

Explorer UL 600 and Safari general Kit information brochure

This brochure gives a general breakdown of the standard and quick-build kit options and some variations there-of. At KFA we are committed to offer you the best builder and customer support in the industry. We keep an open-door policy so please discuss any special requests with us and we will see if we can accommodate your request.

The standard kit is divided in six sub-kits. These can be bought as individual sub-kits, Firewall back kit or as or as a complete kit. Quick build options are also available on request. Build time for a standard kit by a first-time builder should be less than 700 hours. Many first-time builders have reported build times of around 600 hours. Experienced builders have reported around 400 hr's of build time. Quick build kits will significantly reduce build times.

Please note that we reserve the right to amend the layout and content of our kits or sub-kits at any time, this is just a general guideline. The complete kit consists of the following sub-kits:

- Covering kit
- Fuselage kit
- Wing kit
- Landing Gear kit
- Finishing kit
(The kits above make up the firewall back kit)
- Firewall forward kit

Note: The 100hp Rotax is the smallest engine we recommend for the Safari. We do not recommend installing this engine if you are operating from a field elevation higher than 5000ft or planning on exceeding a MTOW of 600kg. High Density Altitudes will cause the aircraft to underperform, especially when operated at the aircraft max gross weight of 750kg. If operated strictly at the LSA gross weight of 600kg then this engine should be adequate for most average conditions. We highly recommend installing as a minimum the turbo charged version of the 912 UL (120hp). For excellent performance which is close to a 915iS we have available the KFA 912 ULS turbo (135hp).

BUILT FOR THE BUSH

Covering kit:

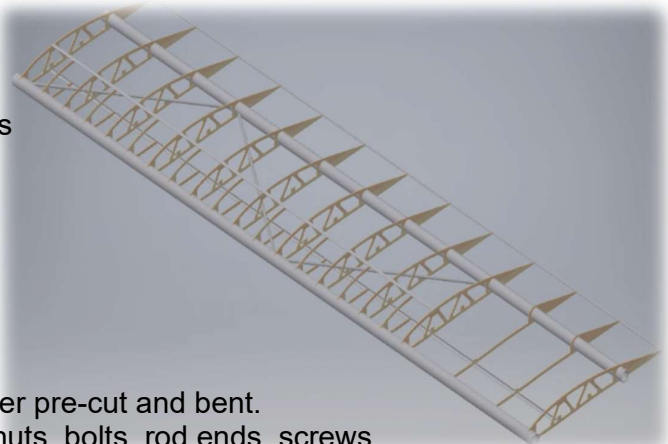
- KFA Aeromuti covering system including 2.4oz Polyester fabric with pinking tapes, rib stitching lace, adhesive, butyrate, nitrate and UV protecting.
- Covering system designed to be painted with normal 2K automotive car paints. If looked after this system will comfortably last in excess of 20 years and provides a nice shiny finish.
- Other covering systems like Stewart, Oratex or Poly Fibre can also be used.

Fuselage kit:

- Welded tubular steel fuselage, rudder, stabilizer and elevator.
- Tailwheel and nosewheel gear attachment structure welded in. (No welding required by the builder.)
- Welded tubular steel door frames, baggage door (Safari aircraft only).
- Elevator, aileron and flap controls are from steel push-pull tubes.
- Rudder cables are from 3 mm stainless steel cables.
- Dual control sticks with adjustable stops.
- Composite elevator trim tab and associated hardware.
- Flap deployment system is a friction non-graduated system giving the pilot full control over flap position settings for off-field operations.
- Interchangeable landing gear system brackets welded in - tailwheel to tri-gear and visa-versa. ALG system for Beringer as well as ACME shocks available as an option.
- Luggage bay floor boards are 6mm Birch plywood and are CNC pre-cut.
- Cockpit floorboards are 4mm Birch plywood and are CNC pre-cut
- Ray Allen electric trim system.
- Complete hardware package, these include, rod-ends, bolts, nuts, washers and other fittings and pins.

Wing kit:

- 6061-T6 aluminium drawn seamless wing spars.
- CNC cut Birchwood or marine ply wing ribs.
- Aircraft grade structural epoxy.
- Composite Leading Edges.
- 2 x 57 litre wing tanks with fittings. (50 litre for Explorer)
- Tubular steel lift struts
- Fuel fittings and fuel valves.
- Steel drag and anti-drag braces.
- Steel lift strut brackets
- Pre-fabricated composite flaperons with hinges installed.
- All steel components come standard from the factory treated with Strontium Chromate.
- Pre-formed composite removable wing tips complete with CNC cut angles and rivets
- All Aluminium components are laser pre-cut and bent.
- All standard hardware, including; nuts, bolts, rod ends, screws,



- fasteners, washers, spacers, rivets and other items.
- 1 set of vortex generators
- Mass balance and elbow weldment
- Doublers to reinforce the strength of the spars.
- Combination Pitot tube with Ø6mm nylon tubes in 3 colours (Green, black and clear)
- Buttrifs and associated fittings and hardware.

Landing gear kit:

- Welded steel tube landing gear
- Matco hydraulic wheels and brake system with a 1.25" axle to handle Bush wheels up to 31"
- Single brake callipers upgradeable to dual. (Dual needed for tyres larger than 22")
- Buffalo suspension with Cabane and hardware now standard with both Explorer and Safari kits.
- Pilot side brake pedals and master cylinders with associated hardware, Co-pilot brakes available as an option.
- *22" Bush wheels now standard on Tailwheel Explorer and Safari kits*
- *(Bungees: are now optional)*
- *(Explorer: Ø12,7mm x 3700mm and Ø10 x 1000mm)*
- *(Safari: Ø12,7mm x 4000mm and Ø10 x 1000mm)*
- Remote Reservoir with brake lines and fittings
- Tailwheel Configuration (Standard) - Steerable Tailwheel
- Complete Hardware Package including clamps, bolts, nuts, hydraulic fittings and so forth.

NOTE: *If you decide to upgrade the landing gear to Beringer ALG shocks, we will credit you the price of the standard gear, this makes it more affordable to upgrade right from the start*

Finishing kit:

- Four-point seat belt and shoulder harness system with thimbles and nico-press sleeves
- Windshield is from CNC cut:
Safari: 3mm polycarbonate
Explorer: 2mm polycarbonate
- Windshield to wing cuff
- Composite bench seat
- Instrument panel (blank but can be cut for you)
- Rudder cable fairings (composite)
- Centre console CNC cut from aluminium or carbon fiber as an option.
- Dash board (Glare shield) is pre-formed (composite).
- Roof and Turtledeck is aluminum that is CNC cut and pre-bent at the factory.

- Instrument panel from 2mm aluminum.
- All angles and tubes required for support to the roof and turtle deck including stringers.
- Top and bottom door skins, of which the bottom door skin can either be 0,9mm aluminium or 2mm polycarbonate.
- All windows (roof, turtle deck and rear side)
- Rotation beacon holder (composite)
- Gas lifts and fittings for pilot and co-pilot doors
- Foot slide plate
- All standard hardware, including bolts, washers, rivets, hose barbs, rubber edging and fuel cocks.

912UL and ULS - Firewall forward kit:
(See notes for Safari suitability (912 ULS))

- Firewall engine mount
- Firewall – 0,5mm stainless steel (laser cut and pre-bent)
- Top and Bottom cowls
- Water radiator Naka Duct
- Landing light composite “tubes” to fit lights in the cowling.
- Oil cooler bracket
- Water radiator bracket
- Oil cooler
- Water radiator
- Engine mount rubbers with washers, bolts and nuts.
- Battery box
- Throttle system and hardware
- Fuel lines from the tanks to the header tank are supplied.
- Boot cowl (fiberglass).
- All standard hardware, including; nuts, bolts, screws, rod ends, washers, spacers, rivets and other items.
- Rotax engine engine ring optional extra (some builders install used engine which already have the engine ring included)

KFA 912 UL-ST and ULS-ST/914//915iS – Firewall forward

- Firewall engine mount (slightly different mount to accommodate the airbox)
- Firewall – 0,5mm stainless steel
- Top and Bottom cowls
- Water radiator Naka Duct.
- Landing light composite “tubes” to fit lights in the cowling.
- 5-liter header tank with low fuel warning system.
- Oil cooler bracket
- Water radiator bracket
- Oil cooler
- Water radiator
- Engine mount rubbers with washers, bolts and nuts.
- Battery box (Battery not included)
- Fuel lines from the tanks to the header tank and shut off valve are supplied.
- Boot cowl (fiberglass).



- Air filter box
- Throttle system

NOTE: These components are not included in the Firewall forward kits:

- Rotax water overflow bottle
- Battery
- Rotax exhaust
- Fuel and oil lines
- Wiring
- Filters
- Clamps and fittings
- Rotax engine ring optional extra (Most of these engines come standard with the ring mount fitted)

Optional extra's:

- Carbon fiber package – dash board(glare shield), kick panels, instrument panel, seat, center console.
- Droop wing tips
- LED Strobe/nav lights
- Landing lights
- Parachute bracket, rocket plate and harness straps (Explorer only)
- Avionics (including SP6 Compass and SP7 Artificial Horizon)
- Propeller
- Engine
- Dual calipers on the wheels (Mandatory for Wheels larger than 8.50x6)
- Co-pilot brakes
- Larger tyres up to 27,5" for Explorer and 31" for Safari
- Wheel spats/pants
- Door vents (Twista vents)
- Door locks
- Lift strut cuffs
- Autopilot plate (Mounting for the autopilot servo)
- Only 2 Axis AP for Explorer and 3 Axis for Safari. (Not DULV approved, only Experimental)
- Capstan Servo for 3rd (Rudder) Auto Pilot (Safari)
- Cabin heat system complete with vents, solenoid and hardware.
- McFarlane Throttle control System
- Upholstery kit (Seat cushions, roof lining, turtle deck lining, dash, luggage. Only the seat cushions are pre-made. The balance of the kit consists of the fabric only.)

Quick Build options:

Wing Quick build:

- Wing washout set
- Ribs epoxied in place
- Ribs treated (Varnished or sealed)
- Cap strips fitted except for tank capstrips
- Diagonal braces fitted
- Spar doublers (inserts) manufactured and fitted

- Flaperon hanging brackets backing plates fitted
- Spar reinforcing tubes fitted
- Top rear spar bolt hole drilled
- Top and bottom angles fitted
- Trailing edge flat bar fitted
- Capstrips on trailing edge fitted
- Leading joint angles (200 & 235mm) fitted
-

Stage 1 Quick build (Standard 51% compliant)

- Wing Quick build
- Wings rigged to the fuselage, dihedral, sweep and washout set; lift struts dry fitted to fuselage
- Lift strut brackets fixed in position
- Wing tanks fitted
- Wing leading edges fitted
- Wing tips fitted
- Butt ribs and roof dry-fitted
- Turtle deck dry fitted
- Controls installed and travels set; excluding flaperons and associated push pull tubes
- Floor boards and luggage boards installed
- Luggage compartment covered
- Firewall assembled and dry fitted
- Landing gear dry fitted; no painting or covering or installation of plumbing

Stage 2 Quick build (Advanced)

- Stage 1
- Covering of the fuselage, wings, tail sections and landing gear.
- Wings and tail sections rib stitched
- Pinking tapes
- Nitrate and Butyrate applied to the fabric.
- UV protection applied.

Stage 3 Complete factory build

- Stage 2
- Engine installation
- Propeller installation
- Avionics installation
- Paint
- Upholstery
- Other wiring
- Fuel lines
- Oil lines

FOR THE BUSH

Explorer panel



Explorer UL-600



Explorer UL-600 Nosewheel



KFA Safari – Rotax 915iS



Explorer with Rotax 914 and KFA buffalo suspension

