AirBorne AUSTRALIA


# XT Series Light Sport Aircraft
# Kit Assembly Instructions
# ISSUE 1.0

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**Part # 109029**

# DATA PACKAGE

This Kit Assembly Instruction constitutes one part of the complete data package that accompanies the aircraft. Following is a list of each of the components, which are required.

| | |
|---|---|
| • **Pilot's Operator's Handbook or Aircraft Operating Handbook** | |
| • **XT Maintenance Manual** | |
| • **XT Illustrated Parts Catalogue** | |
| • **Wing Maintenance Manual** | |
| • **Wing Illustrated Parts Catalogue** | |
| • **Rotax Owners Manual** | |
| • **Rotax Maintenance (Compact Disk)** | |
| • **Radio Manual – If Installed** | |
| • **BRS Parachute Manual – If Installed** | |
| • **Transponder Manual – If Installed** | |
| • **Kit Assembly Instruction – If supplied as kit LSA** | + |

**Table 1 XT Data Package**

# 1.00 REVISION HISTORY

January 2008- Revision 1.0 Created to address the Kit built Light Sport Aircraft Market.

### AMENDMENT RECORD SHEET

| Amendment Date | Affected Sections | Affected Pages | Date Inserted | Signature |
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**Table 2 Amendment Record Sheet**

### NOTE

Airborne data packages will be revised from time to time. Owners registered on AirBorne's database will be notified of any changes to data and directed to the AirBorne website (<http://www.airborne.com.au/>) for the applicable pages. The amended pages should be printed and the prior page replaced in the folder as soon as possible. The amendment table should at that time be updated with the appropriate details and date. Revised pages will be sent by mail if requested.

## *1.10 LOG OF ALL EFFECTIVE PAGES*

| Page | Issue | Date | Page | Issue | Date |
|---|---|---|---|---|---|
| All of issue | 1.0 | January 2008 | | | |
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**Table 3 Log Of All Effective Pages**

# 2.00 INTRODUCTION

This manual contains factory recommended procedures and instructions for the assembly of the XT Series aircraft from a kit.

This document is applicable to the XT series microlight, of 912 / 582 engine sizes and full pod / Outback variants.

This includes: Safety summary, description of applicable standards, required consumer abilities and responsibilities, required equipment and environmental conditions, parts list, assembly operations, final assembly inspections, flight test procedures and additional requirements.

The aircraft to which these Kit Assembly Instructions (KAI) are applicable, is an XT series aircraft intended primarily for recreation. Kit assembled Light Sport Aircraft are destined for registration as Experimental Light Sport Aircraft. Special light Sport aircraft differ in that they have additional assembly qualifications required and quality assurance procedures that apply to them (only authorized AirBorne distributors have the training and quality assurance qualifications to provide S-LSA assembly and registration). Special Light Sport aircraft are those that may be used for commercial training, hire and reward. An aircraft assembled according to the consumer ability criteria and checklists provided in this KAI for Experimental kit built LSA are not eligible for registration as Special Light Sport Aircraft.

## 2.10 INSTRUCTIONS FOR USING THE KAI

The KAI is navigated using the table of contents on page 7.
Please take time to familiarise yourself with the contents of this document before commencing work on assembly of the aircraft.

**Categories of Registration, Applicability of this Document**

The basic form of this aircraft is certified as a Primary Category aircraft and as a Special Light Sport Aircraft (SLSA); it comes with manuals and placards applicable to the registration category as ordered from the factory. The Special Light Sport Category of registration is available only to customers who order the appropriate documentation from the factory. Changing from an experimental aircraft as assembled from a kit, to a SLSA, is not possible once kit assembly has commenced. If you intend to register as SLSA, contact the factory before commencing any work, as special qualifications and specialised documentation must be used that is not provided in these kit assembly instructions.

**Note** that S-LSA aircraft must be assembled by authorised AirBorne Distributor who is also a part of the registration function; whereas, an ELSA kit may be assembled by a customer with appropriate skills as specified by the manufacturer.

The category of registration may be quite varied; as such the maintenance requirements of this aircraft are to be applied in conjunction with the requirements of the National Airworthiness Authority (NAA) of the country of registration. Any NAA maintenance requirement takes precedence over this manual.

## *2.20 Service Difficulty Reporting*

The Kit Assembly Instructions have been prepared using the ASTM required sections and ASTM format. If any errors or omissions are found in this manual please advise the factory. Any assembly difficulties, defects or instruction deficiencies should be reported to Airborne using the form contained in appendix A.

**WARNING**

**THE EXPERIMENTAL CATEGORY OF REGISTRATION PERMITS MODIFICATION OF AIRCRAFT STRUCTURE AND DEVIATION FROM THE PROCEDURES GIVEN IN THIS DOCUMENT. IT IS THE OPINION OF AIRBORNE THAT THE INFORMATION IN THIS MANUAL NEEDS TO BE FOLLOWED, AND IT IS NOT ACCEPTABLE TO MAKE CHANGES TO THE MATERIALS AND OR PHYSICAL FEATURES OF THIS AIRCRAFT. IN PARTICULAR THE GRADES OF BOLTS THAT HAVE BEEN UTILISED IN THE MANUFACTURE OF THIS AIRCRAFT ARE CRITICAL FOR ITS CONTINUING AIRWORTHINESS. NEVER REPLACE BOLTS WITH ANY OTHER SIZE OR GRADE. GRADE 8 BOLTS ARE NOT INTERCHANGEABLE WITH AIRCRAFT (AN) GRADE BOLTS. THE FATIGUE CHARACTERISTICS OF AIRCRAFT GRADE BOLTS ARE SUPERIOR TO OTHER BOLTS AND ALLOW LONGER SAFE SERVICE LIFE UNDER CYCLIC LOADS LIKE THOSE EXPERIENCED IN AIRCRAFT. THE LENGTH OF BOLT IS IMPORTANT. IF A SHORTER BOLT IS USED THE THREAD MAY ENCROACH ON THE LOAD BEARING AREA, WHICH INCREASES THE STRESSES EXPERIENCED BY IT.**

## *2.30 USE OF METRIC/ IMPERIAL UNITS*

This KAI uses the metric unit system as the basic system of measurement. Where common usage or available instrumentation refer to the Imperial system, both units are quoted. The following conversion factors are presented as a ready reference to the conversion factors that have been used in this manual.

| | | |
|---|---|---|
| 1 Pound (lb) | = | 0.4536 Kilogram (kg) |
| 1 Pound per sq in (psi) | = | 6.895 Kilopascal (kPa) |
| 1 Inch (in) | = | 25.4 Millimetres (mm) |
| 1 Foot (ft) | = | 0.3048 Metre (m) |
| 1 Statute mile | = | 1.609 Kilometres (km) |
| 1 Nautical mile (NM) | = | 1.852 Kilometres (km) |
| 1 Millibar (mb) | = | 1 Hectopascal (hPa) |
| 1 Millibar (mb) | = | 0.1 Kilopascal (kPa) |
| 1 Imperial gallon | = | 4.546 Litres (l) |
| 1 US gallon | = | 3.785 Litres (l) |
| 1 US quart | = | 0.946 Litre (l) |
| 1 Cubic foot ($ft^3$) | = | 28.317 Litres (l) |
| 1 Degree Fahrenheit (F) | = | (1.8 X C)+32 |
| 1 Inch Pound (in lb) | = | 0.113 Newton Metres (Nm) |
| 1 Foot Pound (ft lb) | = | 1.356 Newton Metres (Nm) |

**Table 4 Imperial / Metric Conversions**

# 3.00 CONTENTS

## 3.10 LIST OF TABLES



## 3.20 LIST OF FIGURES

# 4.00 SAFETY SUMMARY

This section is intended to provide a list of potential hazards associated with the assembly of the kit.

## *4.10 Chemicals*

Hazardous chemicals used for the assembly of the kit are listed.

- 4.10.10 Unleaded Petrol
- 4.10.20 Oil, generic description.
- 4.10.30 Cadmium, as applicable to aircraft bolts.

### 4.10.10 Unleaded Petrol

MSDS information is condensed from the full publication, as issued from the Caltex Australia website - 'www.caltex.com.au'.

**Hazard Classification**
Classified as Hazardous according to the criteria of NOHSC.
Classified as Dangerous Goods according to the ADG Code.
Risk phrase:
R11 Highly flammable.
R38 Irritating to skin.
R45(1) May cause cancer.
R65 Harmful: may cause lung damage if swallowed.
R48/20/21/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if
swallowed.
Safety phrase:
S16 Keep away from sources of ignition - No smoking.
S2 Keep out of reach of children.
S62 If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.
**Risk Phrase(s)**
R11 Highly flammable.
R38 Irritating to skin.
R65 Harmful: may cause lung damage if swallowed.
R45(1) May cause cancer.
R48/20/21/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if
swallowed.
**Safety Phrase(s)** S2 Keep out of reach of children.
S16 Keep away from sources of ignition - No smoking.
S62 If swallowed, do not induce vomiting; seek medical advice immediately and show this container or label.
**Other Information** Use as a motor fuel only. Do not siphon with the mouth.
Do not use in the vinicity of a fire, a hot surface or during welding.

## 4.10.20 Oil

Typical material safety data for engine oil follows in condensed form, relevant sections extracted from original source courtesy of
www.msdsxchange.com

**FSC:** 9150 **NIIN:** 00−188−9862 **MSDS Date:** 05/15/1995 **MSDS Num:** CCJRJ
**Submitter:** D DG **Tech Review:** 12/16/1996 **Status CD:** C
**Product ID:** 1128 ULTRALUBE ENGINE OIL SAE 40 **MFN:** 03
**Article:** N **Kit Part:** N
Responsible Party **Cage:** 1L506
**Name:** SOUTH COAST TERMINALS, INC
**Address:** 7401 WALLISVILLE ROAD **Box:** 15535
**City:** HOUSTON **State:** TX **Zip:** 77020
**Country:** US

Item Name: LUBRICATING OIL,ENGINE
Specification Number: MIL−L−2104F Type/Grade/Class: 40 GRADE

**Name: DISTILLATES, HYDROTREATED HEAVY PARAFFINIC**

**LD50 LC50 Mixture**TOXICITY DATA CALL 713−672−2401 EXT 301.
Route Of Entry Inds − Inhalation:YES Skin:YES Ingestion:NO
Carcinogenicity Inds − NTP:NO IARC:NO OSHA:NO
Health Hazards Acute And Chronic
INHAL:HIGH VAP CONC MAY CAUSE IRRIT OF EYE/NOSE/THROAT. EYE:IRRIT,BUT WILL NOT PERM INJURE EYE TISSUE.DIRECT CONTACT MAY CAUSE BURNING,TEARING,REDNESS. SKIN:FREQUENT/PROL CONTACT MAY IRRIT SKIN,CAUSE SKIN RASH(DERM). INGEST:SM AMTS OF LIQ MAY BE DRAWN INTO LUNGS BY EITHER SWALLOW/VOMIT.MAY CAUSE SEVERE/DELAYED (SUPPLE)
Explanation Of Carcinogenicity
N/P
Signs And Symptions Of Overexposure
IRRIT OF NOSE/EYE/THROAT. EYE IRRIT, BURNING, TEARING, REDNESS. SKIN IRRIT, RASH (DERMATITIS). ASPIRATION INTO LUNGS:SEVERE & DELAYED HEALTH EFFECTS SUCH AS INFLAMMATION OF LUNGS (PULM EDEMA) & INFECT ION OF BRONCHI (BRONCHOPNEUMONIA). DIGESTIVE TRACT IRRIT & DIARRHEA. SKIN SENS, ALLERGIC REACTION.
Medical Cond Aggravated By Exposure
NONE SPECIFIED BY MANUFACTURER.
First Aid
INHAL:IRRIT NOSE/THROAT DEVELOPS MOVE AWAY FROM EXPO SOURCES.IRRTI PERSISTS SEEK MED ATTN. EYE:FLUSH W/LG AMTS OF CLEAN WATER TIL IRRIT SUBSIDES.IRRIT PERSISTS GET MED ATTN. SKIN:FLUSH W/LG AMTS OF WA TER.USE SOAP IF AVAILABLE.REMOVE SEVERELY CONTAMIN CLOTH
2
INCLUDING SHOES.IRRIT PERSIST SEEK MED ATTN. INGEST:DO NOT INDUCE VOMIT.KEEP @REST.GET PROMPT MED ATTN.ADDN:MED OPINION DIVIDED FOR LG(SUPPLEM)
Spill Release Procedures
LAND:TREAT AS OIL SPILL.CONTAIN/REMOVE BY MECHANICAL MEANS.NOTIFY APPLICABLE FED/STATE/LOC AUTHORITIES AS REQUIRED.WATER:REMOVE BY SKIMMING OR W/SUITABLE ABSORBENTS.IF ALLOWED BY LOC ENVIR REG AGENCIE S USE SUITABEL DISPERSANT.
Neutralizing Agent
NONE SPECIFIED BY MANUFACTURER.
Waste Disposal Methods
CONSULT EXPERT ON DISPO OF RECOVERED MATL.ENSURE DISPO IN COMPLIANCE WITH GOVT REQMTS/ENSURE CONFORMITY TO LOC DISPO REGS.SARA TITLE III/313 REPORTABLE INGRED:NONE.
Handling And Storage Precautions
STORAGE TEMP/PRESSURE:AMB/ATM.KEEP CNTNR CLSD.LOOSEN CLOSURE CUAT BEF OPENING.STORE IN ATM TEMP,WELL VENT PLACES.KEEP AWAY FROM HEAT/SPARKS/FLAMES.
Other Precautions
EMPTY CNTNR MAY RETAIN ANY DESCRIBED PROPERTIES.FOLLOW ALL MSDS/LABEL WARNINGS EVEN AFT CNTNR IS EMPTIED.

**Flash Point Method:** COC
Flash Point: Flash Point Text: 392F,200C
Autoignition Temp: Autoignition Temp Text: N/AVAI
Lower Limits: NA Upper Limits: NA
Extinguishing Media

FOAM, DRY CHEMICAL, CO2, SAND, EARTH.
Fire Fighting Procedures
EITHER ALLOW FIRE TO BURN OUT UNDER CONTROLLED CONDITIONS OR EXTINGUISH W/FOAM/DRY CHEM,CO2,SAND,EARTH.WATER & FOAM MAY CAUSE FROTHING.RESP/EYE PROT REQUIRED.
Unusual Fire/Explosion Hazard
NOT CONSIDERED FLAMM LIQ.WHEN BURN HOWEVER PROD MAY YEILD MAJOR AMTS OF OXIDES OF CARBON & MINOR AMTS OF OXIDES OF SULFUR,NITROGEN,PHOSHPORUS,CALCIUM,ZN.

**Respiratory Protection**
IF CONCENTRATIONS ARE OVER EXPO LIMITS USE AIR SUPPLIED RESPIRATOR.
Ventilation
NONE SPECIFIED BY MANUFACTURER.
Protective Gloves
CHEM/OIL RESIST,NEOPRENE,BUTYL RUBB.

Eye Protection
CHEM GOGGLES, FACE SHIELDAS AS APPROPRIA
Other Protective Equipment
PEOPLE WHO ARE HYPERSENS TO OIL PROD AVOID DIRECT SKIN CONTACT.WEAR RUBB BOOTS.
Work Hygienic Practices
WASH CONTAMIN CLOTH BEF REUSE.
Supplemental Safety and Health
HEALTH HAZ:HEALTH EFFECTS(INFLAMM OF LUNS−PULM EDEMA,INFECTION OF BRONCHI−BRONCHOPNEUMONIA).INGEST MAY CAUSE IRRIT OF DIGESTIVE TRACT & DIARRHEA.CHRONIC:MAY CAUSE SKIN SENS,ALLERGIC RX WHICH BECOMES E VIDENT ON REEXPO TO MATL. 1STAID:INGEST.EMESIS/LAVAGE HAS BEEN RECOMMENDED FOR THOSE PETRO PROD W/HIGH ORAL TOXICITY.

**HCC:** V6 NRC/State LIC No: N/R
Net Prop WT For Ammo:
Boiling Point: B.P. Text: >260F,>127C
Melt/Freeze Pt: M.P/F.P Text: NA
Decomp Temp: Decomp Text: NP
Vapor Pres: <0.01 @20C Vapor Density: >AIR
Volatile Org Content %: Spec Gravity: 0.87−0.88 @60F
**VOC Pounds/Gallon:** PH: NEUTRA
VOC Grams/Liter: Viscosity: 14.20CST@100C
Evaporation Rate & Reference: SLOWER THAN ETHER.
Solubility in Water: NEGLIGIBLE.
Appearance and Odor: ADDITIVE ODOR, CLEAN AMBER LIQUID.
Percent Volatiles by Volume: NP Corrosion Rate: NP

TOP

**Stability Indicator:** YES
Stability Condition To Avoid: NONE SPECIFIED BY MANUFACTURER.
Materials To Avoid: STRONG OXIDIZING AGENTS.
Hazardous Decomposition Products: SMOKE, FUMES, OXIDES OF CARBON. MINOR AMTS OF OXIDES OF SULFUR, NITROGEN, CALCIUM,
PHOSPHORUS &ZINC MAY BE FORMED.
Hazardous Polymerization Indicator: NO
Conditions To Avoid Polymerization

==========

### 4.10.30 CADMIUM PLATING

This MSDS is provided for its applicability to aircraft bolts

AURORA BEARING COMPANY -- CADMIUM PLATING -- 8030-00N015169
========== Product Identification ==========

Product ID:CADMIUM PLATING
MSDS Date:03/16/1988
FSC:8030
NIIN:00N015169
MSDS Number: BKPXL
=== Responsible Party ===
Company Name:AURORA BEARING COMPANY
Address:970 SOUTH LAKE STREET
City:AURORA
State:IL
ZIP:60506-5929
Country:US
Info Phone Num:312-859-2030
Emergency Phone Num:312-859-2030
CAGE:56644
=== Contractor Identification ===
Company Name:AURORA BEARING COMPANY
Address:970 SOUTH LAKE STREET
Box:City:AURORA
State:IL
ZIP:60506-5929
Country:US
Phone:312-859-2030
CAGE:56644

========== Composition/Information on Ingredients ==========

Ingred Name:CADMIUM (METAL). REC EXPOS LIMIT: 0.1 MG/M3 FUME, 0.2 DUST
(MFR).
Other REC Limits:SEE INGRED NAME

========== Hazards Identification ==========

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.
Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO
Health Hazards Acute and Chronic:PULMONARY INTERSTITIAL EDEMA WITHIN 24
HOURS. TOXIC NEPHROSIS, BONE MARROW DAMAGE, CHEST PAIN ARE ALL
POSSIBLE WITH CHRONIC OVEREXPOSURE.
Explanation of Carcinogenicity:GROUP 2A (IARC), GROUP 2 (NTP).
Effects of Overexposure:NONE SPECIFIED BY MANUFACTURER.
Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

========== First Aid Measures ==========

First Aid:IN EMERGENCY USE DECONGESTANTS AND BRONCHODILATORS, STEROIDS,
ANTIBIOTICS AND GET VICTIM TO FRESH AIR. GET IMMEDIATE MEDICAL
ATTENTION AND GIVE OXYGEN IF AVAILABLE. INGEST: CALL MD IMMEDIATELY
.

========== Fire Fighting Measures ==========

Extinguishing Media:NONE SPECIFIED BY MANUFACTURER.
Fire Fighting Procedures:NONE SPECIFIED BY MANUFACTURER.
Unusual Fire/Explosion Hazard:GRINDING AND POLISHING DUST MAY BE
EXPLOSIVE OR FIRE HAZARD UNDER CERTAIN CONDITIONS.

========== Accidental Release Measures ==========

Spill Release Procedures:NONE SPECIFIED BY MANUFACTURER.
Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

========== Handling and Storage ==========

Handling and Storage Precautions:WHERE QUANTITIES WARRANT, STORE FOR
POSSIBLE RECLAMATION.
Other Precautions:NONE SPECIFIED BY MANUFACTURER.

========== Exposure Controls/Personal Protection ==========

Respiratory Protection:NIOSH/MSHA APPROVED RESPIRATOR FOR DUST, MIST
AND FUMES AS APPLICABLE.
Ventilation:USE OF LOCAL EXHAUST IS RECOMMENDED FOR HOT OPERATIONS.
Protective Gloves:PROTECTIVE GLOVES.
Eye Protection:CHEMICAL WORKERS GOGGLES .
Other Protective Equipment:APRONS.
Work Hygienic Practices:WASH HANDS AND FACE BEFORE EATING, DRINKING OR
SMOKING.
Supplemental Safety and Health
NONE SPECIFIED BY MANUFACTURER.

========== Physical/Chemical Properties ==========

HCC:T6
Boiling Pt:B.P. Text:767F,408C
Vapor Pres:NONE @ 70F
Spec Gravity:8.64
Appearance and Odor:STEELY WHITE METAL, NO ODOR.

========== Stability and Reactivity Data ==========

Stability Indicator/Materials to Avoid:YES
OXIDIZING AGENTS AND ACIDS.
Stability Condition to Avoid:NONE SPECIFIED BY MANUFACTURER.
Hazardous Decomposition Products:NONE SPECIFIED BY MANUFACTURER.

========== Disposal Considerations ==========

Waste Disposal Methods:DISPOSAL MUST BE IN ACCORDANCE WITH LOCAL, STATE
AND FEDERAL REGULATIONS .

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# 5.00 APPLICABLE STANDARDS AND SPECIFICATIONS

This kit is provided in a form to allow registration as a kit built experimental Light Sport Aircraft.
As such the aircraft is delivered in a similar form to a Special Light Sport Aircraft, with the exception of statement of compliance and requirements for assembly / tuning flight / inspection skills on the kit built aircraft are reduced.
The design of the kit built aircraft is as per the Special Light Sport Aircraft. As such the manuals and design standards are shared with special and kit built experimental aircraft.

Applicable standards include the following ASTM designations:

| | |
|---|---|
| Design and Performance | (F 2317/F 2317M–05) |
| Continued Airworthiness | (F2425–05a) |
| ~~Production Acceptance Test~~ | ~~(F2447–05)~~ not applicable to kit aircraft |
| Airframe Parachutes | (F2316–03) |
| Maintenance & Manuals | (F2483–05) |
| Operational Safety Monitoring | (F2295–03) |
| Product Information | (F2457–05) |
| Quality Assurance | (F2448–04) |
| Kit Instructions | (F 2563 –06) applicable to kit aircraft only |

# 6.00 TERMINOLOGY

| | |
|---|---|
| CAA | Civil Aviation Authority |
| NAA | National Airworthiness Authority |
| FAA | Federal Aviation Authority |
| CASA | Civil Aviation Safety Authority |
| RAO | Recreational Aviation Organisation such as the RAA, HGFA, EAA |
| RAA | Recreational Aviation Australia |
| HGFA | Hang Gliding Federation of Australia |
| EAA | Experimental Aircraft Association |
| Maintenance inspector | FAA approved inspector of Experimental aircraft, holding a maintenance Inspector approval or higher (A&P, service centre) maintenance approval issued by the FAA. |
| DAR | District Airworthiness Representative |
| Consumer / Customer | Purchaser of the aircraft kit |
| Owner | Owner of the aircraft and person listed as the manufacturer of the experimental aircraft |
| CoA | Certificate of Airworthiness |
| KAI | Kit Assembly Instructions |
| LSA | Light Sport Aircraft |
| SLSA | Special Light Sport Aircraft, an aircraft requiring special registration and quality assurance documentation. Used for hire and reward, LAME maintained. |
| ELSA | Experimental Light Sport Aircraft, as built from this kit using these instructions. The aircraft is primarily intended for recreational use |
| LAME | Licensed Aircraft Maintenance Engineer, equivalency to A&P mechanic. |
| AD | Airworthiness Directive |
| SD | Safety Directive |

The KAI uses terminology based on the following component overview.

## 6.10 Component Overview

Important areas of the Trike base have been identified in this section to aid maintenance personnel. These photos and list of names are not comprehensive.

### Aircraft Structure

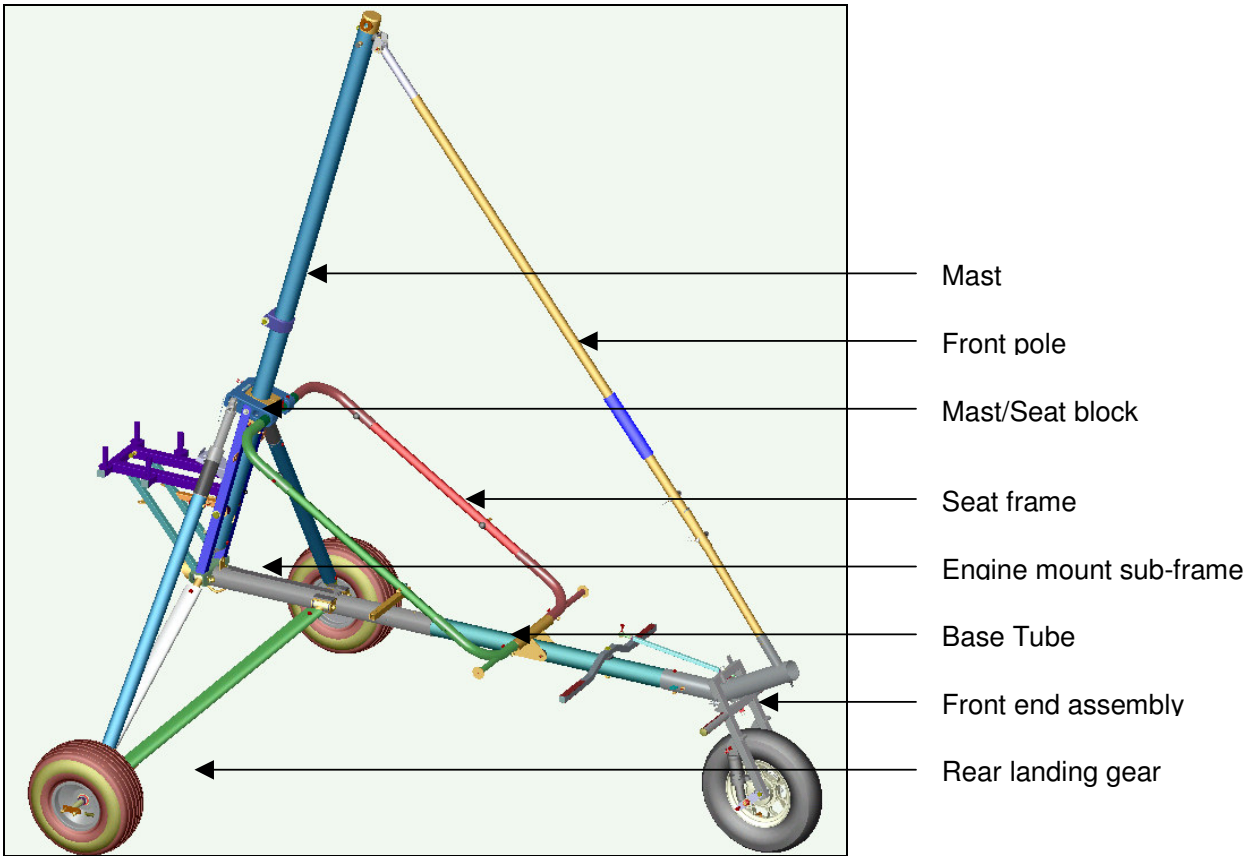



**Figure 1 Main Structural Members**

### Cockpit

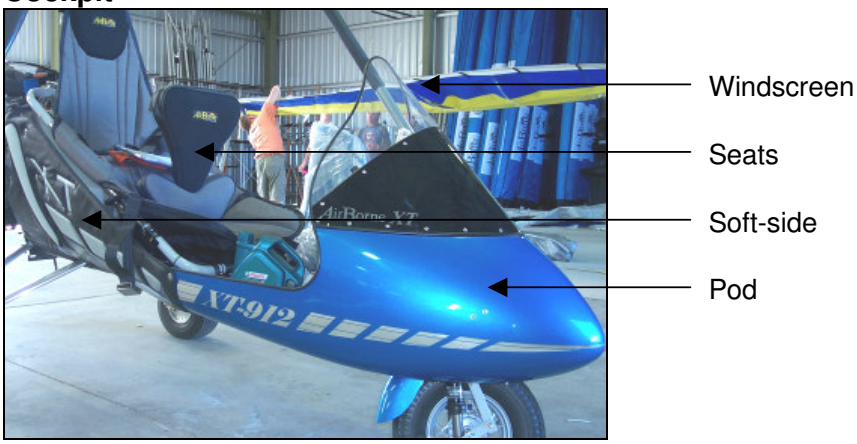



**Figure 2 Cockpit**

**Mast Block Area**

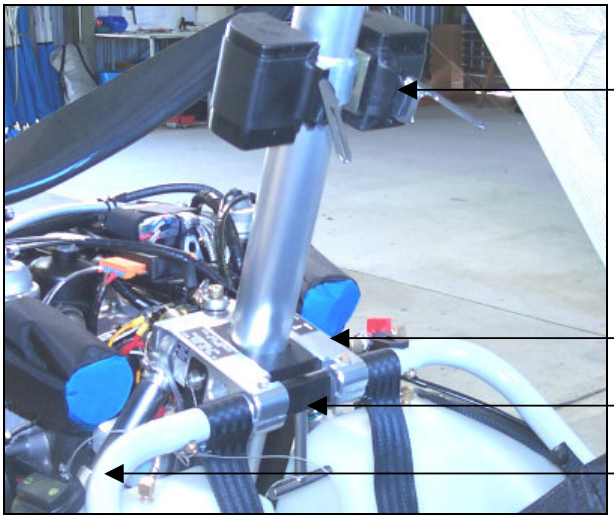



**Figure 3 Mast Block Area**

**Steering and Foot Levers**

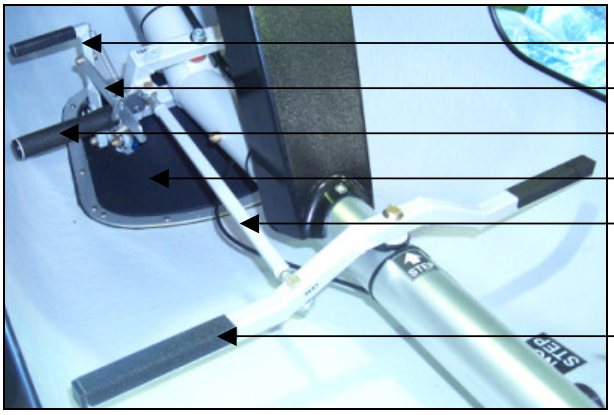



**Figure 4 Steering and Foot Levers**

**Power Plant**

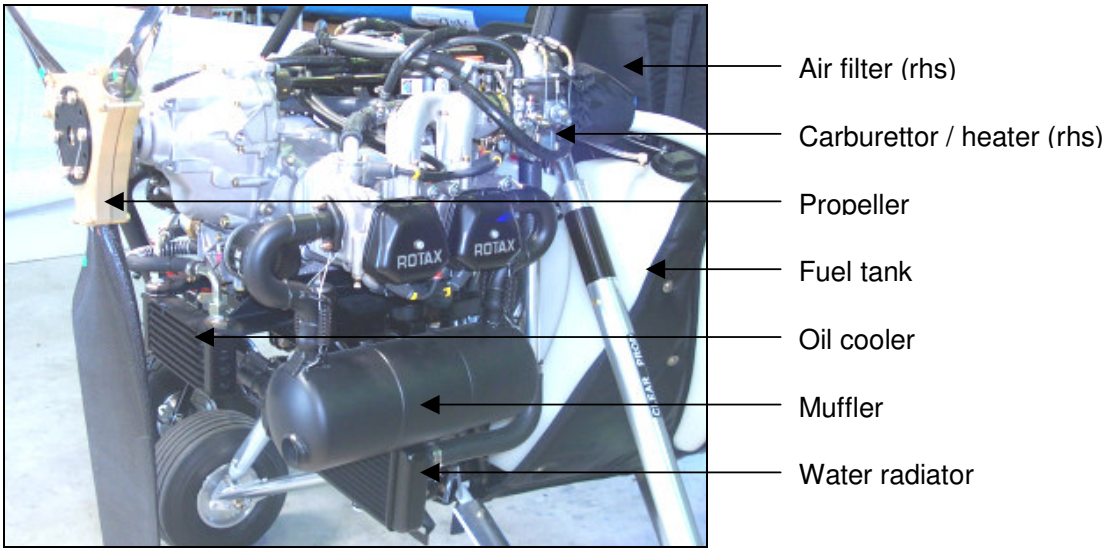



**Figure 5 Power Plant**

# 7.00 REQUIRED CONSUMER ABILITIES AND RESPONSIBILITIES

Only people with an adequate skill level should perform assembly functions on this aircraft. A sound understanding of mechanical systems, and good experience with the necessary tools and procedures is required - as the airworthiness of the aircraft relies on the competence of the person performing the assembly and aircraft inspection.

The aircraft is factory assembled and subject to operational testing before being packed for shipping. The wing is tested and tuned by factory test pilots. It is possible that a pilot familiar with operation of the model of aircraft may perform the first flights on the aircraft after assembly from the kit. Airborne recommends that the AirBorne WindSports distributor network be used to perform tuning flights where possible, as the distributors are most familiar with the inspection, flight handling qualities and tuning operations on the aircraft. Post build inspection and tuning flight/ quality assurance paperwork must be performed and signed by an Airborne distributor to validate the aircraft warranty.

## 7.10 Skills and authorisations specific to Experimental Special Light Sport Aircraft

The initial inspection conducted for the purpose of registration is performed by the NAA or their authorized delegate such as a Designated Airworthiness Representative (DAR, FAA delegate).

Subsequent yearly inspections are performed by:

*LSA Repairman Inspection*— To perform inspections to be completed on an E-LSA by a responsible owner, who holds an FAA repairman certificate (light sport aircraft), with an inspection rating or equivalent.

There are no requirements for minimum certification to perform any other task on an experimental aircraft. However, Airborne recommend that only people with an adequate skill level should perform assembly or maintenance on this aircraft as described at the start of this section.

Any areas where specific skills are required to perform an operation, it will be listed alongside the operation.

## 7.20 Consumer Responsibilities

List of forms to be filled and sent to the factory by the aircraft owner.

- GJP-144
- GJP-142w
- GJP-163
- GJP-164
- GJP-236

It is the responsibility of the consumer to complete the kit as directed in these instructions. The QA forms contained are used to guide the assembler through inspections, operation and to maintain contact with the factory on airworthiness issues. Upon change of ownership, it is the responsibility of the new owner to notify Airborne of the new owners name and contact information.

The requirement to comply with such ADs applies to both production aircraft with a Special Certificate of Airworthiness for LSA and to LSA issued with an Experimental Certificate.

When a registered operator receives a Safety Directive (SD), the operating rules require the operator to comply with the requirements of the directive. The operator may apply to the manufacturer for a variation or exemption against the SD provided suitable safety justification is included in the application. The manufacturer is to assess the application and if the safety justification satisfactorily addresses the safety issue, the manufacturer may approve an alternative means of compliance against the SD. However, if the manufacturer does not approve an application, the registered operator must comply with the requirements of the manufacturer's SD.

## 7.30 Obtaining Flight Authorisation

The Light Sport system permits kit built aircraft to fly primarily for recreational purposes. Prior to flight it is the responsibility of the aircraft owner to register the aircraft with the NAA or their delegate.

The following procedure applies to obtaining registration in the Light Sport Aircraft Experimental category:

- Register the aircraft
- Book an inspection with NAA delegate (eg a DAR with weight shift control endorsement).
- Build kit, also perform the inspection and quality assurance functions, and complete the forms as progress is made. Apply registration markings to the aircraft
- Apply Experimental sticker to the aircraft
- Apply passenger warning to the aircraft
- Apply fireproof data plate to the aircraft, see note 2.
- Present the completed aircraft to the DAR for inspection.
- Obtain a airworthiness certificate for the aircraft
- Conduct tuning flight and flight test operations (or preferably delegate this function to a qualified Airborne distributor).

Note 1.
Applicable pilot licensing for Light Sport Aircraft in the country of operation is given:

- In the USA; a sport pilot certificate (with weight shift control land endorsement) or higher as issued by the FAA.
- In Australia*;*
  - *RAA pilot certificate* issued by Recreational Aviation Australia Inc (*RAA*) that includes a Group B (weight shift control). or
  - *HGFA certificate*
    - an advanced pilot certificate with a motorised endorsement; or
    - a weight shift microlight pilot certificate issued by the Hang Gliding Federation of Australia (*HGFA*).

Note 2: Engrave the data plate with the owners name as the manufacturer. The data plate must be located and secured so that it will not deface or detach in normal service. It must be attached to the exterior, behind the cockpit in plain view. The data plate information is to be duplicated on FAA Forms 8130-6 and 8050-3.

Deviations from the instructions or unauthorised modifications may prohibit the aircraft from obtaining flight authorisation. This will be at the discretion of the DAR / maintenance inspector, performing inspections on the aircraft,

# 8.00 REQUIRED EQUIPMENT AND ENVIRONMENTAL CONDITIONS

## *8.10 Tooling*

There are no specialised tools needed for the kit assembly described in this manual. Following is a list of the type of tools that may be required.

Ratchet & Sockets

| | |
|---|---|
| 7/16” | (struts & propeller) |
| 1/2” | (struts) |
| 5/16” | (battery) |
| 3/8” | (front axle lock bolt) |
| 15/16” | (wheel nuts on tundra undercarriage) |
| 13mm | (propeller) |
| 17mm with extension | (front mud guard) |
| 19mm | (front wheel axle nut) |

Ring spanners (box end wrenches)

- 7/16”
- 3/8”
- 1/2”
- 8 mm
- 10 mm

Hex Keys

- 3 mm
- 4 mm

Soft hammer

| | |
|---|---|
| Power drill with socket drive 5/16 | (crate screws) |
| Shifting spanner / crescent wrench | (for use on wheel nut / spat bracket on spat model) |

Lifting mechanism and anchor suitable for a safe working load of 200kg.
Torque wrench (to apply up to 13Nm) (propeller)
Air Pump (Schrader Style Valve) and pressure gauge.

| | |
|---|---|
| Pliers, cutters | (Tie wire tooling) |

## *8.20 Wing Assembly Environmental Conditions*

Assembly of the wing is best performed in the following environmental conditions:
Clean open area such as carpeted floor, clean dry grass, an open area length of 8m or more is desirable.
Lighting should be adequate to read printed parts labels and instructions.
Light wind conditions are desirable for outdoor assembly.
Temperature and humidity are not critical for assembly operations.

### *8.30 Trike Base Assembly Environmental Conditions*

Assembly of the trike base is best performed in the following environmental conditions:
Clean open area located indoors, with clean carpeted or concrete floor. An open area of 4m x 4m or more is desirable.

An assembled trike with mast up stands under 2.6 m tall, with minimum height at under 1.7 m with the mast down and propeller on. A pulley set or lifting device with safe working load of 200 kg or more is required, with anchor point above the trike base. The trike may be lifted by the mast top (with mast extended), or by the gearbox (with mast folded) depending on height restrictions.

Crate plan dimensions are 2820 x 680mm as maximum values.
Lighting should be adequate to read printed parts labels and instructions.
Temperature and humidity are not critical for assembly operations.

# 9.0 PARTS LIST

The kit aircraft is provided for sale in two principle components; the wing and trike base.
The components of each of the major assemblies are listed.

Wing components, as short packed for shipping:
Major frame and sail assembly

| | |
|---|---|
| 1 of Rear leading edge right | L/EDGE REAR S3 CRUZE RHS ASM 106445 /or<br>L/EDGE REAR WIZARD III RHS ASM 104742 |
| 1 of Rear leading edge left | L/EDGE REAR S3 CRUZE LHS ASM 106443 /or<br>L/EDGE REAR WIZARD III LHS ASM 104741 |
| 1 of Batten set | BATTEN SET STREAK 2B/3 HINGE 106453 /or<br>BATTEN SET CRUZE HINGE 106891 /or<br>BATTEN SET WIZARD HINGE 106904 |

Kit Component List

Trike Base components, as packed in crate for shipping:
Major trike base assembly
Front mast brace assembly
Rear undercarriage wishbone assembly, right and left.
Rear wheel assembly, two of.
Rear wheel spats, right and left
Front mudguard
Front wheel assembly
Propeller assembly:
- PROP HUB COMPLETE BOLLY or WARP DRIVE
- TIE WIRE
- PROP BLADE BOLLY or WARP DRIVE, 3 of 3

# 10.00 XT RE-ASSEMBLY FROM CRATE INSTRUCTIONS

This document forms a pictorial instruction set and checklist for trike base assembly from crate. Detailed instructions of assembly are included in the maintenance manual. This document forms a sensible sequence of activities for an Airborne distributor / airframe mechanic to perform re-assembly from crate and conduct a quality assurance inspection on the assembly.

## *10.10 Trike Base Re-Assembly*

## Procedure

The crate packaging may vary slightly in arrangement depending on the spare parts provided on the order. Some additional unpacking may be required on any individual aircraft shipping crate.

Locate the crate underneath a lifting device that has a safe working load of 200 kg or more.

### *Remove Outer Cardboard Box*

Remove straps and outer cardboard box. On occasion documentation may be stapled to the inside of the cardboard box.

### *Remove small parts*

Remove small parts from the crate. On disk brake equipped models the rear undercarriage parts remain in place. Unwrap parts only as they are required for assembly.

On disk brake equipped models, support the rear undercarriage wishbone, by tying to the seat frame using rope / string or wing ties from the wing bag. This is to protect the brake line from being loaded by movement of the rear suspension struts.

### *Decide on assembly method*

The trike may be lifted by the mast top (with mast extended), or by the gearbox (with mast folded) depending on height restrictions in the workshop. These instructions assume mast top hang point, this arrangement will allow easy access to fit all wheels, assembly is possible with one person and is the method recommended where possible.

Alternatively, a soft hang loop may be used to hoist from the gearbox output shat. Considerations must be made to have assistance in fitting the front wheel (taking front fork loading) and also to connect the battery at a late stage in assembly.

### *Stand the mast upright.*

Remove the mast support member from the crate. The mast tie down strap remains in place.
Fit the front mast brace to the top bracket on the mast. Lock with wingnut and split pin.

**Figure 6 Connect the front mast brace to the mast**

*Warning* The mast is forced upright by a gas strut. Hold the mast down while removing the mast tie down strap.

Place the mast in the upright position. Find the mast cam lever inside the rear seat, remove the wrapping and install into the mast lock position. Connect the upper mast brace to the lower mast brace using the two PIP pins. See Aircraft Operating Instructions / Pilot Operating Handbook Normal Procedures section 4.4.8.

### *Lifting the trike base*

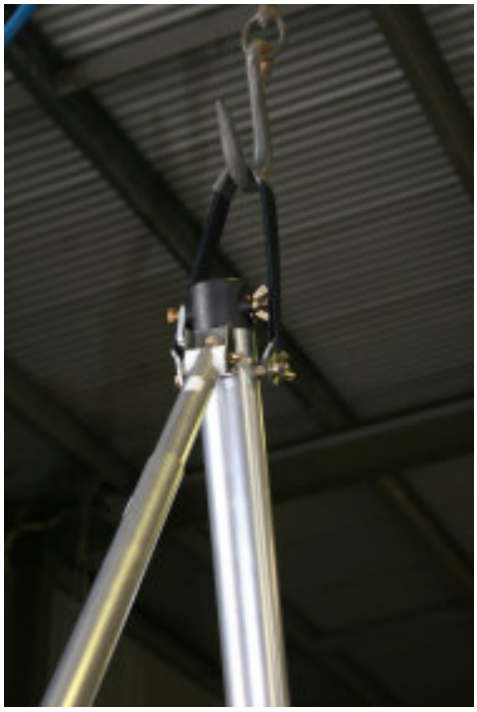


**Figure 7 Tension the lifting apparatus while separating the trike base from the crate floor**

Connect the trike base to the lifting apparatus via the mast safety strap. Lightly tension the lifting apparatus.

### *Disassemble the Crate*

Discard all packing bolts and packing screws, the mast head bolt used to support the mast during shipping is a hardware store grade bolt (do not use this as a hang bolt). The mast / wing heart bolt is packed in the orange Rotax tool bag located under the seat.

Untie the gearbox support rope.

Remove the crate top and side posts.

Apply greater load to the lifting device while separating the trike base from the crate floor.

Unbolt base tube support frame from the crate floor (at the engine end of the crate). Unbolt the front axle from the crate floor.

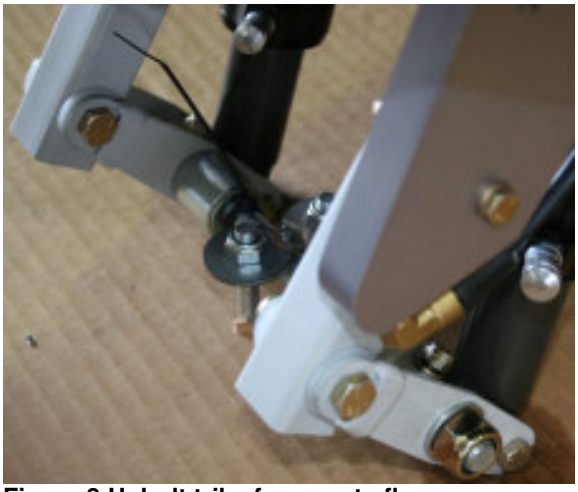


**Figure 8 Unbolt trike from crate floor**

Connect the front of the trike base using a rope to a ground or wall anchor to prevent rotation of the lifted load. Suitable front mount points include the rear steering arm for the full pod model, or for Outback model use the base tube / upper front fork.

Raise the trike clear of the ground to a height so the rear wheels may be fitted. Remove the rear trike frame support, bolted through the most rearward undercarriage strut mount.

**Figure 9 Remove the rear trike frame support**

### *Install the rear undercarriage*

Take care when handling the rear undercarriage as the brake lines are attached. Install the front and rear struts to the base bar, bolts are inserted from the rear towards the front.

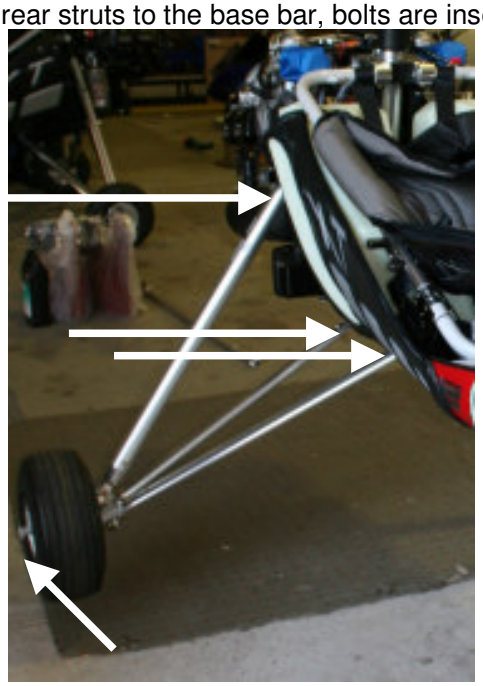


**Figure 10 Connection and fastening points on the rear undercarriage during assembly from crate.**

**Figure 11 Connect lower wishbone struts, all bolts are inserted from the rear, with nuts to the front**

The lower struts each have a washer on the front under the nut.
The right rear undercarriage strut mount on the base bar is used to mount a mast reserve cable. The cable terminates between washers, under the nut on the front of this bracket.

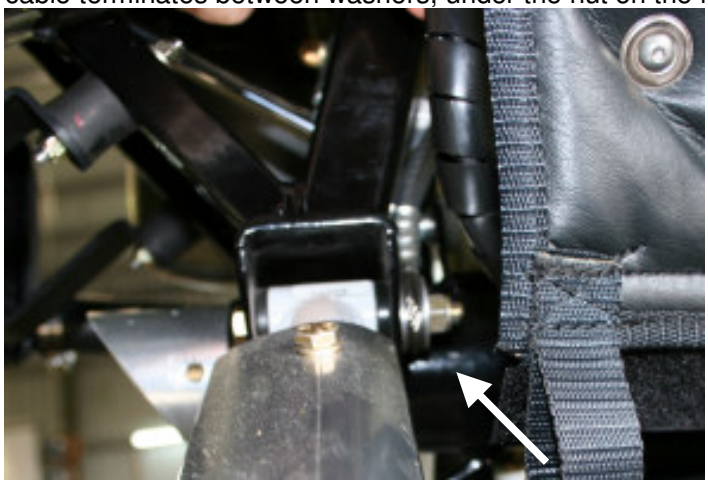


**Figure 12 Mast safety cable attachment, front side of the rear right side strut**

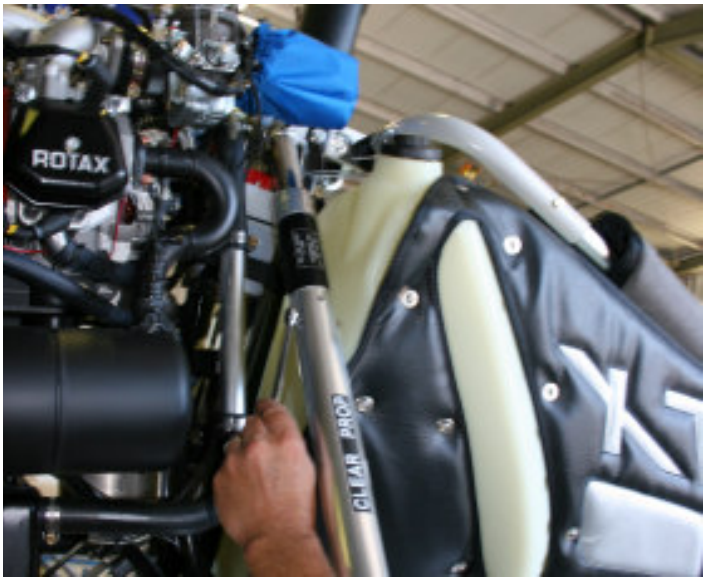



**Figure 13 Install the compression strut**

Install the compression strut to the shock absorber. The bolts are inserted from the rear towards the front, no washer is used on this bolt.
Remove the packing and cable (zip) ties from the rear wheel axle and disk brakes. Install the wheel and wheel nut. Install spats as applicable. Instructions are found in the maintenance manual Section 20.10.00 Torquing Procedures rear wheels.

Figure 14 Install spats

### *Install the front undercarriage*

Install the front mud guard.

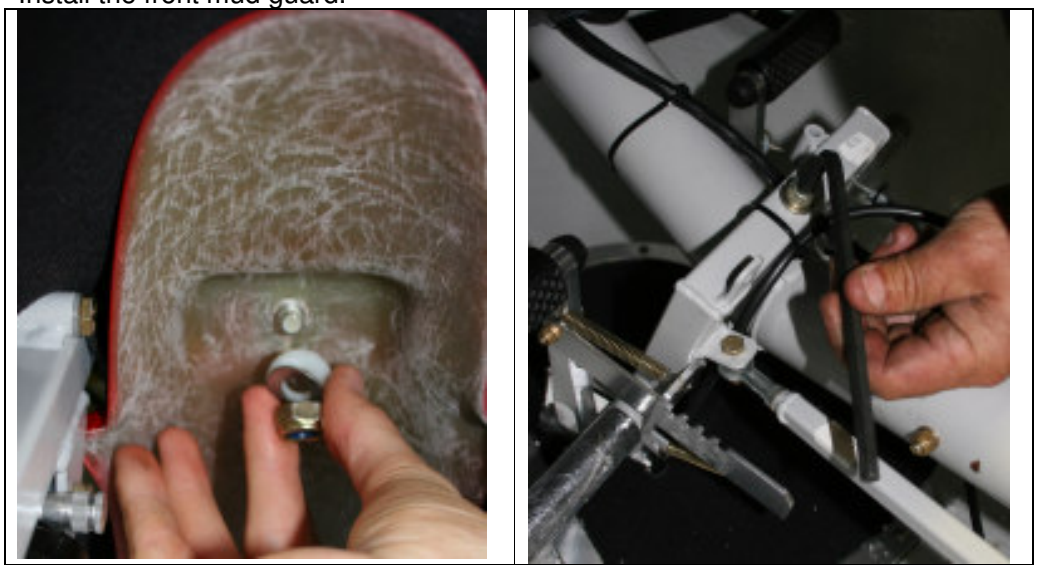
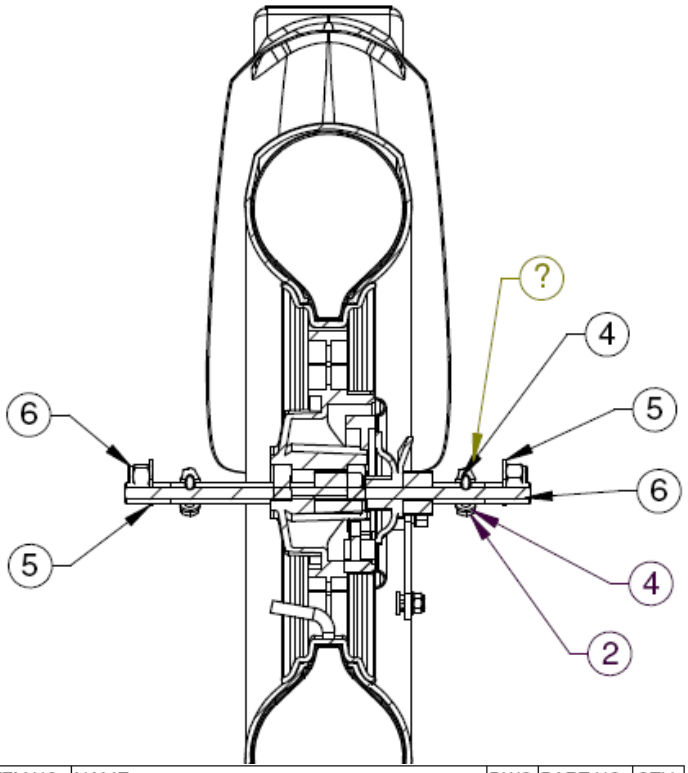


**Figure 15 Install front mudguard**

Install the brake drum into wheel (if applicable), spacers, axle, wheel, and axle lock bolts (as shown in figure 10, 11 and 12).

Install the front brake if applicable, fitting the front brake torque arm to the stainless steel bush. Fit the wheel in place.

**Figure 16 Front drum brake with torque arm**




| ITEM NO. | NAME | DWG | PART NO. | QTY. |
|---|---|---|---|---|
| 1 | AXLE ASM FRONT EDGE X-XT GREMICA | 6575 | 106713 | 1 |
| 2 | Bolt AN3-10 a | 5449 | 102927 | 2 |
| 3 | NUT NYLOC AN3 FULL | 5535 | 100051 | 2 |
| 4 | WASHER AN3 | 5540 | 100049 | 4 |
| 5 | WASHER SS 1-2 X 1" 304 FLAT | 5540 | 100093 | 2 |
| 6 | NUT NYLOC M 12 FULL - FINE | 5604 | 103612 | 2 |
| 7 | GREMICA FRONT RIM-TUBE-TYRE | 6898 | 107511 | 1 |
| 8 | MUDGUARD EDGE XT COMPLETE TBA | 6922 | 102933 | 1 |

**Figure 17 Front wheel assembly showing axle assembly, with axle locking bolts in place**

### *Lower the trike base*

Lower the trike from the suspension point. Disconnect from lifting rigging.

### *Brake check & soft side close up*

Check the static operation of the brake system by depressing the brake lever. Check for adjustment and a lack of creeping when holding the lever depressed.

Check hydraulic brake system lines for chafing or damage from handling during re-assembly.

### *Close the soft side*

Close the soft side under the rear of the aircraft at the hook and loop fasteners and rear clip.

**Figure 18 Close the soft side clip and hook & loop fastener**

### *Fitting propeller*

Assemble the propeller and fit in accordance with the maintenance manual, section 61.

### *Connect the battery*

The positive power supply cable (with double wire fuseable link) is disconnected from the battery when packaged. The cable terminal is insulated using electrical tape. Remove the electrical tape and connect the terminal of the double wire fuseable link to the positive terminal of the battery. The fastener is Philips head screw or 5/16" nut.
The positive power cable is red, with a fuseable link constructed of two green insulated wires.

**Figure 19 Connect the positive terminal of the battery**

### *Carburettor Inspection*

The carburettor has been opened and dried to comply with dangerous goods shipping regulations. Check that the fuel float reservoir (located at the bottom of the carburettor) is correctly held by the retention wire, such that the wire is pushed hard against the stop.

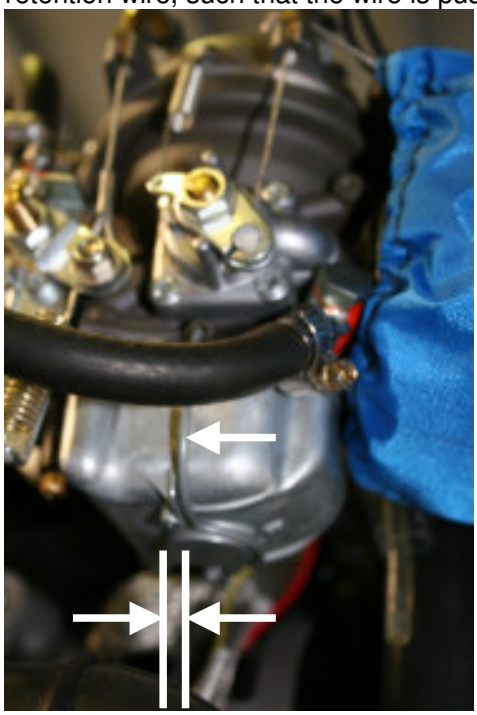


**Figure 20 Carburettor float bowl retention wire location**

## *10.20 Wing Re-Assembly form Short Pack*

**NOTE:**

- **Ensure that the tip strut is positioned on the top of the leading edge**. (Top of leading edge assumes the wing is in the flying position)

- **Insert rear leading edges in the correct side** (Left hand side has a red tip on the tip strut and the right hand side has green tip on the tip strut, And are also marked in writing) with the slot positioned horizontally.

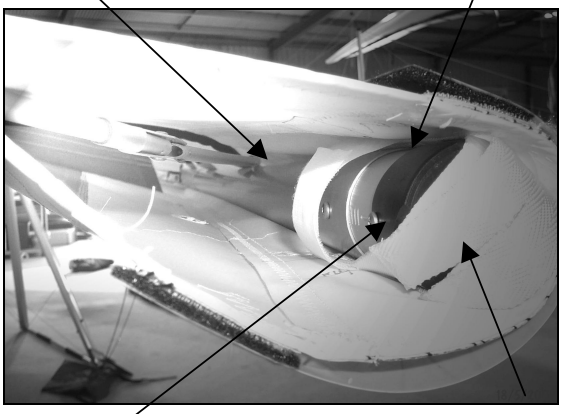
- The rear leading edges are located with their slots and are held in place by the sail loops.

- **WIND ON LEADING EDGE TENSION USING 6MM ALLEN WRENCH BEFORE LOADING TIP STRUTT OR DAMAGE WILL RESULT.**

### VIEW OF RIGHT HAND SIDE

Tip strut goes on top side of leading *edge*

*Top of rear leading edge*

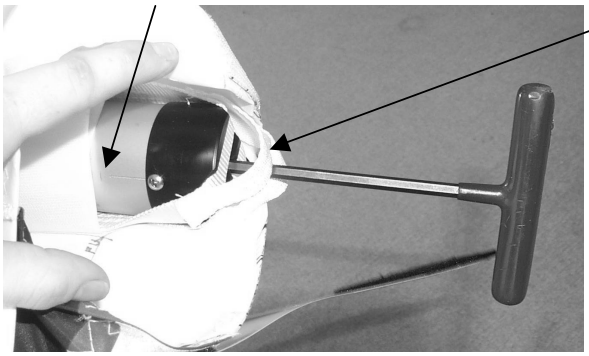


*Webbing holds rear in place*

*Phillips screw goes on inside of rear*

*Tension sail to correct mark*

*Extra webbing for assembly use only*



| ***Leading edge tension mark*** | |
|---|---|
| ***STREAK III*** | ***4TH MARK*** |
| ***STREAK 2B*** | ***3RD MARK*** |
| ***WIZARD*** | ***3RD MARK*** |
| ***CRUZE*** | ***3TH MARK*** |

# 11.00 INSPECTION AND QUALITY ASSURANCE DOCUMENTATION

## *11.10 Systems Inspection*

Conduct an inspection according to the checklist contained in this instruction set, GJP-144. Please use this form to log completion of all assembly work and to identify the name of the builder.

Review the tightening of all nuts and bolts in accordance with standard practice. See maintenance manual: Standard Practices Airframe, Torquing Procedures, Section 20.10.00.

## *11.20 Engine Start Up and Break-In*

### 11.20.10 Rotax 912

No special considerations are provided for the run in period of Rotax 912 engines. Normal operating parameters apply to new engines.

Before engine start. Please refer to the Rotax Operators manual, read and comply with the following guidelines:

Daily checks (section 10.3.2)
Pre-flight checks (section10.3.3)
Start (section10.3.4)
Prior to take off (section10.3.5)

Note:
Prior to engine start, verify that installation is complete and make sure that you can operate engine controls instinctively without hesitation.

Note:
Secure the area accordingly.

### 11.20.20 Rotax 582 and Rotax 503 Engine Break in Procedures

Special procedures apply for break in of the engine. Refer to the Rotax installation manual.
Break-in procedure (section 21)

Before engine start. Please refer to the Rotax Operators manual, read and comply with the following guidelines:

- Daily checks (section 10.3.2)
- Pre-flight checks (section10.3.3)
- Start (section10.3.4)
- Prior to take off (section10.3.5)

Note:
Prior to engine start verify that installation is complete and make sure that you can operate them instinctively without hesitation.

Note:
Secure the area accordingly.

## *11.30 Pre-Flight Tests and Verifications*

The systems inspection section and quality assurance form reference GJP-235 must be complete and the aircraft must be registered and have flight permit issued by the NAA before flight.

## *11.40 NAA Documentation and Authorisations*

The documentation related to the kit built aircraft is described. When built according to the quality assurance described in this document, the aircraft is intended for registration in the Light Sport Aircraft registration category.

The NAA may be the FAA or CASA or their delegate. The NAA performs registration, inspections and authorisations for the aircraft.

### 11.40.10 Process flow for Experimental Light Sport Aircraft registration

- Request a registration number allocation from the NAA / RAO. This can be done before the aircraft is delivered or completed.
- Only after your aircraft is registered, should you submit an application to the DAR / inspector to have your aircraft inspected. Be sure to fill out the application form precisely and completely and register the activities you wish to accomplish with your aircraft (for example, operation of a kit built LSA and glider towing may be applicable to this aircraft).
- If the inspector is happy with the aircraft and its documentation, you will receive an Experimental Certificate of Airworthiness, a copy of which is sent to the NAA / RAO under which the aircaft is to be operated.
- If the aircraft does not conform to the design standard under which it is being accepted, or the paperwork is not complete, or the aircraft has no conformity statement or is not registered, your application for a Certificate of Airworthiness will be rejected. The inspector must give you the reasons why and the application will be closed. Once you have all the faults sorted, you can re-apply. If you go to a different inspector, the new inspector will have a list of faults from the previous registration attempt to work with. This list is made available from the NAA data base.

### 11.40.20 Airworthiness Certification Inspection

The inspection of aircraft is performed by an NAA or their delegate on an aircraft that is complete and flyable, with all of the documentation and checkpoints complete as in the Inspectors Checklist in the following Inspectors Checklist section.

Inspectors may be located in the USA through the following resources:

EAA volunteer inspectors
http://www.sportpilot.org/inspecting/elsa_dar.html
FAA Flight Standards District Offices (FSDO)
http://www.faa.gov/about/office_org/field_offices/fsdo/index.cfm?print=go
FAA Manufacturing Inspection District Offices (MIDOs)
http://www.faa.gov/aircraft/air%5Fcert/locate%5Foffice/mido/
DAR Locator
http://members.eaa.org/home/govt/help/ab_dar.asp

Booking an inspector is best combined with the supply of the following information to the inspector:

For FAA registration submit form: Aircraft Registration Application FAA Form 8050-1.
To apply for a registration number submit form
http://www.auf.asn.au/docs/tech/LSAregonumber.pdf See appendix.
For CASA registration (RAA / HGFA) submit form

http://www.auf.asn.au/docs/tech/form682RA-Aus.pdf See appendix.

### 11.40.30 Inspectors Checklist

The NAA delegated inspector will be checking the aircraft structure and that the following criteria and documentation is complete:

1. Application for an Experimental certificate must be made by the CoR holder or the owner of the aircraft registered with the NAA or a sport aviation body.

2. Obtain from the applicant the manufacturer's Statement of Compliance that certifies compliance with the requirements of LSA standards including those relating to kits.

3. Confirm the applicant has copies of the documents listed:
   - Copies of the aircraft assembly and operating instructions,
   - Aircraft maintenance and inspection procedures, and
   - Aircraft flight training supplement, issued for the aircraft by the manufacturer.
   - Engine maintenance logbook and airframe maintenance logbook (may be separate or the same book if desired)

   These documents are to be returned to the applicant once verified.

4. Additional cockpit instruments and system controls added by modification to the aircraft must also be labelled. Parachute and or tow systems require appropriate placarding.

5. If the aircraft is a Non-compliant Production LSA, ensure reason for non-compliance is stated on Experimental LSA checklist.

6. Inspect the aircraft to ensure it has been assembled in accordance with the manufacturer's instructions and is in a condition for safe operation.

7. If the aircraft incorporates modifications that have not been approved by the manufacturer, verify that, with such modifications incorporated, the aircraft remains compliant with the Light Sport Aircraft definition.

8. A statement, in a form and manner acceptable to NAA or the authorised person, setting forth the purpose for which the aircraft is to be used, (the purpose for this aircrafts operation is "operating a kit built LSA");

9. Enough data (such as photographs) to identify the aircraft. Photos are not required for aircraft converted from a previously certificated type without appreciable change in the external configuration — three-view drawings or three-view dimensioned photographs of the aircraft. Photos are required only if the aircraft is substantially different from the SLSA production model;

10. Upon inspection of the aircraft, any information reasonably needed by the NAA or the authorised person to enable it to impose any conditions or operational limitations necessary in the interests of the safety of other airspace users and persons on the ground or water;

11. Confirm the aircraft complies with all applicable ADs and SDs

12. Confirm the warning passenger warning placard has been fixed to the aircraft.

13. Once the authorised person is satisfied the aircraft complies with these requirements the

Experimental Certificate can be issued.

In the USA, the aircraft must display FAA form 8130-7. A clear pocket is provided on the back of the pilot's seat back rest. In Australia, a CASA CoA may be held in the aircrafts Pilot Operating Instructions.

### 11.40.40 Registration and QA Forms Provided

Forms provided by AirBorne WindSports for Kit LSA include:

- Affidavit of Ownership O.M.B. No 2120-0690
- Light Sport Aircraft Statement of Compliance
  - O.M.B. No 2120-0690 for FAA or
  - AirBorne WindSports GJP-203 for CASA
- Bill of Sale O.M.B. No 21-20-0042
- Factory test flight logbook entry
- Weight-shift-control weight and loading
- Airworthiness Certificate from the representative S-LSA

Additional documents supplied out of the EAA kit include:

- "Program letter to accompany application for experimental light-sport airworthiness certificate"

Additional parts supplied out of the EAA kit include:

- Data Plate
- Experimental sticker
- Passenger warning placard

Additional forms applicable for validation of the aircraft warranty include:

- GJP-144
- GJP-142w
- GJP-163
- GJP-164
- GJP-236

After quality assurance forms are completed by an AirBorne WindSports approved independent distributor, and received by the factory; the warranty forms will be validated and issued by AirBorne WindSports.

# 12.00 FLIGHT TEST PROCEDURES

The flight test phase is only permitted with a valid CoA when operated in the USA or Australia.
The flight test phase may legally be performed by the aircraft owner or licensed pilot that they nominate. AirBorne WindSports recommended that the aircraft be inspected by an Authorised Airborne independent distributor (as well as the DAR for CoA). It is also recommended that the Authorised Airborne independent distributor perform a post assembly tuning flight as these authorised pilots are familiar with the way that the aircraft are designed to handle. AirBorne WindSports require that the post assembly tuning flight form be completed by the authorised Airborne independent distributor to validate the aircraft warranty.

## *12.10 Flight-Test Objectives*

Specific objectives are listed in aircraft POST ASSEMBLY TUNING FLIGHT, quality assurance form GJP 164.

## *12.20 Flight-Test Environmental Conditions*

The flight test area will be designated by the NAA delegate who issues the CoA. This will primarily be determined for risk mitigation to the general public. Flight-testing is best conducted from a location that has landing areas straight ahead and numerous options through a regular circuit.
It is desirable to utilise weather that is less than challenging to operate in. Conditions may be selected to utilise the best of the following considerations: visibility, turbulence and other air traffic.

## *12.30 Flight-Test Procedures and Maneuvers*

Carry out pre-flight inspection in accordance with the pilot handbook: Normal Procedures Section 4.5 Complete Trike Pre-Flight inspection.

Specific flight test maneuvers are listed in aircraft POST ASSEMBLY TUNING FLIGHT, quality assurance form GJP 164.

## *12.30.10 Production Acceptance Procedures*

The production acceptance procedures relating to flight test are listed in aircraft POST ASSEMBLY TUNING FLIGHT, quality assurance form GJP 164.

## *12.40 Post Flight–Test Documentation and Notifications*

Specific flight test documentation and notifications required for verification of successful operation are listed in POST ASSEMBLY TUNING FLIGHT, quality assurance form GJP 164.

A complete list of forms applicable for validation of the aircraft warranty include:

- GJP-144
- GJP-142w
- GJP-163
- GJP-164
- GJP-236
- customer questionnaire

# APPENDIX A – Feedback Form

| ***Operation and Maintenance* Feedback Form** | |
|---|---|
| AirBorne AUSTRALIA | Please use a copy of this form to provide notification to the manufacturer about issues or anomalies identified during the operation or maintenance of the aircraft or in the content of the manual. |
| Return to<br>AirBorne WindSports Pty Ltd<br>PO Box 7042 Redhead<br>New South Wales<br>2290 Australia<br>Fax +61 2 4944 9199<br>Email trikesupport@airborne.com.au | Please provide your own contact details below |
| Issue Description | |
| If you have a proposal to remedy the issue please provide it here:<br><br>Number of pages submitted including this cover page_____ | |

**End of XT Series Kit Assembly Instructions**