



**LAA TYPE ACCEPTANCE DATA SHEET
TADS 370
MISSION M108**

Issue 3	Minor editorial changes. UK contact details added. Note on AFM revision status in section 2.4. Clarification on instrument fit approvals in section 2.6. Correction of aileron deflections in section 2.8. Additional manufacturer options to section 3.2. Additional SBs in section 3.3	Dated 03/06/21	JV
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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 the aircraft in an 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

Tel: 03300 500 018
Email: uksales@lambert-aircraft.com
Website: www.flym108.co.uk

Aircraft kits and support are available direct from the manufacturer:

Lambert Aircraft Engineering
Vliegveld 59
B-8560 Wevelgem
Belgium

Tel: +32 56431626
Email: info@lambert-aircraft.com
Website: www.lambert-aircraft.com

1.2 Description

The Mission M108 is a single-engined, two-seat, high-wing monoplane of traditional tube and fabric construction, designed and produced by Lambert Aircraft Engineering bvba in Belgium.

The aircraft is supplied as a kit with the following features: the wing structure consists of two parallel aluminium alloy tubular spars with plywood ribs, bonded to the front and rear spars. Nose ribs are located between the main ribs to assist the composite leading edge maintain aerodynamic profile. Fibreglass wing tips are installed. The wing also incorporates steel tubes to provide anti-drag bracing, two aluminium alloy wing struts each side with jury struts, and ailerons and flaps hinged from wing ribs. All surfaces are fabric covered.



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The fuselage is a fabric-covered, welded steel space-frame, incorporating non-structural composite fairings, a steel tube engine mount and two adjustable seats in a side-by-side arrangement. The empennage consists of a conventional arrangement of horizontal and vertical fixed and moveable fabric-covered surfaces. The fin is integral with the rear fuselage; the horizontal stabiliser is mounted to the fuselage using two struts each side. Rudder and elevator are conventionally hinged.

The aircraft includes dual controls with individual control sticks and rudder pedals for each occupant. The elevator is controlled using pushrods; the rudder and ailerons are controlled by conventional cable arrangements. The flaps are manually lowered using an overhead lever with retraction operated by a return spring when the lever is released. The port elevator incorporates a Bowden cable controlled trim tab.

At initial approval, the landing gear consists of a tricycle arrangement of a steerable, telescopic nose gear with internal gas strut and a main gear of two cantilevered composite leaf springs each mounting a 6" wheel with hydraulic brakes. The undercarriage can also be installed in a tail dragger configuration which is also approved by LAA.

Each wing houses a 36 litre (or optionally, 53 litre) fuel tank at the root end, each feeding an 8 litre header tank under the passenger seat.

The standard engine installation is a Rotax 912iS fitted with a Duc Swirl or Duc Flash 3-bladed 1730 mm diameter propeller. Note that the only propeller(s) approved for an individual aircraft are those listed on the individual aircraft's Operating Limitations document or in the PTL/1 (Propeller Type List) for the type.

The type is classed as a SEP ('group A') aircraft.

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. Condition No 3 of a Permit to Fly requires that: "*the aircraft shall be maintained in an airworthy condition*".

2.1 Fast Build Kit 51% Compliance

The 'standard', 'advanced' and 'advanced with optional build assist programme' kits have been assessed as being 51% compliant. See Appendix 1 for the breakdown of work associated with each of these options.

2.2 Build Manual

The manufacturer supplies an 'Airplane Assembly Manual', revision 0 or as amended.

2.3 Build Inspections

Build inspection schedule 72 'Mission M108'.
Inspector approval codes A-A or A-M or K. Inspector signing off final inspection also requires 'first flight' endorsement.



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2.4 Flight Manual

An aircraft flight manual is supplied with each aircraft. SB-108-500 at its current issue gives the current revision status of the AFM.

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)

Unless specifically agreed with LAA Engineering for an individual aircraft, the following instrument options must be installed:

LSTC 1-026: SIRS standby magnetic compass and one of the following options:

LSTC 1-013: instrument panel with TL Electronic Integra EFIS/EMS, or

LSTC 1-018: instrument panel with Garmin G3X Touch system with single GDU460 display and compact radios ("VFR Panel"), or

LSTC 1-019: instrument panel with Garmin G3X Touch system with single GDU460 display and stack radios ("VFR Plus Panel"), or

LSTC 1-020: instrument panel with Garmin G3X system with dual GDU370 displays and IFR certified GPS navigator, or

LSTC 1-037: instrument panel with Garmin G3X Touch system with dual GDU470 displays and IFR certified GPS navigator ("IFR Panel").

If using LSTCs 1-013 or 1-020 then LSTC 1-025 must also be fitted (LX Navigation BU57, Salus or Iris All-in-One standby attitude instrument). See also notes in section 3.2.

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.

With Rotax 912iS engine:

Max Coolant Temp: 120°C (with 50/50 Glycol/water coolant)

Oil Temp Limits: 50°C to 130°C (Normal 90-110°C)

Oil Pressure: 2-5 Bar

Fuel Pressure: 2.8 to 3.2 bar



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2.8 Control surface deflections

Ailerons	s/n 001 & 003 Up: 18° ±1° Down: 18° ±1° s/n 002, 004 and up Trailing edge up: 18° ±1° Trailing edge down: 14° ±1°
Elevators	Trailing edge up: 33° ±2° Trailing edge down: 22° ±2°
Elevator tab	Trailing edge up: 35° ±5° Trailing edge down: 40° ±3°
Rudder	Left: 30° ±2° Right: 30° ±2°
Flap	Down: 0° - 10° ±1° - 30° ±2°

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
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: 600 kg
CG Range: 1885 mm to 2012 mm aft of datum.
Datum Point is: 1 m forward of front face of firewall.
 - 2.3 Engine Limitations
Maximum Engine RPM: 5800.
Maximum continuous engine RPM: 5500.
 - 2.4 Airspeed Limitations
Maximum Indicated Airspeed (V_{NE}): 114 knots
Max Indicated Airspeed, Flaps Extended: 69 knots
 - 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"



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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

The Maintenance Manual for the type (ref M108-110 Rev 0) includes the manufacturer's maintenance schedule for the airframe. For engine maintenance consult engine manufacturer's schedule.

3.2 Manufacturer's/Standard Options

The listing below shows the factory options that have been accepted by the LAA.

LSTC 1-001	Taildragger configuration ¹
LSTC 1-002	Nosewheel configuration, standard tyres ¹
LSTC 1-003	Toe brakes on pilot's side ¹
LSTC 1-004	Toe brakes on co-pilot's side ¹
LSTC 1-005	Central brake lever and parking brake valve ¹
LSTC 1-006	Duc Swirl 3-bladed 1730 mm diameter propeller ²
LSTC 1-007	Cabin heating/ventilation system
LSTC 1-008	Wheel fairings
LSTC 1-009	Adjustable rudder pedals ¹
LSTC 1-011	Long range fuel tanks
LSTC 1-012	Deluxe interior
LSTC 1-013	Instrument panel with TL Electronic Integra EFIS/EMS
LSTC 1-014	Garmin GPSMAP695 or Aera 795 moving map
LSTC 1-015	Trig Avionics TY91 VHF Comm radio ³
LSTC 1-016	Trig Avionics TT21 Mode S transponder ³
LSTC 1-017	Interior lighting
LSTC 1-018	Instrument panel with Garmin G3X Touch system with single GDU460 display and compact radios ("VFR Panel") ⁴
LSTC 1-019	Instrument panel with Garmin G3X Touch system with single GDU460 display and stack radios ("VFR Plus Panel") ⁴
LSTC 1-020	Instrument panel with Garmin G3X system with dual GDU370 displays and IFR certified GPS navigator *("IFR Panel")
LSTC 1-021	Garmin GTX23ES transponder ³
LSTC 1-021b	Garmin GTX35R transponder ³
LSTC 1-022	Garmin GTR225A com or Garmin GNC255A nav/com ³

¹ Approved landing gear/brake configurations are either: LSTC 1-001 with LSTC 1-003 (LSTC 1-004 optional), or LSTC 1-002 with LSTC 1-003 (LSTC 1-004 optional), or LSTC 1-002 with LSTC 1-005 (LSTC 1-009 optional).

² Note that the only propeller(s) approved for an individual aircraft are those listed on the individual aircraft's Operating Limitations document or in the PTL/1 (Propeller Type List) for the type.

³ Form [LAA/MOD7](#) avionics application required if these items are fitted.

⁴ Backup ASI and altimeter are optional if the system is configured to SB -108-50x



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LSTC 1-023	Garmin G3X autopilot ⁵
LSTC 1-024	Rear avionics shelf
LSTC 1-025 rev 1	LX Navigation BU57, Salus or Iris All-in-one standby attitude instrument ⁶
LSTC 1-026	SIRS standby magnetic compass
LSTC 1-027	Redesigned pitot & static systems with Garmin GAP26 pitot probe and optionally heated GAP26 pitot probe
LSTC 1-028	RC Allen RCA2600-2 standby attitude indicator
LSTC 1-029	VHF nav antenna
LSTC 1-030	Whelen Orion wingtip position and anti-collision lights
LSTC 1-031 rev 1	Tail mounted anti-collision light
LSTC 1-032	Landing lights
LSTC 1-034	PS Engineering PMA4000 audio panel and intercom
LSTC 1-035	Bendix/King KN64/62A DME ³
LSTC 1-036	WX-500 Stormscope
LSTC 1-037	Instrument panel with Garmin G3X Touch system with dual GDU470 displays and IFR certified GPS navigator ("IFR panel") ⁸
LSTC 1-038	Garrecht TRX-1500 collision warning system
LSTC 1-040	DME antenna and/or alternative location for transponder antenna
LSTC 1-041	Garmin Flight Stream 210 wireless interface
LSTC 1-042	Trig Avionics TN72 GPS position source for ADS-B Out ⁷
LSTC 1-044	EarthX, model ETX690C lithium battery
LSTC 1-045	Trig Avionics TY96 nav/comm ³
LSTC 1-046	Garmin GPS175 ⁸
LSTC 1-050	40A external alternator
LSTC 1-051	DUC Flash 3-blade 1730 mm diameter propeller ²
LSTC 1-052	Galaxy GRS 6/600 SD B1 airframe parachute system
LSTC 1-054	Removable control stick on passenger side
LSTC 1-055	DV panel in door window
LSTC 1-056	Elevator and rudder gap seals
LSTC 1-057	Manually controlled electric aileron trim system
LSTC 1-058	Manually controlled electric rudder trim system

The following Lambert Aircraft Engineering Type Design Changes (TDCs) have been accepted by LAA:

<i>TDC</i>	<i>Description</i>	<i>Eligibility</i>	<i>Retrofittable</i>
1-001	Rotax 912iS Sport upgrade package	All	Y
1-002	Differential aileron control system	s/n 002, 004+	N
1-003	Fuel tank modification	All	Y
1-004	Fuel system upgrades	All	Y
1-005	Oil cooling hose	All	Y

⁵ If installing as part of initial build, please submit forms [LAA/IC-APP](#) and [LAA/IC-APR](#) with build completion paperwork; if installing retrospectively, please contact LAA Engineering prior to fitting. Note minimum speed accepted as being 60 knots.

⁶ Configuration of Iris unit must not be altered from that specified by Lambert Aircraft.

⁷ Form [LAA/MOD7](#) or [LAA/MOD14](#) application required as appropriate if this item is fitted.

⁸ Form [LAA/MOD7](#), [LAA/MOD14](#) or [LAA/MOD17](#) application required as appropriate if this item is fitted to provide ADS-B Out.



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

In the absence of any over-riding LAA classification, inspections and modifications published by the manufacturer should be satisfied according to the recommendation of the manufacturer. It is the owner’s responsibility to be aware of and supply such information to their inspector.

Each LSTC/TDC listed above is covered by a Lambert Engineering service bulletin which gives information on how the LSTC/TDC may be embodied.

Service bulletins covering in-service issues:

<i>SB</i>	<i>Rev</i>	<i>Description</i>	<i>Applicability</i>	<i>Compliance</i>
SB-108-203	0	Fuel tank repair/modification	S/n 001-005	Mandatory
SB-108-501	2	Approved software & configurations for avionics systems with TL Elektronik PFD	A/c fitted with LSTC 1-013	Mandatory
SB-108-502	5	Approved software & configurations for avionics systems with “Garmin G3X Touch Panel”	A/c fitted with LSTC 1-018	Mandatory
SB-108-504	3	Approved software & configurations for avionics systems with “Garmin G3X IFR Panel”	A/c fitted with LSTC 1-020	Mandatory
SB-108-510	0	Replacement of gascolator bowl	S/n 001-006	Mandatory
SB-108-511	0	Replacement of radiator mounting brackets	S/n 001-012	Mandatory

3.4 Special Inspection Points

- Documentation is available from the [Tech Pubs](#) section of the manufacturer’s website. This includes maintenance data and is available to view by owners and inspectors with user accounts (contact manufacturer to create a user account). This should be used as an active reference by owners and consulted for updates regularly.
- The manufacturer publishes a Type Data Sheet, which contains useful information. Note that where information on the Type Data Sheet conflicts with this TADS, the TADS takes precedence for LAA aircraft.

3.5 Operational Issues

None at current issue.

3.6 Standard Modifications

None.



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Appendix 1 – Pre-build level for quick-build kits

The M108 is available in three different states, all of which have been assessed as compliant with the '51% rule' by the LAA provided the work content for each as set out on the following pages is followed.

Standard kit: The standard kit is supplied as a complete package. All components and materials are included (including covering, finishing and firewall forward section) except for the cabin upholstery and instruments, which have to be purchased separately. The amateur builder is expected to carry out all work in his own workshop at his pace. The fuselage structure and tail surfaces are supplied with all welding done and powder coated. The wing structure is partially assembled (with correct built-in alignment). There is some preparation required before the aircraft will be ready for fabric covering, such as fitting wing tips, leading & trailing edges, installation of fuel tanks, etc. The amateur builder is required to do the fabric covering entirely by himself. After painting, the control systems will need to be assembled and installed, landing gear assembled and fitted, etc, until the kit is fully assembled.

Advanced kit: The advanced kit contents is identical to the standard kit, except that a basic instrument package and cabin upholstery is included. The amateur builder is required to attend 8 days of intensive training at the Builder Centre during which he will do the following work under close supervision:

- fabrication components for wing structure, ailerons and flaps;
- assembly of the wings, ailerons and flaps;
- fabric covering of the airframe (control surfaces, fuselage, wings).

After fabric covering, the airframe will be painted by factory personnel. Then the partially completed kit is transferred from the Builder Centre to the customer's (home) workshop where he will complete the kit at his own pace.

Build assist programme: The build assist programme is an additional option to the advanced kit. With this option, the amateur builder is required to attend a further two weeks of intensive training at the Builder Centre, during which the customer will assemble and install all parts and systems into the aircraft (control systems, landing gear, fuel system, engine, pitot-static system, instruments, wiring, etc) under close supervision. Factory personnel will be available at all times to answer questions, to monitor and inspect work at various stages, and to provide any necessary assistance where tasks cannot be managed by one person (e.g. fitting a wing to the fuselage).

		Std	Adv	Adv+BAP	Note
	Fuselage				
1	Fabricate special tools and fixtures	N/A	N/A	N/A	
2	Fabricate longitudinal members, cores or shells	F	F	F	1
3	Fabricate bulkheads or cross members	F	F	F	1
4	Assemble fuselage basic structure	F	F	F	1
5	Fabricate brackets and fittings	F	F	F	1
6	Install brackets and fittings	F	F	F	1
7	Fabricate cables, wires and lines	B	B	B	2
8	Install cables, wires and lines	B	B	B	2
9	Fabricate fuselage covering or skin	N/A	N/A	N/A	3
10	Install fuselage covering or skin	B	B	B	4
11	Fabricate windshield, windows, canopy	B	B	B	5
12	Install windshield, windows, canopy	B	B	B	5
	Wings				
1	Fabricate special tools and fixtures	N/A	N/A	N/A	
2	Fabricate wing spars	F	B	B	6
3	Fabricate wing ribs and cores	F	B	B	7
4	Fabricate wing leading and trailing edges	F/B	F/B	F/B	8



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		Std	Adv	Adv+BAP	Note
5	Fabricate drag/ anti-drag truss members	F	F	F	9
6	Fabricate wing brackets and fittings	F	F	F	10
7	Fabricate wing tips	F	F	F	11
8	Assemble basic wing structure	F	B	B	12
9	Install wing leading and trailing edge	B	B	B	13
10	Install drag / anti-drag truss	F	B	B	12
11	Fabricate cables, wires and lines	B	B	B	14
12	Install cables, wires and lines	B	B	B	14
13	Fabricate wing covering or skin	N/A	N/A	N/A	3
14	Install wing covering or skin	B	B	B	4
15	Fabricate wing struts and wires	F	F	F	15
16	Install wing struts and wires	B	B	B	16
	Flight controls				
1	Fabricate special tools and fixtures	N/A	N/A	N/A	
2	Fabricate aileron spars	B	B	B	6
3	Fabricate aileron ribs and cores	B	B	B	7
4	Assemble aileron structure	B	B	B	12
5	Fabricate aileron leading and trailing edges	F/B	F/B	F/B	8
6	Assemble aileron leading and trailing edges	B	B	B	13
7	Fabricate aileron brackets and hinges	F	F	F	17
8	Install aileron brackets and fittings	B	B	B	12
9	Fabricate aileron coverings or skins	N/A	N/A	N/A	3
10	Install aileron coverings or skins	B	B	B	4
11	Fabricate aileron trim tab(s)	N/A	N/A	N/A	
12	Install aileron trim tab(s)	N/A	N/A	N/A	
13	Install and rig ailerons	B	B	B	
14	Fabricate flap spars	B	B	B	6
15	Fabricate flap ribs and cores	B	B	B	7
16	Assemble flap structure	B	B	B	12
17	Fabricate flap leading and trailing edges	F/B	F/B	F/B	8
18	Assemble flap leading and trailing edges	B	B	B	13
19	Fabricate flap brackets and fittings	F	F	F	17
20	Install flap brackets and fittings	B	B	B	12
21	Fabricate flap coverings or skins	N/A	N/A	N/A	3
22	Install flap coverings or skins	B	B	B	4
23	Install and rig flaps	B	B	B	
24	Fabricate elevator spars	F	F	F	18
25	Fabricate elevator ribs and cores	F	F	F	18
26	Assemble elevator structure	F	F	F	18
27	Fabricate elevator leading and trailing edges	N/A	N/A	N/A	20
28	Assemble elevator leading and trailing edges	N/A	N/A	N/A	20
29	Fabricate elevator brackets and fittings	F	F	F	18
30	Install elevator brackets and fittings	F	F	F	18
31	Fabricate elevator coverings or skins	N/A	N/A	N/A	3
32	Install elevator coverings or skins	B	B	B	4
33	Fabricate elevator trim tab(s)	F	F	F	19
34	Install elevator trim tab(s)	B	B	B	19
35	Install and rig elevator	B	B	B	
36	Fabricate rudder spar	F	F	F	18
37	Fabricate rudder ribs and cores	F	F	F	18
38	Assemble rudder structure	F	F	F	18
39	Fabricate rudder leading and trailing edge	N/A	N/A	N/A	20
40	Assemble rudder leading and trailing edge	N/A	N/A	N/A	20
41	Fabricate rudder brackets and fittings	F	F	F	18
42	Install rudder brackets and fittings	F	F	F	18
43	Fabricate rudder coverings or skins	N/A	N/A	N/A	3
44	Install rudder coverings or skins	B	B	B	4
45	Fabricate rudder trim tab(s)	N/A	N/A	N/A	
46	Install rudder trim tab(s)	N/A	N/A	N/A	
47	Install and rig rudder	B	B	B	
	Empennage				
1	Fabricate special tools and fixtures	N/A	N/A	N/A	



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		Std	Adv	Adv+BAP	Note
2	Fabricate spars	F	F	F	20
3	Fabricate ribs and cores	F	F	F	20
4	Fabricate leading and trailing edges	N/A	N/A	N/A	20
5	Fabricate tips	N/A	N/A	N/A	20
6	Fabricate brackets and fittings	F	F	F	20
7	Assemble empennage structures	F	F	F	20
8	Install leading and trailing edges	N/A	N/A	N/A	20
9	Install fittings	F	F	F	20
10	Fabricate cables, wires and lines	N/A	N/A	N/A	
11	Install cables, wires and lines	N/A	N/A	N/A	
12	Fabricate empennage covering or skin	N/A	N/A	N/A	3
13	Install empennage covering or skin	B	B	B	4
	Landing gear				
1	Fabricate special tools and fixtures	N/A	N/A	N/A	
2	Fabricate struts	F	F	F	21
3	Fabricate brake system	N/A	N/A	N/A	22
4	Fabricate retraction system	N/A	N/A	N/A	
5	Fabricate cables, wires and lines	F	F	F	23
6	Assemble wheels, tyres, brakes and landing gear	B	B	B	
7	Install landing gear components	B	B	B	
	Propulsion				
1	Fabricate special tools and fixtures	N/A	N/A	N/A	
2	Fabricate engine mount	F	F	F	24
3	Fabricate engine cooling system/baffles	B	B	B	25
4	Fabricate induction system	N/A	N/A	N/A	26
5	Fabricate exhaust system	F	F	F	27
6	Fabricate engine controls	B	B	B	28
7	Fabricate brackets and fittings	N/A	N/A	N/A	29
8	Fabricate wires and lines	B	B	B	30
9	Assemble engine	F	F	F	31
10	Install engine and items listed above	B	B	B	
11	Fabricate engine cowling	F/B	F/B	F/B	32
12	Install engine cowling	B	B	B	33
13	Fabricate and assemble propeller	F/B	F/B	F/B	34
14	Install propeller	B	B	B	
15	Fabricate fuel tank(s)	F	F	F	35
16	Install fuel tank(s)	B	B	B	36
17	Fabricate fuel system components	B	B	B	37
18	Install fuel system components	B	B	B	
	Cockpit/interior				
1	Fabricate instrument panel	F/B	F/B	F	38
2	Install instrument panel and instruments	B	B	B	
3	Fabricate seats	F/B	F/B	F/B	39
4	Install seats	B	B	B	
5	Fabricate electrical wiring, controls / switches	F	F	F/B	40
6	Install electrical wiring, controls / switches	B	B	B	

Notes:

1. Fuselage is a welded steel space frame. Brackets and fittings are welded and are part of the structure. All parts are fabricated and welded by Lambert Aircraft Engineering and subsequently powder coated.
2. Control system cables in fuselage are fabricated and installed by amateur builder. Fuel lines are assembled and installed by builder.
3. Aircraft is fabric covered. Fabric covering is not considered as fabrication.
4. Process for amateur builder involves fabric covering with Diatex®.
5. Process for amateur builder involves cutting of transparencies from polycarbonate sheet, trimming, fitting and riveting.
6. Spars are made from aluminium tubing. Process for amateur builder involves cutting, drilling and preparation for assembly of tubes.



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7. Process for amateur builder involves fabrication of plywood rib caps, assembly of ribs by bonding of caps to web in a set of jigs using urethane glue, and protection of ribs against the long term effects of deterioration.
8. Leading and trailing edges are supplied as premolded FRP parts. Process for amateur builder involves cutting, trimming and fitting of parts. Although the lamination of the FRP is by the factory, the remaining work is judged as sufficient to credit the amateur builder with a 50% share in the fabrication of the parts.
9. Anti-drag tubes are fabricated by Lambert Aircraft Engineering.
10. Brackets and fittings for wings are fabricated from steel sheet or tubing and welded by Lambert Aircraft Engineering and subsequently powder coated.
11. Wingtips are supplied as premolded FRP parts. Work for amateur builder involves trimming the edge and fitting to the outboard wing rib. The work is judged as insufficient to credit the amateur builder with this task.
12. Process for amateur builder involves assembly in a jig in the builder's centre.
13. Process for amateur builder involves bonding of leading and trailing edges to assembled structure.
14. Control system cables in fuselage are fabricated and installed by amateur builder. Fuel lines are assembled and installed by builder.
15. Fittings for wing struts are fabricated from steel sheet and tubing and welded by Lambert Aircraft Engineering and subsequently powder coated.
16. Process for amateur builder involves installation of wing struts at the stage of installation of the wings to the fuselage.
17. Brackets and hinges for ailerons & flaps are fabricated from aluminium sheet by laser cutting.
18. Elevators and rudder are welded steel structures. Brackets and fittings are welded and are part of the structure. All parts are fabricated and welded by Lambert Aircraft Engineering and subsequently powder coated.
19. Trim tab parts are fabricated by Lambert Aircraft Engineering. Installation includes assembly by riveting.
20. Empennage, elevators and rudder are welded steel structures. Brackets and fittings are welded and are part of the structure. All parts are fabricated and welded by Lambert Aircraft Engineering and subsequently powder coated. Front and rear spars also serve as leading and trailing edge, therefore the items are listed only once. Also, there is no wing tip as such.
21. Fabrication of struts is interpreted as fabrication of composite landing gear legs.
22. Brake system is almost entirely assembled from 'off the shelf' components which do not involve any fabrication.
23. Brake lines are supplied as ready to install components. Fittings are swaged by brake line manufacturer.
24. Engine mount is a welded steel space frame, and is fabricated by Lambert Aircraft Engineering and subsequently powder coated.
25. Work for amateur builder involves cutting, bending, trimming, fitting and assembly by riveting of baffling for radiator and oil cooler.
26. Not applicable since there is no fabricated induction system. The air filter is mounted directly on the throttle body inside the engine compartment.
27. Exhaust system is produced by CKT engineering and comes ready to install. There is no fabrication by the amateur builder.
28. Work for amateur builder involves trimming, fitting and installing the throttle control from an off the shelf Bowden control cable. This is the only engine control, since everything else is either automatic or not present (thermostats on oil and cooling system; no carburettor heater, no choke, no mixture).
29. There are no fabricated brackets and fittings for the engine installation.
30. Work for amateur builder involves fabrication of hoses for cabin heating system, fuel system, oil system. Also involves fabrication of electrical wiring for fuel pumps and starter and alternator.
31. Engine is produced by Rotax and does not require assembly.
32. The engine top and bottom cowlings are supplied as premolded FRP parts. Process for amateur builder involves cutting, trimming, fitting and bonding of parts. Although the lamination of the FRP is by the factory, the remaining work is judged as sufficient to credit the amateur builder with a 50% share in the fabrication of the cowlings.
33. Installation work for amateur builder includes fitting of Camloc fasteners to cowlings.



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34. Assembly of propeller has been added to description of task. The 3-blade propeller is of the ground adjustable type and requires assembly by builder prior to installation. Assembly takes place on work bench and includes setting of correct blade angles and bolt torques. Therefore, it is judged that by crediting the amateur builder with the assembly of the propeller, a 50% share in the fabrication and assembly is justified.
35. Fuel tanks are made from FRP and are premolded, assembled and pressure tested by Lambert Aircraft Engineering.
36. Installation of fuel tanks takes place during wing assembly. See note 12.
37. Work for amateur builder involves fabrication of fuel lines and hoses.
38. Instrument panel is laser cut from aluminium sheet. Work for amateur builder involves bending of lower edge and riveting of brackets for rear mounted accessories (relays, connectors). Although the amateur builder is not involved in the laser cutting process, the remaining work is sufficient to credit the amateur builder with a 50% share in the fabrication of the instrument panel.
39. The basic seat frames are welded by Lambert Aircraft Engineering. The seat pan and backrest are made from aluminium sheet. Work for amateur builder involves bending, trimming, drilling and fitting of aluminium sheet, and riveting the seat pan and backrest to the frames. Although the amateur builder is not involved in the steel cutting and welding stage, the remaining work is sufficient to credit the amateur builder with a 50% share in the fabrication of the seats.
40. Because of the Rotax 912iS puts special requirements on the electrical system, the electrical wiring harness is made by Lambert Aircraft Engineering. For the kits that are assembled under the Build Assist Programme, the programme provides for involvement of the amateur builder in the fabrication of the wiring harness. Because it is critical to aircraft safety and because the consequences of a mistake can be very expensive, this work must take place under close supervision. Therefore, it is judged that the amateur builder cannot be fully credited with the fabrication of the wiring looms, and a 50% share is justified.

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