firewall area behind the bulkhead, where moisture and oil soakage can lead to early deterioration, and in the aft fuselage tail area where these contaminants are also likely to collect. These areas are always worth examining closely and special attention should be given to keeping drain holes clear.
5. Fabric coverings glue adhesion
Although fabric may look in a satisfactory condition with a very good paint finish experience on other types within the LAA fleet has shown that it may be very weakly adhered. Fabric will have a life and consideration to the age of the fabric should be factored in to a potential recover of the aircraft.
6. Cable tensions
The Minicab uses pulley and cable circuits for its flying controls and the cables are particularly susceptible to humidity and temperature. The flying control circuits must be kept suitably taught. Loose flying control circuits could cause a serious flutter event.



**LAA TYPE ACCEPTANCE DATA SHEET
TADS 056
GARDAN MINICAB GY201, GY201(modified),
JB-01 STANDARD**

3.5 Operational Issues

1. *Safety Spot* reference

The following *Safety Spot* articles are relevant to Gardan Minicab aircraft:

Light Aviation [March 2014](#) *Loss of Control on Landing*

LOC-L caused by rotation of mainwheel undercarriage oleo. On inspection fault not spotted as aircraft was jacked under axle.

Light Aviation [March 2016](#) *Prop strike on start-up*

Prop strike caused by failure to retard throttle to start when hand swinging propeller.

3.6 Standard Modifications

The following Standard Modifications have been approved on the type. The Standard Modification leaflet associated with each modification (published on the website) must be followed and an [LAA/MOD1](#) form completed and return to LAA Engineering in each case (see also [TL 3.06](#)).

<i>Standard Mod no.</i>	<i>Issue</i>	<i>Description</i>
n/a	n/a	n/a

----- END -----

Please report any errors or omissions to LAA Engineering: engineering@laa.uk.com