

# Texas Sport Aircraft Company

## *Premier Kit Built Aircraft*

### Kit Description

### Rev 1.01

This document describes the structure and contents of the Texas Sport Aircraft Kit for the TX3 and TX11 model aircraft.

The aircraft build process centers around four main kits. These kits represent the core structure of the aircraft that remains reasonably constant for any aircraft constructed. There are many optional items that may be included with each of the main kits.

The four main kits include:

TLK-001	Tail Kit
FSK-001	Fuselage Kit
WGK-001	Wing Kit
PPK-00x	Firewall Forward Kit

*Part Number is dependent upon engine and cowling selection*

Each of the main kits, as well as all the optional kits, is delivered with an extensive build manual that details the process.

To complete the aircraft, the areas listed below must also be addressed. These areas are considered separately given the wide range of options available to a builder. For each of these areas, Texas Sport Aircraft has kits available that are listed in this document.

Powerplant, Powerplant Accessories, Propeller  
Interior  
Covering / Paint Materials  
Electrical System  
Instrumentation / Avionics

## **TLK-001: Tail Kit**

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The tail kit contains all the control surfaces, bracing and hardware required for a complete aircraft installation.

### Kit Includes:

- Stabilizer assemblies (2) ready for cover
- Elevator assemblies (2) ready for cover
- Rudder assembly (1) ready for cover
- Upper and lower tail brace wire assemblies
- Forward and aft stabilizer liner tubes
- Required installation hardware (clevis pins, bolts, nuts, washers)
- Manual – 500-MS1003

## **Tail Kit Option**

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### **Tail Covering Kit (Stits)**

*Option Part Number: TLA-001*

- All materials required to complete
- Texas Sport Covering Manual – 500-MS1006

### **Tail Covering Kit (Air-Tech)**

*Option Part Number: TLA-002*

- All materials required to complete
- Texas Sport Covering Manual – 500-MS1006

## **FSK-001 Fuselage Kit**

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### ***Fuselage Frame Assembly Kit***

*Included in Fuselage Kit FSK-001*

- TIG Welded Fuselage Frame – Internal Corrosion X treatment, primed, ready for paint
- Lower Doors (left and right) – Pre-installed, primed, install hardware
- Upper Doors (left and right) – Pre-installed, primed, install hardware
- Front Seat Frame – Pre-fitted, primed, install hardware
- Vertical Fin – Primed, pre-bushed, stringer transition bracket and install hardware
- Aluminum Stringers – Backbone stringer, upper left and right stringers, lower left and right stringers, belly stringer and install hardware
- Manual – 500-MS1000

### ***Landing Gear Kit***

*Included in Fuselage Kit FSK-001*

- Cabane "V" – Primed and install hardware
- Main Landing Gear Legs (Left and Right) – Primed and install hardware
- Die Spring Strut Assemblies (Left and Right) – Primed and install hardware
- 600 X 6 Grove Wheels and Brake Assemblies
- 800 X 6 Tires and Inner Tubes
- Wheel hub caps with required installation hardware
- Tail Wheel Spring, U-bracket, crush pad and install hardware
- Maule Tail Wheel, compression spring kit and install hardware
- Rudder Horn and install hardware
- Die Spring Dust Covers (2)
- Manual – 500-MS1001

### ***Trim Assembly Kit***

*Included in Fuselage Kit FSK-001*

- Stabilizer Trim Assembly – Trim yoke bracket, jack screw, stabilizer like assembly, double pulley, tension pulley, spring, pulley brackets and install hardware
- Cockpit Trim Assembly – Trim handle, escutcheon ring, double pulley, single pulleys, cable guide block, continuous cable and install hardware
- Trim Indicator System – Indicator assembly, tension spring, 1/16" cable, stringer bracket with pulley, cable guide tube and install hardware

### ***Floor Board Kit***

*Included in Fuselage Kit FSK-001*

- CNC pre-cut marine plywood floor boards – ready for finish
- Skid plates
- Install hardware

### ***Throttle Assembly Kit***

*Included in Fuselage Kit FSK-001*

- Forward throttle quadrant with carb heat and install hardware
- Aft Throttle quadrant with carb heat and install hardware
- Interconnect control rods, links and hardware

### **Rudder Pedal Assembly Kit**

*Included in Fuselage Kit FSK-001*

- Forward rudder pedals (2), u-clamp brackets, return springs and install hardware
- Rear rudder pedals (2), u-clamp brackets, return springs and install hardware
- Rudder Cable Assemblies – Ready to install load tested assemblies, links, fairleads, pulleys and install hardware

### **Brake System Kit**

*Included in Fuselage Kit FSK-001*

- Rear heel brake assemblies (2) with mounting plate and install hardware
- Master cylinders (2) and install hardware
- Brake reservoir and install hardware
- Brake line material and fittings
- Forward brake pedal assemblies with spacer brackets, clamp brackets and install hardware.
- Interconnect cables, links, install hardware

### **Control System Kit**

*Included in Fuselage Kit FSK-001*

- Control torque tube assembly, forward and aft sticks, interconnect rod, torque tube bearing clamps and install hardware
- Elevator Cable Assemblies – Ready to install load tested assemblies, links, fairleads, pulleys, turnbuckles, safety clips and install hardware
- Aileron control stop bolts, pulleys and install hardware

### **Fuselage Fuel System Kit**

*Included in Fuselage Kit FSK-001*

- Fuel shut off valve and install hardware
- Fuel shut off pull cable, lever, cable clamp and install hardware
- Fuel line material, AN fittings, Adel clamps and install hardware

### **Finishing Kit**

*Included in Fuselage Kit FSK-001*

- Upper wing root close-outs (2)
- Fuel gauges (2), fuel line material and clamps
- Entry Step and hardware
- Upper door acrylic plexiglass material, preformed sheet metal close-out, isolator washers, upper door P-seal and install hardware
- Skylight acrylic plexiglass material, pre-formed sheet metal close-outs, isolator washers and install hardware
- Cable Rub Patches – Leather
- Interior pulley close-out cover plates (3)
- Stabilizer close-out plates (2) forward, (2) aft, (1) elevator bellcrank inspection cover
- Tail Section – Aft belly inspection cover panel
- Inspection cover plates (2)
- Door entry keys (2)
- Pilot Operating Manual and Check list
- Manual – 500-MS1002

## Fuselage Accessory Options

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- 121.5 MHZ ELT**  
*Option Part Number: FSA-001*
  - ELT unit with mounting bracket, antenna, remote switch and wiring
  - Required installation hardware
  - Texas Sport ELT Installation Manual
  
- 406 MHZ ELT**  
*Option Part Number: FSA-002*
  - ELT unit with mounting bracket, antenna, remote switch and wiring
  - Required installation hardware
  - Texas Sport ELT Installation Manual
  
- Weld-on Float mount Kit**  
*Option Part Number: FSA-003*  
*Note: Must be ordered with the Fuselage Kit*
  - Weldment fittings
  - Weldment tabs for rudder steering
  
- Interior Light Kit**  
*Option Part Number: FSA-004*
  - Option for either white, red, or combo white and red
  - LED interior light
  - Required wiring and terminal ends
  - Switch and breaker
  - Required installation hardware
  - Texas Sport Interior Light Install Manual and Wiring schematic
  
- Fresh Air Vent Kit**  
*Option Part Number: FSA-005*
  - Vents (2)
  - Required installation hardware
  - Texas Sport Fresh Air Vent Install Manual
  
- Placard Kit**  
*Option Part Number: FSA-006*
  - Interior placards
  - Exterior placards
  - Texas Sport Placard Install Manual

☐ **Interior Kit**

*Option Part Number: FSA-007*

- AmSafe 4-Point Inertial Reel Seat Belts – Forward and aft seat positions, install hardware
- Forward canvas seat sling with lacing cord
- Aft canvas seat sling with lacing cord
- Baggage compartment canvas bag, install hardware
- LH fiberglass sidewall panel, lower door seal, Velcro and install hardware
- RH fiberglass sidewall panel, Velcro and install hardware
- RH Throttle close-out, lower door seal and install hardware
- Baggage compartment fiberglass headliner
- D-window interior close-outs (2)
- Leather door seal close-outs (2)
- Stick grips (2)
- Front and rear sets, vinyl with fabric insert
- Options: Grey, Red, Blue, Black
- Aft seat cushions with Texas Sport embroidery logo
- Forward seat cushions with Texas Sport embroidery logo
- Texas Sport Interior Installation manual

☐ **Fuselage Covering Kit (Stits)**

*Option Part Number: FSA-010*

- All materials required to complete
- Texas Sport Covering Manual – 500-MS1006

☐ **Fuselage Covering Kit (Air-Tech)**

*Option Part Number: FSA-011*

- All materials required to complete
- Texas Sport Covering Manual – 500-MS1006

## **WGK-001 Wing Kit**

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The wing kit consists of a factory-built, assembled wing. Fuel tanks and brackets, cables, pulleys and wing tip bow are supplied and must be installed. Fully constructed ailerons are included in the kit.

Kit includes:

### **Wing Assembly Kit**

*Included in Wing Kit WGK-001*

- Semi-assembled wing assemblies (Left and Right Wing)
- Aileron Assemblies – Ready for cover, Installation Hardware
- Pre-run conduit for Nav/Strobe wiring
- Fuel Tanks (2) 11-gallon tanks, mounting brackets, AN fittings, drain sumps, pressure fuel caps, inner-tank drag tube and install hardware
- Aileron Cable Assemblies – Ready to install load tested assemblies, links, fairleads, pulleys, pulley brackets, turnbuckles, safety clips, upper tear drop cable covers and install hardware
- Wingtip bow, brackets and hardware
- Manual – 500-MS1004

### **Wing Install Kit**

*Included in Wing Kit WGK-001*

- FAA-PMA sealed strut assemblies with heavy duty forks and install hardware
- Jury struts, jury strut interconnect brace, install hardware
- Wing to fuselage and strut attachment hardware
- Wing tank cover panels (ready for final fit and trim) filler neck grommets and install hardware
- Wing root to fuselage fairings (pre-bent ready for final fit and trim, windscreen seal and install hardware)
- Fuel tank to fuselage fuel hose and clamps
- Stainless steel tie down rings
- Inspection cover plates (12)
- Manual – 500-MS1005

## **WGK-001 Wing Kit Accessory Options**

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### **Wing Tip Strobe and Position Light Kit**

*Option Part Number: WGA-001*

- LED Nav/Strobe Lighting System
- Wing bracket
- Required wiring terminal connections and conduit material
- Texas Sport Installation Manual

### **HID Landing Light Kit**

*Option Part Number: WGA-002*

- HID Lighting System
- Wing mounting bracket
- Required wiring, terminal connections, circuit breaker, switch and conduit material
- Required installation hardware, Adel clamps etc.
- Texas Sport Installation Manual

- **EFIS pitot tube Kit**  
*Option Part Number: WGA-003*
  - AOA pitot tube for Dynon Avionics flight instrument systems
  - Install hardware to mount the pitot tube in the wing
  
- **Wing Covering Kit (Stits)**  
*Option Part Number: WGA-010*
  - All materials required to complete
  - Texas Sport Covering Manual – 500-MS1006
  
- **Wing Covering Kit (Air-Tech)**  
*Option Part Number: WGA-011*
  - All materials required to complete
  - Texas Sport Covering Manual – 500-MS1006

## **PPK-001      Classic Open Cowl Firewall Forward Kit (Continental O-200)**

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This firewall forward kit contains items needed to install an O-200 engine in the aircraft except for the engine, alternator and propeller. All cowlings, baffling, hardware and engine controls are included for a typical installation.

### Kit Includes:

- Upper and lower metal cowling with protection washers and pins
- Engine cowling standoff brackets and standoff nuts
- Continental O-200 engine mount with firewall insulator washers
- Fiberglass boot cowling with pre-drilled stainless firewall and windshield frames
- Windshield
- Eyebrows (2) with brackets
- Instrument panel (blank panel)
- Throttle and mixture cable bracket
- Throttle cable, cable clamps, rod-end and install hardware
- Mixture cable, cable clamps and install hardware
- Carb heat cable, cable clamps and install hardware
- Cabin heat box, control cable, cable clamps and install hardware
- Engine breather hose material and clamps
- Vacuum pump block-off cover plate
- Tachometer cable
- Gascolator and bracket
- Fuel line (TSO'd with fire sleeving) and required AN fittings from carburetor to gascolator
- Primer, primer line material and AN fittings
- All required hardware for above items (Adels, bolts, spacers, nuts, washers, pins, firewall grommets)
- Texas Sport Open Cowling Continental O-200 Engine Installation Manual
- Manual – 500-MS1007

## **PPK-002          Closed Cowl Firewall Forward Kit (Continental O-200)**

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This firewall forward kit contains items needed to install an O-200 engine in the aircraft except for the engine, alternator and propeller. All cowlings, baffling, hardware and engine controls are included for a typical installation.

The kit includes:

- Upper and lower fiberglass cowling with access doors, hinge material, support brackets, 1/4-turn fasteners install hardware
- Pre-fab engine baffles with baffle seals
- Continental O-200 engine mount with firewall insulator washers
- Fiberglass boot cowling with pre-drilled stainless firewall and windshield frames
- Windshield
- Instrument panel (blank panel)
- Throttle and mixture cable bracket
- Throttle cable, cable clamps, rod-end and install hardware
- Mixture cable, cable clamps and install hardware
- Carb heat cable, cable clamps and install hardware
- Cabin Heat box, control cable, cable clamps and install hardware
- Engine breather hose material and clamps
- Vacuum pump block-off cover plate
- Tachometer cable
- Gascolator and bracket
- Fuel line (TSO'd with fire sleeving) and required AN fittings from carburetor to gascolator
- Primer, primer line material and AN fittings
- All required hardware for above items (Adels, bolts, spacers, nuts, washers, pins, firewall grommets)
- Texas Sport Close Cowling Continental O-200 Engine Installation Manual
- Manual – 500-MS1008

## **PPK-003      Closed Cowl Firewall Forward Kit (Jabiru 3300A only)**

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This kit includes the components necessary to complete an installation of the Jabiru 3300A engine. Not included in the kit is the engine itself, nor the cooling ducts, muffler assembly, mount isolators, air/oil separator, voltage regulator which should be purchased with the engine.

The kit includes:

- Upper and lower fiberglass cowling with access door, hinge material, support brackets, 1/4-turn fasteners install hardware
- Pre-fab engine baffles with baffle seals
- Jabiru engine mount, firewall and engine install Fiberglass Boot Cowling with Pre-drilled stainless firewall and windshield frames
- Windshield
- Instrument panel (blank panel)
- Induction air box, filter element, scat hose material, clamps and install hardware.
- Oil cooler, mounting bracket, hose material, hose fittings, scat hose and clamps
- Throttle cable bracket and throttle arm extension bracket
- Throttle cable, cable clamps, rod-end and install hardware
- Carb heat cable, cable clamps and install hardware
- Cabin Heat box, control cable, cable clamps and install hardware
- Engine breather hose material and clamps
- Gascolator and bracket
- Fuel line (TSO'd with fire sleeving) and required AN fittings from carburetor to gascolator
- All required hardware for above items (Adels, bolts, spacers, nuts, washers, pins, firewall grommets)
- Texas Sport Jabiru Engine Installation Manual
- Manual - 500-MS1009

## Engine Accessory Options

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- **Exhaust Kit  
(Continental O-200 only)**  
*Option Part Number: PPA-001*
  - Note: Lightweight 12 Amp or 30 Amp alternator must be used.
  - Complete exhaust system with cabin heat shroud and carb heat shroud
  - Scat hose material and clamps for cabin heat and carb heat system
  - Blow proof gaskets (4)
  - Exhaust system nuts (8)
  
- **Air/Oil Separator and Oil Quick Drain Kit  
(Continental O-200 only)**  
*Option Part Number: PPA-002*
  - Air/Oil separator unit with mounting bracket
  - Engine breather hose material, return lines and clamps
  - Required installation hardware
  - Texas Sport Air/Oil Installation Manual
  
- **Oil Filter Kit  
(Closed Cowl Continental O-200 only)**  
*Option Part Number: PPA-003*
  - Adapter housing with gasket
  - Oil Filter
  - Installation Instructions

## Propeller Options

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- Classic Sensenich Wood with Brass Leading Edge Propeller Kit (Continental O-200 only)**  
*Option Part Number: PROP-001*
  - 72 X 44 Wood Propeller with brass leading edge
  - Skull cap spinner with bracket
  - Crush plate
  - Propeller installation hardware (prop bolts and washers)
- Classic Sensenich Wood With Urethane Leading Edge Propeller Kit (Cont. O-200 only)**  
*Option Part Number: PROP-002*
  - 72 X 44 Wood Propeller with urethane leading edge
  - Skull cap spinner with bracket
  - Crush plate
  - Propeller installation hardware (prop bolts and washers)
- Composite Sensenich Wood Propeller Kit (Continental O-200)**  
*Option Part Number: PROP-003*
  - 72 X 46 Composite Propeller
  - Skull cap spinner with bracket
  - Crush plate
  - Propeller installation hardware (prop bolts and washers)
- McCauley Metal Cruise Propeller Kit (Continental O-200)**  
*Option Part Number: PROP-004*
  - 75 X 38 Metal propeller
  - Skull cap spinner with bracket
  - Propeller installation hardware (prop bolts and washers)
- McCauley Metal Climb/Seaplane Propeller Kit (Continental O-200)**  
*Option Part Number: PROP-005*
  - 75 X 35 Metal propeller
  - Skull cap spinner with bracket
  - Propeller installation hardware (prop bolts and washers)
- Composite Sensenich Cruise Propeller Kit (Jabiru 3300A)**  
*Option Part Number: PROP-006*
  - 68 X 38 Composite propeller
  - Skull cap spinner with bracket
  - Crush plate
  - Propeller installation hardware (prop bolts and washers)

□ **Classic Sensenich Wood Cruise Propeller Kit  
(Jabiru 3300A)**

*Option Part Number: PROP-007*

- 68 X 38 Wood propeller with urethane leading edge
- Skull cap spinner with bracket
- Crush plate
- Propeller installation hardware (prop bolts and washers)

## Electrical System Options

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□ **30 AMP Electrical System Kit for O-200**

*Option Part Number: ELA-001*

- Note: Alternator gear in engine is not included.
- 30 Amp lightweight alternator, voltage regulator, bracket and install hardware
- Dry cell lightweight battery, battery box, attach brackets and hardware
- Battery solenoid with attachment hardware
- Starter solenoid with attachment hardware
- 30 Amp and 1 Amp circuit breakers
- Master switch
- Ignition switch, required wiring, terminal connectors and hardware
- Required wiring, terminal connectors, clamps and hardware

□ **Electrical System Kit for Jabiru 3300A**

*Option Part Number: ELA-002*

- Note: Alternator is included in 3300A engine purchase
- Dry cell lightweight battery, battery box, attach brackets and hardware
- Battery solenoid with attachment hardware
- Starter solenoid with attachment hardware
- 20 Amp and 1 Amp circuit breakers
- Master switch
- Ignition switch, required wiring, terminal connectors and hardware
- Required wiring, terminal connectors, clamps and hardware

## Pre-Wired Avionics Options

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Texas Sport Aircraft offers a variety of pre-wired instrument panels that are easily installed in the aircraft with a minimum number of connections. Each panel is fully tested and interfaces with the aircraft systems via a system of connectors. All coax cables are included with appropriate lengths to connect directly to antennas.

☐ **Basic Instrument Panel (No Avionics)**

*Part Number: AVK-001*

- Panel Painted (Grey or Black)
- Tachometer
- Altimeter
- Airspeed
- Oil Pressure, sending unit, oil line, install hardware
- Oil Temperature, sending unit install hardware

☐ **Radio / Navigation Package #1**

*Part Number: AVK -002*

- Includes Basic Instrument Panel (AVK-001)
- Garmin SL-40 Digital Comm Radio
- Garmin 327 Mode-C Transponder
- PS Engineering PM 1200 Intercom System
- Altitude Encoder
- Panel Mount GPS Adapter
- External VHF Comm Antenna
- External Transponder Antenna
- All required circuit breakers, harnesses, coax cables, installation hardware

☐ **Glass Panel Option #1**

*Part Number: AVK-003*

- Note: Wing option EFIS pitot tube kit must be purchased
- Includes Basic Instrument Panel (AVK-001)
- Dynon FlightDek D180 Electronic Flight and Engine Management System
- Garmin SL-40 Digital Comm Radio
- Garmin 327 Mode-C Transponder
- PS Engineering PM 1200 Intercom System
- Altitude Encoder
- Panel Mount GPS Adapter
- External VHF Comm Antenna
- External Transponder Antenna
- All required circuit breakers, harnesses, coax cables, installation hardware