## Sportsman & GlaStar Options & Accessories

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## Factory New Certified & Experimental Aircraft Engines Firewall Forward Options Props, Spinners, Governers, & Cowling Information Engine & Flight Instruments Avionics, Headers, & Intercoms Cabin & Cockpit Accessories Airframe Accessories Electrical Options & Accessories Tools & Supplies Safety Equipment Miscellaneous

## **Factory New Certified & Experimental Aircraft Engines**

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LYCOMING FACTORY NEW EXPERIMENTAL ENGINES		
	All fuel injected engine models are available with either Precision Silver Hawk or Airflow Performance fuel injection components.	
	Lycoming X0-360 (180 HP)	
	Two different models of the 0-360 are offered for the Sportsn propeller choice and available budget. Both engines require 1	
	The A1F6 is a counterweighted engine designed for use with a Hartzell constant-speed prop. The crankshaft counterweights allow use of the Hartzell throughout the engine's operating range without any RPM restriction. The A1A does have a restriction against continuous operation between approximately 1900 and 2200 RPM (plus or minus 50 RPM) with a Hartzell constant-speed prop. This range of restriction is inferred from similar certified engine/prop combinations; the exact range of restriction for the A1A will have to be determined from a vibrational survey of a Sportsman or GlaStar with this powerplant. Both the A1F6 and the A1A can also be used with a Sensenich fixed-pitch prop, but both engines have a restriction against continuous operation between 2150 and 2350 RPM using that prop. For builders with no plans ever to run a constant-speed prop, we offer the A4M, a solid-crank engine with no RPM restrictions for the Sensenich fixed-pitch propeller.	
	Y0-360-A1A	Part No: 501-04000-01X
	Y0-360-A1F6	Part No: 501-04000-02X
	Y0-360-A4M	Part No: 501-04000-03X
	YIO-360-M1A	Part No: 221-0360-105X
	Lycoming YIO-390-X (210 HP) The YIO-390-X engine requires 100LL aviation fuel. This engine can be used with either a fixed pitch or constant speed propeller.	Part No: 501-04000-09
	LYCOMING FACTORY NEW CERTIFIED ENGI	NES

	Lycoming 0-360 (180 HP)			
		Two different models of the 0-360 are offered for the Sportsman and GlaStar, depending on propeller choice and available budget. Both engines require 100LL aviation fuel.		
A Real Provide A real ProvideA real ProvideA real ProvideA real ProvideA real Pro	The A1F6 is a counterweighted engine designed for use with a Hartzell constant-speed prop. The crankshaft counterweights allow use of the Hartzell throughout the engine's operating range without any RPM restriction. The A1A does have a restriction against continuous operation between approximately 1900 and 2200 RPM (plus or minus 50 RPM) with a Hartzell constant-speed prop. This range of restriction is inferred from similar certified engine/prop combinations; the exact range of restriction for the A1A will have to be determined from a vibrational survey of a Sportsman or GlaStar with this powerplant. Both the A1F6 and the A1A can also be used with a Sensenich fixed-pitch prop, but both engines have a restriction against continuous operation between 2150 and 2350 RPM using that prop. For builders with no plans ever to run a constant-speed prop, we offer the A4M, a solid-crank engine with no RPM restrictions for the Sensenich fixed-pitch propeller.			
	0-360-A1A	Part No: 501-04000-01		
	0-360-A1F6	Part No: 501-04000-02		
	0-360-A4M	Part No: 501-04000-03		
	IO-360-M1A	Part No: 221-0360-105		
		The 0-320-D1F engine uses high-compression pistons and requires 100LL aviation fuel. The -D1F engine can be used with either a fixed pitch or Hartzell constant speed prop with no RPM range		
	0-320-D1F with magneto ignition	Part No: 221-0320-102		
	0-320-D1F with Lasar ignition	Part No: 221-0320-104		
		The 0-320-E1F engine uses low-compression pistons and can use auto fuel or 80/87 aviation fuel. Like the D1F, the E1F is available with either a conventional magneto ignition system or the new		
	0-320-E1F with magneto ignition	Part No: 221-0320-103		

Terms re Engine Purchases:

Prices are valid for orders received prior to October 1, 2013 covering engines scheduled for shipment from Lycoming's factory during the 2013 calendar year. Engines are shipped to U.S. customers directly from the manufacturer - Textron Lycoming. International customers have the option of requesting shipment via Glasair Aviation USA, LLC so that engine orders can be shipped along with kit shipments. Lead times are typically 12 to 16 weeks. Please plan your order accordingly.

A 25% non-refundable deposit is required at the time of order for all engine purchases, with the balance due in full one month prior to projected delivery date.

Our Lycoming engine configurations include: magnetos (or optional Lasar ignition); spark plugs and ignition harness; a skytech lightweight starter; and a carburetor. All engines are configured for installation on the Sportsman and GlaStar airframe with little or no modification. Note: Special, long-term storage packaging is available for an additional \$200.00. (Lycoming warrants long term packaging for 6 months.)

#### Warranty:

Textron Lycoming's warranty is very detailed, but in brief it warrants each new engine to be free from defects in material and workmanship appearing within 2 years from the date of first operation, excluding necessary acceptance testing. The date of first operation must not be later than 2 years from the date of shipment from Lycoming. In addition, if the engine proves to be defective in material before the expiration of Lycoming's recommended time between overhaul (TBO) or within 2 years of the date of the first operation, whichever comes first, Lycoming will reimburse the purchaser for a *pro rata* portion of the engine's cost.

The warranty covers major parts of the engine, which is limited to the crankcase, crankshaft, camshaft, cylinders, connecting rods, pistons, sump, accessory housing and gears. The proration policy does not extend to labor or to accessories.

	Firewall Forward Options	Τομ
	Engine Mounts (Engine Mounts are included with the standard kit)	
	Lycoming Type I Dynafocal Mount Installation	Part No: 922-01100-01
	This installation is designed to fit the 30 degree Dynafocal mounting lugs typically used on 0-320-D and -E engines, as well as 0-360, IO-360 & IO-390 engines. Note: includes instructions and all hardware required to bolt the mount to the firewall.	
pra	Lycoming Type II Dynafocal Mount Installation	
	Some fairly uncommon models of fuel-injected IO-320s and IO-360s require an 18 degree Dynafocal mount. We can provide such mounts on request, but due to the small demand for this mount, it is not kept in stock. Please call for anticipated lead time. Note: includes instructions and all hardware required to bolt the mount to the firewall.	Part No: 922-01200-01
	Lycoming Conical Mount	
	Installation	
	This installation is designed to fit the earlier-style conical or "flat" mounting lugs typically used on 0-320-A, -B and -C engines. Note: includes instructions and all hardware required to bolt the mount to the firewall.	Part No: 922-01000-01
	Shock Bushing For Lycoming Engines	
	Rubber "shock bushings" - formally called vibration isolators - are required for all Lycoming installations. Kits include all engine installation hardware.	
	Dynafocal Shock Bushing Installation Kit	Part No: 222-4011-501
	This installation is for Dynafocal-mount 0-320-D and -E engines, and all 0-360, IO-360 and IO-390 engines. Note: Includes a set of four shock bushing assemblies and all hardware necessary to bolt the engine to the engine mount.	
	Engine Baffling Kit	
	The standard Lycoming baffling for the 0-360, 0-320, IO-360 to accommodate short, aftermarket alternators (like the B&C are running the longer, standard Lycoming alternator, you'll baffle aft to accommodate it. This pre-molded fiberglass receives and hardware for installing the recess are included for the standard baffle after and hardware for installing the recess are included for the standard baffle after and hardware for installing the recess are included for the standard baffle after and hardware for installing the recess are included for the standard baffle after and hardware for installing the recess are included for the standard baffle after and hardware for installing the recess are included for the standard baffle after and bafter and	<li>popular with homebuilders. If you need to extend your right forward ess makes this job a snap.</li>
	* When comparing our engine baffling kits to less expensive keep in mind that our baffling is much more complete and co all parts needed for your installation. We are confident that o reduce the assembly and installation time of "cheaper" bafflin fact, we contacted a service center that assembles all types Lancair, etc.) and requested that they compare our baffling p to the less expensive brands. They concluded that our bafflin its superior quality, ease of installation and they emphasized fabrication/installation time will be saved by using our bafflin most cases, "you get what you pay for."	mes with a clean anodized finish an- our higher quality baffling kits will ng kits by a factor of 50% or more. I of aircraft (Sportsman, GlaStar, RV, orice, quality, and ease of installation g kit was a much better value due to the fact that 2 to 3 days of
	Lycoming 0-360 180HP Baffling	Part No: 922-05000-01
	Lycoming IO-360 180HP Baffling	Part No: 922-05000-02
	Lycoming IO-390 Baffling	Part No: 922-05500-01
	Lycoming 0-320 Baffling	Part No: 922-04000-01
	Lycoming standard alternator recess (for use with large	Part No: 505-03001-01

Lycoming Oil Cooler Installation - O-360 / IO-360 180 HP: An oil cooler is essential to any Lycoming engine installation. This installation kit - which is appropriate for 0-360, 0-320 & IO-360 - ducts air from the engine baffling to the oil cooler, which is mounted on the firewall. The kit included a new Stuart-Warner oil cooler matched to the engine size, a molded fiberglass shroud that directs the cooling air over the cooler, a flexible 3" SCAT duct with spun aluminum flange, pre- assembled oil hoses, and all the hardware necessary for a complete Sportsman or GlaStar installation. Detailed instructions are also included. Allow 4-6 weeks for delivery, as stock is limited.	Part No: 922-06000-01
Lycoming Oil Cooler Installation - IO-360 / IO-390 200-210 HP: An oil cooler is essential to any Lycoming engine installation. This installation kit - which is appropriate for IO-360 & IO390- ducts air from the engine baffling to the oil cooler, which is mounted on the firewall. The kit included a new Stuart-Warner oil cooler matched to the engine size, a molded fiberglass shroud that directs the cooling air over the cooler, a flexible 3" SCAT duct with spun aluminum flange, pre- assembled oil hoses, and all the hardware necessary for a complete Sportsman or GlaStar installation. Detailed instructions are also included. Allow 4-6 weeks for delivery, as stock is limited.	Part No: 922-06050-01
Lycoming Carbureted Induction Systems	
Let your Lycoming breathe through a stylish, low-drag comple feature a pre-molded induction housing designed to accomm included. The kits also include a pre-assembled carburetor h air box; all necessary SCAT hose and clamps; all necessary seand detailed installation instructions. Note: We recommend this firewall forward installation. We sell this fire-retardant re this resin has a shelf life of only one month; so please keep t resin. 0-360 Induction System	odate a Brackett air filter, which is neat valve; pre-molded fiberglass carb sheet-metal, gaskets and hardware; that you use fire-retardant resin for esin pre-promoted. Please note that
0-320 Induction System	Part No: 930-02320-01
Sportsman IO-360 & IO-390 Injected Induction Installation (Airflow Performance FM200 Injection) This induction installation is designed for the IO-360 & IO-390 engine series with forward facing Airflow Performance FM200 inductions. The installation is very simple and light weight and is entirely enclosed within the cowl. It utilizes a filter box that ties into the injector servo and protrudes through the baffling directly below the alternator and starter. It picks up the pressurized air contained within the forward baffling plenum chamber and is protected from icing. Used on the IO-360-X184 180 H.P engine and IO390-X 210 H.P. with the forward facing Airflow Performance injector servo.	Part No: 922-07150-01
Sportsman IO-360 & IO-390 Injected Induction Installation (RSA Silverhawk Injection)This induction installation is designed for the IO-360 & IO-390 engine series with forward facing RSA Silverhawk fuel controllers. The installation is very simple and light weight and is entirely enclosed within the cowl eliminating the need for an alternate air valve. It utilizes a machined, anodized filter adapter secured to the injector servo and protrudes through the baffling directly below the alternator and starter. It picks up the pressurized air contained within the forward baffling plenum chamber and is protected from icing. Used on the IO-360-X184 180 H.P engine and IO390-X 210 H.P. with the forward facing RSA Silverhawk fuel controllers.	Part No: 922-07100-02

Exhaust Systems	
Sportsman and Glastar Muffled Exhaust Systems	
All exhaust stacks empty into a central, muffler chamber with cowling on the right, lower side. This exhaust is designed for diameter) stainless steel cabin heat muff surrounding the 5" generous supply of hot air for both cabin and carburetor heat compatible for both configurations making conversion betwee possible.	quieter operation and has a large (6" diameter muffler providing a t. These muffled exhaust systems are
Muffler-style exhaust systems are not available for the 210 h	n.p. IO-390 angle valve engine.
A muffled exhaust system with both cabin and carburetor heat muffs. This sytem is useable on both the Tricycle and Taildragger GlaStar/Sportsman aircraft using the 160 & 180 h.p. carbureted engines (O-320, O- 360-A1A and O-360A1F6). This exhaust is compatible between 320 and 360 engines even though the 360 engines are 1/2" wider at the exhaust ports since the inlet pipes line up (side by side) and are long enough to accommodate either engine.	Part No: 925-03000-01
A muffled exhaust system with cabin heat muffs. This system is useable on both the Tryclycle and Taildragger GlaStar/Sportsman aircraft using the fuel injected 180 h.p. IO-M1A and M1B style parallel valve engines.	Part No: 925-04000-01
Sportsman Hi-Performance Exhaust Systems*	
<ul> <li>www.cafefoundation.org), the 4:1 (four-into-one) exhaust sy exhaust") with optimized pipe and collector lengths provide f pressure waves timed to provide more power, better efficient chamber. All exhaust pipes are near equal length and enter a single tailpipe exiting the cowl.</li> <li>Note: The tricycle version of the 4:1 exhausts will worl gear configurations. The tricycle collector takes a path gear and exits the cowl on the right side of the exit air</li> </ul>	or good scavenging through negative cy and a cleaner combustion a 4:1 collector inside the cowl with a k for both tricycle and taildragger around the right side of the nose
panel to be fabricated by the builder from a cut-out on for creating a tailpipe panel from the existing cowl are exhaust is required for those desiring to convert the S conventional gear. The taildragger (conventional gear) version of the 4:1 through the exit air tunnel, not requiring a tailpipe par by those who do not intend to convert their Sportsmar	<i>under development.</i> The tricycle portsman between tricycle and exhaust takes a straight path nel, and <u>should only be purchased</u>
*These high performance exhausts were designed for the engines listed. They will not fit O-320 or IO-320 engines as they are 1/2" narrower at the exhaust ports. GlaStar owners with the O-360-A1a, A1FI, IO-360-M1A or M1B style engines may use these exhausts with cowling modifications to the cowl exit air ramp for collector/tailpipe clearance.	
A four into one (4:1) hi-performance exhaust ( <b>to be</b> <b>developed, call for availability</b> ) for the <u>taildragger</u> <u>Sportsman</u> aircraft using the 180 h.p. IO-360 M1A & M1B style, parallel valve engines. Cabin heat muff included.	Part No: 925-04100-01
A four into one (4:1) hi-performance exhaust for the <u>taildragger Sportsman</u> aircraft using the carbureted O- 360-A1A or A1F6 engines. Cabin and Carburetor heat muffs included.	Part No: 925-04150-01
A four into one (4:1) hi-performance exhaust for the tricycle Sportsman aircraft using the fuel injected 200 h.p. IO-360 and 210 h.p. IO-390 angle valve style engines. Cabin heat muff included. This exhaust will not fit parallel valve IO-360 engines.	Part No: 925-05100-01

	Exhaust Gaskets (Spiral Wound) - Included w/Exhaust Systems	
	These gaskets have a unique design incorporating a V- shaped spiral wound insert made of layers of stainless steel and asbestos. This allows expansion and contraction through a wide range of heat and vibration. One gasket per cylinder is used. They offer maximum longevity and may even be reused; for example, after temporary removal and replacement of an exhaust stack. Fits all Lycoming Engines.	Part No: 250-1000-001
	Fuel Pump Cooling Shroud	Part No: 331-0165-101
	Fuel Pump Cooling Shroud Installation	Part No: 331-0165-501
	Aeroduct Hose	
	Aeroduct "SCAT" type flexible tubing is constructed of a single impregnated fiberglass with a copper coated steel wire inside the outside. It will withstand temperatures from -80	
1 1 1 1 1	SCAT Tube Size 1"	Part No: 830-0004-001
	SCAT Tube Size 1-1/2"	Part No: 830-0006-001
	SCAT Tube Size 2"	Part No: 830-0008-001
	SCAT Tube Size 3"	Part No: 830-0012-001
	SCAT Tube Size 4"	Part No: 830-0016-001
	SCAT Tube Size 4-1/2"	D. I. N. 220 0010 001
	Cabin Heat System	Part No: 830-0018-001
	This system utilizes a rotary valve installed on the cockpit side It is designed with two cabin heat outlet tubes (one for the pil single outlet tube for the windshield defrost. In the off positio firewall allow heated air traveling from one exhaust heat muff compartment, avoiding hot spots inside the heat muff. Very a cabin heat and defrost is possible because of the unique rotary The cabin heat valve assembly may be purchased separately of kit including all hardware, spun aluminum flange, 11 feet of S	e of the Sportsman/GlaStar firewall. ot and one for the co-pilot) and a on, two openings forward of the to be vented into the engine accurate, smooth metering between y action of the valve. or as part of a complete installation CAT tubing and detailed instructions.
	This system utilizes a rotary valve installed on the cockpit side It is designed with two cabin heat outlet tubes (one for the pil single outlet tube for the windshield defrost. In the off positio firewall allow heated air traveling from one exhaust heat muff compartment, avoiding hot spots inside the heat muff. Very a cabin heat and defrost is possible because of the unique rotary The cabin heat valve assembly may be purchased separately of kit including all hardware, spun aluminum flange, 11 feet of S Cabin Heat System Installation	e of the Sportsman/GlaStar firewall. ot and one for the co-pilot) and a on, two openings forward of the to be vented into the engine accurate, smooth metering between y action of the valve. or as part of a complete installation CAT tubing and detailed instructions. Part No: 938-03000-01
	This system utilizes a rotary valve installed on the cockpit side It is designed with two cabin heat outlet tubes (one for the pil single outlet tube for the windshield defrost. In the off positio firewall allow heated air traveling from one exhaust heat muff compartment, avoiding hot spots inside the heat muff. Very a cabin heat and defrost is possible because of the unique rotary The cabin heat valve assembly may be purchased separately of kit including all hardware, spun aluminum flange, 11 feet of S	e of the Sportsman/GlaStar firewall. ot and one for the co-pilot) and a on, two openings forward of the to be vented into the engine accurate, smooth metering between y action of the valve. or as part of a complete installation CAT tubing and detailed instructions.

	Dual Sportsman Landing Light Kit	
	Light the way for those night takeoffs and landings and improve your visibility in the pattern anytime with our powerful, two cowling-mounted landing light. This kit includes two halogen landing lights, mounting kit, wire, wire terminals, anti-chafe, spiral wrap, clamps, quick disconnect terminals, and all hardware necessary for installation and detailed installation instructions. This kit does not include a panel switch or circuit breakers. (Note: 2 clear plexiglas lens comes with cowling kit.)	Part No: 921-04100-03
	GlaStar Landing Light Kit	
	Light the way for those night takeoffs and landings and improve your visibility in the pattern anytime with our powerful, cowling-mounted landing light installation. This kit includes a 4" diameter, 100,000 candlepower aircraft landing light, a spun aluminum retainer ring, a formed anodized aluminum shroud, wire, wire terminals, anti-chafe, spiral wrap, clamps, quick disconnect terminals, all hardware necessary for installation and detailed installation instructions. This kit does not include a panel switch or circuit breaker. (Note: clear plexiglass lens comes with cowling kit.)	Part No: 921-04000-01
	CP-25 Fire Barrier Caulking	
	Manufactured by the 3M Corporation, CP-25 replaces the previously recommended RTV-88 silicone sealant for use as a fire barrier caulking. Since CP-25 expands to fill voids caused by the shrinkage of other materials, it is preferred for use with materials that shrink when exposed to heat. Due to shelf life, order this product at the time of need. 10-1/2 fl. oz. tube.	Part No: 270-0132-001
	Fire Sleeve	
	Used to fire protect fuel lines in the engine compartment to FAR standard for certificated aircraft. Price is per foot.	Part No: 830-0102-012
	High-Temp. RTV Silicone Sealer	
	Capable of withstanding temperatures of up to 650 degrees F, this pliable sealer has many uses both forward and aft of the firewall. Price is for a 3 oz. tube.	Part No: 270-0026-002
	Air Duct Flanges	
	Aluminum Flanges: Lightweight; for attachment of duct hose be welded or riveted. Attractively anodized for maximum corr	
	1" Diameter x 1-1/4"	Part No: 610-0142-005
	1-1/2" Diameter x 1-1/4"	Part No: 610-0142-001
	3" Diameter	Part No: 610-0469-001
	Stainless Steel Flanges: Give extra durability and strength when required.	Part No: 610-0142-003
	1-1/2" Diameter x 1-1/4"	
	1-1/2" Diameter x 2"	Part No: 610-0142-004
	<ul> <li>12/14 V Alternator Kit 60 AMP, Lightweight</li> <li>12 volt, 60 amp, internally regulated alternator kit includes regulator, overvoltage protection, brackets, pulley, mounting hardware and belt*</li> <li>*NOTES: Belt included is for engines with 9.75" pulley. For engines with 7.5" crank pulley, order 30-5/8" long Gates XL 7300 3/8" V-Belt (pn 11A0760) from your favorite putternative parts dealer</li> </ul>	Part No: 210-0020-010
0000	favorite automotive parts dealer. Weight: 6 Pounds, 15 Ounces.	

	Magneto Cooling Kit	
	Help Extend the life of your engine magnetos! This kit includes two hat flanges, 20" of 3/4" aeroduct hose and installation hardware to install cooling ducting to both magnetos. This is an easy retrofit to existing engine baffling; requiring a step drill capable of 3/4" diameter holes, 1/8" drill bit and a "pop" rivet puller. Estimated installation time is less than one hour.	Part -08No: 042-07000
Props	s, Spinners, Governers, & Cowling Inf	ormation Top
	zell propellers is about 12-16 weeks from the date of order. A 25 e of order with the balance to be paid in full 30 days before shipm	
when first installed, whichever	ers defects in material and/or workmanship for the first 1000 hour occurs first. Hartzell constant speed propellers also have a maxin , highly recommends that the seals be replaced.	
	74" Propeller for 180/200 hp	
-	Non-Extended Hub Constant Speed Propellers This 74" - diameter, Non-extended hub prop produces	
	optimal climb and cruise performance. Operated on the 0-360-A1F6, the prop has no RPM restrictions; on the 0- 360-A1A, the prop is restricted from continuous operation between approximately 1900 and 2200 RPM, pending completion of a vibration survey. Note: This propeller can only be used on 0-360's with hollow crankshafts. Hartzell No:HCC2YK-1BF/F7666A-2/SM8 Installation Weight: 55.4 lbs.	Part No: 681-0476-004
	Hartzell Propeller Model HC-C2YR- 1BFP/F7497/SM19	
	2-BLADE PROPELLER; Available in 74"	
	HARTZELL "BLENDED AIRFOIL" DESIGN PROPELLER FOR USE WITH LYCOMING IO-390-X 210HP ENGINE	Part No: 681-0476-010
	Specifications: Compact Series Propeller Aluminum Hub/Aluminum Blade Construction Constant-Speed Non-Feathering	
	80" Constant Speed Compact Hub Prop for use with Lycoming O360-A1F6 or IO-390-X	
an an an	Operated on the O-360-A1F6, the prop has no RPM restrictions. On the IO-390-X continuous operation is prohibited above 24" manifold pressure below 2250 RPM and below 8" manifold pressure between 1950 and 2300 RPM. the propeller diameter limits are 78" to 80".	Part No: 502-04000-03
	C2R00081 HC-C2YR-1BF/F8477-4 (WITH NO DAMPER)	
	Propeller for Lycoming 0-360 - For use with Extended hub GlaStar cowling only	
	This 74" - diameter, extended-hub prop produces optimal climb and cruise performance. Operated on the 0-360-A1F6, the prop has no RPM restrictions; on the 0-360-A1A, the prop is restricted from continuous operation between approximately 1900 and 2200 RPM, pending completion of a vibration survey. Note: This propeller can only be used on 0-360's with hollow crankshafts.	Part No: 502-08000-01
	Hartzell Part No: HCF2YR-1F/F7666A-2/SM4	

	Propeller for Lycoming 0-320 - For use with Extended hub GlaStar cowling only	
	This extended hub propeller is 73" long, providing about 8 1/2" of ground clearance. Installed weight is 54.18 lbs. Note: This propeller can only be used on 0-320's with hollow crankshafts.	Part No: 968-10476-01
	Hartzell Part No: HCF2YL-1F/F7663-3/SM4	
Recommended governors for must be confirmed. General times). If a hydraulic syster performance of both system we'd recommend the versio manufactured in natural-cou aluminium alloy, Kevlar spin	man and GlaStar (All propellers are variable pitch, constant speed) or all hydraulic propellers: McCauley, Hartzell, Jihostroy and Woodwar lly we recommend the use of hydraulic propeller system because of it in is not possible the electric constant speed propeller is recommenden is sequal, if the same blade types are used. If the Lycoming IO-360 in which has 6th-order dampers installed (i.eA1B6) for lower vibrati imposite, protected by two layers of fiberglass and a stainless-steel er inner dome. Extended hubs - if required - are available on request, at i, customer defined colours upon request. See our Service Bulletin No.	's higher pitch change rate (~6 d. Take off, climb and cruise is selected as the preferred engine, ion loads. Our propeller blades are osion sheet, hubs made from no additional charge. Standard blade
	72" dia 34 lbs incl. Spinner P-294 (without governor) 2- blade hydraulic 502-06300-01	Part No: 502-06300-01
	71" dia 42 lbs incl. Spinner P-237-1 (without governor) 3-blade hydraulic	Part No: 502-06500-01
	80" dia 46 lbs incl. Spinner P-237-3 (without governor) 2-blade hydraulic	Part No: 502-05100-05
	72" dia 45 lbs incl. Spinner P-328 (without governor) 3- blade hydraulic         Sensenich Fixed Pitch Propellers	Part No: 502-05800-01
CODO IN	<ul> <li>their pitch may be adjusted by up to several inches in either of Therefore, if your initial propeller choice does not provide the be a relatively simple remedial solution.</li> <li>Sensenich propellers are all-metal, and come with mounting be appropriate Sportsman or GlaStar cowling. Installation weigh Standard delivery time for all Sensenich propellers is about 8</li> </ul>	performance you desire, there may polts and an extension to match the it for the 0-320 propeller is 42.83 lbs weeks. 25% non-refundable deposit
	required at time order is placed. All propellers are drop-shipp Sensenich. Cruise Propeller for Lycoming 0-360:	ed freight collect directly from
	76" diameter, 65" pitch. Designed for optimum cruise speed. Operated on the 0-360 A4M, the prop has no RPM restrictions; on the 0-360-A1A or A1F6, the prop is restricted from continuous operation between 2150 and 2350 RPM.	Part No: 502-06000-01
	Cruise Propeller for Lycoming 0-320 with 7/16" Prop Bolts: 74" diameter, 65" pitch. Designed for optimum cruise speed. Sensenich Part No: 74DM7S16-0-65	Part No: 681-7465-101
	Cruise Propeller for Lycoming 0-320 with 3/8" Prop Bolts:74" diameter, 65" pitch. Designed for optimum cruise speed. Sensenich Part No: 74DM6S16-0-65	Part No: 681-7465-102
	Climb Propeller for Lycoming 0-320 with 7/16" Prop Bolts: 74" diameter, 62" pitch. Designed for optimum climb performance. Sensenich Part No: 74DM7S16-0-62	Part No: 681-7462-101
	Climb Propeller for Lycoming 0-320 with 3/8" Prop Bolts: 74" diameter, 62" pitch. Designed for optimum climb	Part No: 681-7462-102

Jihostroj Governor	
Glasair Aviation also carries the Jihostroj governor. Compact design and light 2 lbs weight.	Part No: 681-0210-050-160-180-210 hp
 Lycoming Cowling for Sportsman/Glastar	
This Lycoming cowling - which accommodates O-320, O-360, IO-360 and IO-390's without modification and is included in the standard Glastar and Sportsman kits - consists of molded upper and lower cowling halves where the lower cowl comes with the cowl flap and the landing light lens recesses premolded into the shape. The installation kit includes all hardware to secure the cowling to the fuselage; a molded oil access door; MS hinge stock for fastening the oil access door, all required rivets and hardware and detailed installation instructions	Part No: 930-03000-01
Note: This cowl can be installed with either the compact or extended hub propellers. For compact hub propeller installations, approximately two inches will need to be trimmed off the aft edge of the cowling.	

All spinner installation kits come with a sleek, molded fiberglass spinner matched to the contours of the respective Sportsman or GlaStar cowling, anodized aluminum front and back plates, all necessary installation hardware, and detailed instructions (which include templates to make the proper propeller blade cuts). Note: Lycoming 0-360s, 0-320s, IO-390's and IO-360's with similar bolt size take identical spinners.

	Lycoming with Hartzell Constant-Speed Propeller Extended Hub	Part No: 301-0260-501
	Lycoming with Sensenich Fixed-Pitch Propeller and 7/16" Prop Bolts	Part No: 301-0260-507
	Spinner Kit for CS compact hub propellers on GS/SP Note: This option kit provides all the parts, materials and hardware necessary for the spinner installation used on Sportsman and GlaStar aircraft equipped with the constant-speed <b>compact hub propellers</b> . This spinner kit will not work on the extended hub propellers.	Part No: 301-0260-508
	Lycoming with Sensenich Fixed-Pitch Propeller and 3/8" Prop Bolts	Part No: 301-0260-506

#### Terms re Hartzell Propeller Purchases:

Standard delivery time for Hartzell propellers is about 12-16 weeks from the date of order. A 25% deposit is required to be paid to Glasair Aviation, LLC at the time of order with the balance to be paid in full 30 days before shipment. Propellers are drop-shipped freight collect directly from Hartzell.

Propellers must be shipped in calendar year 2012 to qualify for this pricing. November 15, 2013 is the approximate order cutoff date to qualify for 2013 shipment.

Hartzell's factory warranty covers defects in material and/or workmanship for the first 1000 hours or for a period of one year from when first installed, whichever occurs first. Hartzell constant speed propellers also have a maximum shelf life of 2 years, after which Hartzell, in Service Letter 61-P, highly recommends that the seals be replaced.

Engine & Flight Instruments		Тор
Molded Instrument Panel Installation - GlaStar Bring state-of-the-art ergonomics, style and utility to your GlaStar cockpit! Although based on the extremely popular Glasair Future Vision panel, the GlaStar molded instrument panel has been completely re-tooled specifically to fit the GlaStar airframe. Say goodbye to problems of glare and parallax with the panel's unique canted sub-panels, which are individually removable, making instrument and avionics maintenance a snap as well, the installation kit includes the pre-molded, gel- coated panel, all installation materials and hardware;	Part No: 912-05000-01	

	sheet metal and classy stainless-steel cap screws for the panel inserts; and detailed instructions.	
	Low Profile Molded Instrument Panel Installation - Sportsman This lower profile version of the GlaStar panel designed for the Sportsman will fit either the Sportsman or the GlaStar. The top corners of the panel are more rounded allowing better visibility over the nose. The molded instrument panel has been completely re-tooled specifically to fit the Sportsman airframe. The panel's unique sub-panels, are individually removable, making instrument and avionics maintenance a snap, the installation kit includes the pre-molded, gel-coated panel, all installation materials and hardware; sheet metal and classy stainless-steel cap screws for the panel inserts; and detailed instructions.	Part No: 912-05100-01
	Glare Shield for the Molded Instrument Panel - Glastar The Sportsman Glare Shield is specifically designed to fit over the Sportsman Low Profile Molded Instrument Panel (912-05100-01). It is lightweight yet strong and can be easily painted or upholstered to match any interior. The optional Defrost Manifold Kit 930-05000-03 (shown in picture) can be fit under the glare shield to provide excellent airflow over the window in cooler climates.	Part No: 930-04000-01
- in	Glare Shield for the Sportsman Low Profile Instrument Panel - Sportsman/GlastarThe Sportsman Glare Shield is specifically designed to fit over the Sportsman Low Profile Molded Instrument Panel (912-05100-01). It is lightweight yet strong and can be easily painted or upholstered to match any interior. The optional Defrost Manifold Kit 930-05000-03 (shown in picture) can be fit under the glare shield to provide excellent airflow over the window in cooler climates.	Part No: 930-05000-01
	Defrost Manifold - Sportsman/Glastar The Defrost Manifold Kit is specifically designed to fit under the Sportsman Glare Shield (930-05000-01) and the GlaStar Glare Shield (930-04000-01) to provide excellent airflow over the window in cooler climates. Kit container manifold, tube and diffuser plate.	Part No: 930-05000-03

### **Custom Labeling**

Custom labeling for instrument panels and rocker switches are available direct through Aircraft Engravers, phone (203) 653-2780, fax (203) 654-7324. If you have seen or read about Ken Johnson's Grand Champion Glasair III, these are the folks that provided his labeling. Call them for more information.

 Avionics, Headers, & Intercoms		Тор
LightSpeed QFR XC2 Headset 10-12 dB of Active Cancellation 24-26 dB of Passive Attenuation Exclusive AES Battery 'Time Out' Auto Shut-Off Aux Audio Input Significant reduction in the 120-200Hz range Additional active attenuation out beyond 600 Hz Small In-Line Battery Control Box Two 'AA' batteries provide 25 hours of operation Battery Status Indicator Dual volume controls, stereo/mono selection and a LED battery "fuel gauge" to monitor usage Reversible Boom Allowing for Left or Right Side Operation Adjustable Gain Pre-amp Allowing for Field 'Balancing' of Mic Sensitivities Color: Black	Part No: 121-3010-01	
3 Year Warranty from LightSpeed		

LightSpeed Thirty 3G Headset (battery powered) 28-30dB of Active Cancellation 12-22dB of Passive Attenuation Exclusive AESTM "Auto Shut-Off" powers down the Active Electronics if system is left unattended. Personal Side-Tone EQ with Bass and/or Treble Boosting Cell Phone Interface Auxillary Audio Interface Weighs under 16 ounces ANR Power for 14-24 Hours on just Two AA Batteries Independent left and right ear volume controls Stereo-or-mono switchable Temperature Sensitive Confor-Foam Ear Seals Padded Headset Bag, Mic Wind Screen, and (2) AA Batteries Included. Interface Cables for Music / Cell Phone Low battery indicator Color: Blue	Part No: 121-3020-01
 3 Year Warranty from LightSpeed LightSpeed Thirty 3G Headset (panel powered)	
The Quietest LightSpeed Has Ever Made! 28-30dB of Active Cancellation 12-22dB of Passive Attenuation Exclusive Glastar, Sportsman or Glasair Logo available on each ear-cup! Exclusive AESTM "Auto Shut-Off" powers down the Active Electronics if system is left unattended. Personal Side-Tone EQ with Bass and/or Treble Boosting Cell Phone Interface Auxiliary Audio Interface Weighs under 16 ounces Panel Powered, single cord Independent left and right ear volume controls Stereo-or-mono switchable Temperature Sensitive Confor-Foam Ear Seals Padded Headset Bag, and Mic Wind Screen Included. Interface Cables for Music / Cell Phone Color: Grey 3 Year Warranty from LightSpeed	Part No: 121-3030-01
*to purchase the panel receptacle (Lemo Redel part number PTG.M0.6NL.LC65N) contact Earle & Brown @ 425-885-5064.	
 Cabin & Cockpit Accessories	Τοι
Door Latch Retrofit Kit	
This option kit greatly improves the function and appearance of the door latch mechanism resulting in more positive latching and a tighter coal on the main	

appearance of the door latch mechanism resulting in more positive latching and a tighter seal on the main cabin doors. The upgrade kit contains stronger, larger diameter aluminum pushrods, machined aluminum clevis ends and threaded inserts. Installation of the threaded inserts and clevis ends is simple and easy and the length adjustment feature of the pushrod assemblies allows for complete engagement of each door latch into its respective door dog. Eliminates tolerance build-up and bowing of the pushrods under load.

Also included is aluminum sheet for fabrication of new latches and doublers, machined aluminum spacers, 3/8 diameter Nylon rod used as friction pad material, and hardware for attachment of the pushrods to the latches.

This kit does not come with prefabricated door dogs, which are highly recommended.

Part No: 940-07100-03

	Pre-fabricated Door Dogs This option kit saves you hours of fabricating the door	Part No: 940-07100-01
22 65	dogs. The prefabricated dogs are deburred and ready to install.	
	Sportsman Door Lock/Ignition Switch Installation	
	Secure your investment with the door lock/ignition switch-installation! Both cabin door locks, both baggage door locks and the ignition switch all use a common key so you'll never have to fumble for the right key. In addition to the three locksets and a standard, five position aircraft magneto switch, the kit includes an extra key, all installation parts and hardware, and detailed instructions.	Part No: 921-03000-01
	Dual Brake Installation - GlaStar	
	Share the braking duties with complete co-pilot's side toe brakes - highly recommended for GlaStar owners who intend to put their spouses and/or teenage kids in the left seat! This installation kit includes two Matco master cylinders with custom GlaStar clevises; all required sheet metal, angle stock and hardware, all necessary tubing and fittings and detailed installation instructions.	Part No: 991-01000-01
	Dual Brake Installation - Sportsman	
	Share the braking duties with complete co-pilot's side toe brakes - highly recommended for Sportsman owners who intend to put their spouses and/or teenage kids in the left seat! This installation kit includes two Matco master cylinders with custom GlaStar clevises; all required sheet metal, angle stock and hardware, all necessary tubing and fittings and detailed installation instructions.	Part No: 991-01000-03
	Cast Rudder Pedals - GlaStar	
	They not only look good they are functional. We have used these pedals for years on the Glasair's, these come out of the cast with "Glasair" on them. You will find it is easier to stay off the brakes with these pedals. All the hardware and installation instructions are included. (2 Pedals per set)	Part No: 991-02000-01
	Control Stick Grips	
	These stick grips are superb quality, made of black molded is attractively molded into the top of the handle (except on available: civilian type (#'s 1451, 1452, 1453), and military stick will fit either hand and comes with one trigger switch of positions are left unfilled and switches may be added by the come with the switches described. Switch functions may be auto-pilot disengage, roll trim, etc. Weight: .25 lb. Ea. Ther order early. *These grips include a sleeve to match the inside diameter	the military type grip). Two styles are y type (#1460). The neutral military only, the remaining three switch a builder, if desired. The other grips used for intercom, radio transmit, e is often a lead time on these parts, so
	the control stick.	
	2 Switch, Rt. Hand	Part No: 621-1451-101
	1 Switch, Rt. Hand	Part No: 621-1452-101
	1 Switch, Lt. Hand	Part No: 621-1453-101
	4 Switch, Neutral	Part No: 621-1460-101
	Cabin Air Vent Installation Keep your cool under the most difficult circumstances! This installation - which has been performance-tested at the hottest airshows in the country! uses a sleek NACA-style scoop on each side of the fuselage to provide separate, individually adjustable ventilation sources for the pilot and co-pilot. The complete kit includes two pre- molded air boxes with integral NACA scoops, two wide- mouthed "eyeball" ventilators, all installation hardware	Part No: 938-02000-01

Seat Belt and Shoulder Harness Set - GlaStar	
Designed for the GlaStar, these seat belts and dual shoulder harnesses feature "cruiser gray" nylon straps customized with the GlaStar logo and chromed buckles. These belts are brand new, PMA-approved and manufactured to our size specifications for the GlaStar. The price shown is for belts for one seat only. All necessary attach hardware for both seats in provided in the standard GlaStar kit.	Part No: 803-00630-01
Seat Belt and Shoulder Harness Set - Sportsman	
Designed for the Sportsman, these seat belts and shoulder harnesses feature "cruiser gray" a straps customized with the Sportsman logo and chromed buckles. These belts are brand new approved and manufactured to our size specifications for the Sportsman. The price shown is belts for one seat only. All necessary attach hardware for both seats is provided in the standard Sportsman kit.	
Left Side	Part No: 803-00690-01
Right Side	Part No: 803-00690-02
Seat Belt, SP, Left, Rear	Part No: 803-00575-01
Seat Belt, SP, Right, Rear	Part No: 803-00575-02
GlaStar Windshields	
any additional "safety" it might provide. In this regard, when Stoddard-Hamilton developed the Glasair III, they investigated general aviation aircraft bird-strike issues, observed bird-strike test etc. What they concluded was that the only windshields capable of offering any real protection from bird strikes are substantially thicker (as is ½" thick or greater), 'stretched' acrylic windows, which are used primarily on commercial, private and military jets. The weight and expense of this type window has kept them priced out of the kitplane realm and similar sized general aviation aircraft. Will a 3/16" windshield offer an increase in bird-strike protection on a Glastar? Based upon our research, we believe that, if a hawk, pigeon or seagull-size bird impacts near the center of either 1/8" or 3/16" windshield. (or almost any windshield on small general aviation aircraft), the bird is likely to penetrate the windshield. Thus, we believe the additional weight of the 3/16" windshield not worth the minimal, if any, gain in protection from a real-world bird-strike. The good news is that bird-strikes are infrequent; see-and-avoid tactics work for pilots and birds themselves. However we offer the thicker windshield so you can make the decision that is right for you. Quality and Fit: Be assured that Glasair Aviation has (1) qualified all of our window vendors; (2) specified the highest optical and surface finish quality; and, (3) verified that each window you receive from Glasair Aviation will have high quality optics. (Interestingly, one aftermarket supplie who claims to have superior windows actually purchases windshields from one of our vendors!) Recently, we have evaluated the fit of the windshields that we supply (and compared them to the provided by aftermarket suppliers) and verified that the windows we supply fit very nicely. (Note	
 should you decide to purchase an aftermarket window or wind upon our testing, some of these windows do not fit near as w Glasair Aviation and may require greater force and effort to fi 1/8" thickness (10.5 lbs.)	ell as those currently offered by
3/16" thickness: Part No (16.0 lbs.)	Part No: 101-14001-03
 Sportsman Rear Floorboard and Seat Options:	101110.101-14001-05
Note: For a complete rear seat installation you must order bo 803-00575-01 Seatbelt, SP, Left, Rear and 803-00575-02 Sea Those desiring not to install the rear seat, but a partial rear fl choose to order kit 930-06000-01 only.	atbelt, SP, Right, Rear listed above.

Pilot and Co-Pilot Seats	
Now Available - Ergonomically designed seats for your Sportsm combination of fire retardant memory and open cell polyuretha comfort and support. Upholstered in gray faux-leather which is zolotone interior of the fuselage	ne foam to provide long-lasting
Pilot Seat	Part No: 930-07000-11
Co-Pilot Seat	Part No: 930-07000-12
Sportsman Baggage Floorboard & Seat Base Kit	Fait No. 930-07000-12
Sold separately for those who may not want to install the rear seat back and restraints. This kit includes a strong, lightweight 1/4" composite floorboard with a set of two support flanged bulkheads conforming to the fuselage belly. The floorboard extends 30" forward of bulkhead A. Kit includes all installation hardware and detailed instructions. Laminating resin not included.	Part No: 930-06000-01
Sportsman Rear Seat Back Kit This kit includes a lightweight composite, flanged seat back, upper locking bar assembly, a set of welded pivot hinges and fuselage bushing to allow for easy folding of the seat back or complete removal within seconds. All assembly hardware and detailed instructions included.	Part No: 930-06000-03
GlaStar & Sportsman Primer/Zolatone Touch-up Kit This kit includes <u>one pint of gray polyester primer</u> (with catalyst) and <u>4 ounces of Gray Stone Zolatone.</u> These materials are for touch-up and repair of the factory interior finish on the GlaStar and Sportsman Jump-Start fuselages. The primer must be thinned 30-40% with Acetone. (not included) Note: Early fuselages were painted on the inside with a darker primer and Gray Stone Zolatone. This primer can be obtained from any automotive paint supply store that stocks PPG products: DP50LF (gray) Primer DP402LF Catalyst DT Reducer.	Part No: 027-00005-01
Seal Kit, Spar & Cable Made of soft, thin rubber combined with a gray powder coated cover, the spar seals are designed to close the gaps between the fiberglass wing root and the GlaStar and Sportsman main wing spars, resulting in both a quieter cabin and a "cosmetically improved" interior. The cable seals are designed to fit against the drain pans and seal the flap and aileron cables as they enter the cabin. Standard, off-the-shelf contact cement is required to install the seals (not included). The seals come with installation instructions PN 063-09071-01	Part No: 962-02000-01
Interior Closeouts If you like the finished look of the Sportsman interior from the interior closeouts are now available. To help identify the closed here for a pdf document with photos.	
Fwd Tunnel Cover, Kit 4 way Andair	Part No: 962-03000-01

Fwd Tunnel Cover, Kit 2 way Swagelok	Part No: 962-03000-02
Rear Tunnel Cover Kit	Part No: 962-04000-01

Airframe Accessories	Тор
Sportsman and Glastar Aileron Anti-Servo Kit Description: The Aileron Anti-Servo Kit will lower the GlaStar aileron control forces by a measured 33%, improving overall control harmony between pitch and roll forces. (Note: the Anti-Servo Kit is included in all Sportsman kits.) Installation is made easy with our pre- assembled kit, which includes detailed installation instructions. The kit includes a fully assembled 23" anti- servo tab (with anti-corrosion primer inside), rolled piano hinge, a formed spar section (which is installed in the aileron to support the assembly), an attach bracket, pushrod assembly and all necessary hardware to complete the installation. To install the kit, the left aileron is removed and a 23" x 2.8" section of the inboard trailing edge skins are removed. After trimming, the supplied spar section and hinge is riveted in place and a bracket is attached to the anti-servo tab and the aileron hinge. The supplied pushrod is then trimmed to length, clevises bonded on, and the pushrod assembly installed. Included as standard in the Sportsman kits. Note: The servo-tabs have cosmetic (non- structural) surface scratches. If you intend to polish your servo-tab, you should manufacture your own servo-tab.	NGA Part No: 921-06100-01
Sportsman and Glastar Aileron Electric TrimDescription: Our compact, lightweight Aileron Trim Kit makes flying a GlaStar or Sportsman even more enjoyable! It solves the trim imbalance associated with loading or occasional uneven fuel flow from the wing tanks. We were amazed at how well this trim system worked at reducing fuel management and unbalanced stick forces after installing it on the Sportsman prototype. Installation is made easy with this complete kit and detailed assembly instructions. The kit includes a fully assembled 14" trim tab (with anti-corrosion primer inside), rolled piano hinge, a formed spar section (which is installed in the right aileron to support the hinge), attach bracket, trim servo with pushrod assembly, inspection cover and all the wire and electrical connectors necessary to complete the installation. To install, the right aileron is removed and a 14" x 2.8" section of the inboard trailing edge skins are removed. After trimming, the supplied spar section and hinge is riveted in place. The trim servo is then installed inside the aileron through a hole cut-out in the lower skin. A bracket is then attached to the trim tab, the supplied pushrod installed, clevis threaded on, and the pushrod assembly installed. Simple!Note: This kit comes with a 2 wire servo and a 2 wire cable which cannot be used with a panel indicator. The kit does not include the hat switch(es) which one will need on the stick grip(s). If you have already purchased our elevator trim kit, and have ordered the optional Elevator Trim Hat Switch (Part No: 210-0098-001 or 210- 0099-001), no additional switches are required. The servo-tabs have cosmetic (non-structural) surface scratches. If you intend to polish your servo-tab, you should manufacture your own servo-tab.	NGA Part #: 921-06200-01
Gear Conversion Kits Enjoy the best of both worlds! Since and important element of Sportsman and GlaStar versatility is the ability to switch back and forth from one landing gear	Part No: 937-01000-01

937-01100-01	configuration to another quickly and easily, our landing gear conversion kits make shopping for the necessary parts quick and easy too! No matter which gear you're starting with, we've got a kit that will get you where	
937-03000-01	you're going. Conversion kits do not include any parts that are common to the "before" and "after" installations ( such as main gear legs, for example) but include all other required parts, hardware and instructions. Please be aware that there is a fairly lengthy lead time on some landing gear parts, so please call for availability.	
	A. Tricycle to 5.00 X 5 taildragger - GlaStar	
	A1. Tricycle to 6.00 x 6 Taildragger - Sportsman	
	Includes two hardware trays, main gear leg fairing (aluminum and hinge), Scott 3200 tail wheel assy., tail wheel spring set, steering springs, tail wheel cable assy. and spring attach angles.	
	B. Tricycle to 6.00 X 6 taildragger - GlaStar	
	*Same as (A) 5x5 tail wheel conversion kit above with the addition of a set of Grove 6/8x6 wheels, brakes, 6x6 tires and tubes and 6x6 main gear axle sleeves and brake flange weldments. Assembly instructions included.	Part No: 937-01200-01
	C. Tricycle to 8.00 X 6 taildragger - GlaStar	
	*Same as (B) 6x6 taildragger kit above with 8x6 tire tube package rather than 6x6 tires.	Part No: 937-01100-01
	D. 5.00 X 5 taildragger to tricycle - GlaStar	
	*Includes nose gear strut, upper and lower nose gear trunnion weldments, nose gear fork, axle and spacers, stop plate weldment, nose wheel assy., nose tire and tube, nose wheel pant and strut fairing and all installation hardware.	Part No: 937-02000-01
	E. 6.00/8.00 X 6 taildragger to tricycle - GlaStar	
	* Same as (D) with the addition of a Grove 5x5 wheel and brake set, 5x5 tires, tubes, wheel pant set (left and right) and all installation hardware.	Part No: 937-02100-01
	F. 5.00 X 5 taildragger to 6.00 X 6 taildragger -	
	GlaStar *Includes a Grove 6/8x6 wheel and brake set, 6x6 tires and tubes, axle flange weldments, axle spacers and sleeves. All installation hardware is included.	Part No: 937-03100-01
	G. 5.00 X 5 taildragger to 8.00 X 6 taildragger - GlaStar	
	Giastai	Part No: 937-03000-01
	*Same as (F) but with 8x6 tires and tubes.	
	H. 6.00 X 6 taildragger to Trike - Sportsman	Part No: 039-01415-01
	<b>I. 6.00 X 6 tricycle to TUNDRA tricycle - Sportsman</b> For all of those that saw the Tundra Trike at Oshkosh and want to configure your Sportsman the same, the option is now available. Go the same places that the taildragger goes, but now you don't have to deal with a Taildragger.	Part No: 937-06000-01
	*Includes, nose gear fork, axle and spacers, nose wheel assy., $(1) 600 \times 6$ Tire and tube and $(2) 800 \times 6$ tire and tubes and all installation hardware.	
	Extra Main Gear Leg Set - GlaStar	
		Part No: 937-04000-01

	Auxiliary Fuel Tanks	
933-01000-03         933-01000-03         201-41000-05/6	GlaStar and Sportsman customers with the old style fuel tanks PN 201-41000-05 & -06 can get their fuel sensing for the main tanks with mechanincal guages PN 201- 40030-01 & -02. Few destinations are out of reach with the 20 gallons of additional fuel capacity available with the auxiliary fuel tank installation kit. A 10-gal. aluminum tank is easily installed in the outer bay of each wing (or easily retrofitted to a finished aircraft). The aux tanks feed into the two main tanks via a pair of electric transfer pumps. The pumps, when not operating, provide a positive shut-off in both directions between the aux tanks and the mains, preventing any outflow of fuel from the mains. Fuel management with this system is a simple matter of burning down the main tanks and then running one or both transfer pumps to refill them. Customers wishing to use the electronice fuel sending units PN 201- 40030-05 can monitor all 4 tanks.	
	Auxiliary Fuel Tank Installation Kit (Included as standard in Sportsman Kits)	
	The installation kit includes the tanks, pumps, custom sump drain fittings, all plumbing and wiring (up to the instrument panel), all installation materials and hardware, and detailed instructions covering both original equipment and retrofit installations. Note: The kit does not include switches or circuit breakers.	Part No: 933-01000-04
	For customers who wish to source their own pumps, drain fittings, plumbing, wiring, installation materials and hardware, we also offer the auxiliary fuel tanks by themselves.	
	Auxiliary Fuel Tank (Tank Only) Left	Part No: 201-41000-07
	Auxiliary Fuel Tank (Tank Only) Right	Part No: 201-41000-08
	Electric Fuel Sensors Simple, lightweight and reliable! These electric fuel sensors bolt up to the mounting flanges on the Sportsman main and aux fuel tanks, providing information for electric gauges and/or EFIS units (such as Advanced Flight Systems). These sensors have a custom float arm and readjusted angular travel stops specifically for the Sportsman tanks. Note: The price below is for one gauge, including gasket and mounting hardware: two required for sensing of main tanks only or four required for sensing of main and aux tanks per aircraft.	Part No: 201-40030-05
	Mechanical Fuel Gauge Simple, lightweight, low-tech and reliable! These Rochester gauges bolt up to the mounting flanges on the Sportsman and GlaStar main fuel tanks, providing easy- to-read fuel level indication. Although they utilize the same basic, well proven float-arm design as the Rochester gauges sold by the large aircraft supply houses, these gauges have a custom float arm and readjusted angular travel stops specifically for the	
	Sportsman and GlaStar tanks, Don't be fooled into buying "cheaper" fuel gauges that might cost you dearly because of their inaccurate readings! Note: The price below is for one gauge, including gasket and mounting hardware: two required per aircraft.	
	"cheaper" fuel gauges that might cost you dearly because of their inaccurate readings! Note: The price below is for one gauge, including gasket and mounting hardware: two	Part No: 201-40030-01

	Flush Fuel Caps	
	By popular demand! Replace the standard, "John Deere" fuel caps (actually, that's one of the more polite names we've heard!) with sleek, precision-machined, flush- fitting caps. Locking and non-locking varieties are available. Both types feature one-piece, anodized aluminum bodies that screw directly into the filler opening of the Sportsman and GlaStar tanks - either the mains or the aux tanks. The non-locking caps feature a high-impact plastic, lever-action cap, while the locking caps are of an all-metal design. Note: Prices are for single caps - one required per tank.	
	Locking Fuel Caps	Part No: 201-40004-01
	Non-locking Fuel Caps	Part No: 201-40003-01
	ners choose not to utilize the wing fold feature, and our desire is to ree (3) items, which facilitate the ease and speed of wing folding, Wing Brace Kit - GlaStar	
	This kit includes two tubular steel strut assemblies to support the inboard leading edges of the wings while they're folded, two shorter tie-struts to secure the outboard trailing edges of the wings to the vertical fin; all necessary hardware and sheet stock for the race attach points, and detailed instructions. All the strut assemblies come with anti-corrosion protection, and the leading- edge struts include threaded clevis ends for precise length adjustment. Note: the wing-fold mechanism itself is standard in the Sportsman and GlaStar kit. No part of this option kit is necessary for flight.	Part No: 902-01000-01
902-01000-01	Wing Brace Kit - Sportsman This kit includes two tubular steel strut assemblies to support the inboard leading edges of the wings while they're folded, two shorter tie-struts to secure the outboard trailing edges of the wings to the vertical fin; all necessary hardware and sheet stock for the race attach points, and detailed instructions. All the strut assemblies come with anti-corrosion protection, and the leading- edge struts include threaded clevis ends for precise length adjustment. Note: the wing-fold mechanism itself is standard in the Sportsman and GlaStar kit. No part of this option kit is necessary for flight.	Part No: 902-01050-01
	Wing Drain Pans - GlaStar The wing drain pan area will keep rain out of the baggage area. This is a valuable addition for those who fold the wings often. We have conducted field tests in the rainiest part of the country, (which happens to be right out our door, and we are still dry!) The photo below shows the panel from the outside and inside of the fuselage.	Part No: 940-01000-01
945-01000-01	Wing Drain Pans - Sportsman The wing drain pan area will keep rain out of the baggage area. This is a valuable addition for those who fold the wings often. We have conducted field tests in the rainiest part of the country, (which happens to be right out our door, and we are still dry!) The photo below shows the panel from the outside and inside of the fuselage.	Part No: 940-01100-01
	Top Deck Hatch Quarter-Turn Fasteners If you intend to fold your Sportsman's or GlaStar's wings often, you'll definitely want quick-release fasteners on the top-deck hatches. This kit includes 26 quarter-turn CAMLOC fasteners and rivets to replace the screws and nutplates that come in the standard fuselage kit. Fastener installation instructions are also included.	Part No: 945-01000-01

	Fastener Retro Kit, Top Deck Hatch	
	To retrofit an existing Sportsman's or GlaStar's top-deck hatches with quick-release fasteners. This kit includes longer 34 quarter-turn CAMLOC fasteners and rivets to replace the screws and nutplates that are the standard fuselage kit installation. Fastener installation instructions are also included.	Part No: 945-01000-02
0	Anti-Chafe Tape, 3/4" Wide This .010" thick ultra-high molecular weight (UHMW) anti-chafe tape offers maximum abrasion resistance. It should be used to protect against chafing between the fuel tanks and the wing hat sections, as well as between the horizontal stabilizer and its associated strakes and fairings. Price is for an 18-yd. roll.	Part No: 033-01001-01
912-02000-01	Heated Pitot/Static System (without Pitot Head) This kit includes installation instructions, mounting materials, wiring, static ports and all the plumbing for installation of a heated, IFR-certifiable pitot/static system. However we have removed the heated pitot tube and listed it separately. We are happy to order the tube for purchasers who request it (see next item below), but it is a standard tube that may be more easily found through some of the large aircraft supply houses, which have the advantage of purchasing such items in greater volume. Note: This kit does not contain a switch or circuit breaker.	Part No: 912-02000-01
	Heated Pitot Tube         This 14 V heated pitot tube is a military-spec, "L" shaped         AN5812-12 type, which uses 1/4" AN flared tube fittings.         The tube comes with an AN315-1 phenolic connector         receptacle	Part No: 120-5812-012
120-5812-012	Non-Heated Pitot/Static System This kit includes installation instructions, mounting materials, custom calibrated static ports, pitot tube and all plumbing for a non-heated pitot/static system. Note: This system is suitable for VFR flight only.	Part No: 912-01000-01
	Tires and Tubes Goodyear 5.00 x 5 main wheel tire	Part No.: 800-0660-003
	Generic* 5.00 x 5 main wheel tire	Part No.: 800-0660-001
	Generic* 6.00 x 6 main wheel tire	Part No.: 080-06060-01
	Generic* 8.00 x 6 main wheel tire	Part No.: 080-08060-01
	Generic* 11.4 x 5 nose wheel tire	Part No.: 800-0655-001
	5.00 x 5 main wheel tube	Part No.: 800-0675-001
	6.00 x 6 main wheel tube	Part No.: 080-06075-01
	8.00 x 6 main wheel tube	Part No.: 080-08075-01
	11.4 x 5 nose wheel tube	Part No.: 800-0670-001
	Brake Lining Kit	
	Replacement brake linings for Cleveland brakes. Since all GlaStar models use differential braking to assist in directional control, it is important to replace the linings before they are worn excessively. Excessively worn linings may allow the O-ring on the brake piston to move past its seal in the caliper, resulting in loss of fluid pressure and immediate brake failure, not to mention the damaged discs.	
	The Brake Linings are for 5" wheels	
	Model: GlaStar	Part No: 900-0678-501
	Replacement Cleveland Brake Master Cylinder	

	Stainless Steel Brake Line Upgrade	
	Upgrade your brake lines to a stainless steel braded line. Can be retrofit on all GlaStar and Sportsman aircraft. Includes two brake line assemblies and fittings.	Part No: 991-03000-201
	Electrical Options & Accessories	То
	Lighted Panel Switches Manufactured by Microswitch, these panel switches are an enha These are a flush mounted lighted rocker switch that illuminate press it to the "on" position. The white caps can easily be label switch bracket is able to house (1) master switch and (7) rocket simple. These are the same Panel Switches that are installed in Order early as stock quantities are limited.	es an opaque white cap when you ed for quick cockpit reference. The er switches. Installation is quick and
	Switch Bracket (One Needed)	Part No: 210-0061-008
	Switch-Cap (Up to 7 req.)	Part No: 210-0054-010
	Switch-Lamp 14 V (Up to 7 req.)	Part No: 210-0073-001
	Switch-Lamp 28 V (Up to 7 req.)	Part No: 210-0085-001
	14 Volt High Intensity	Part No: 210-0070-001
	28 Volt High Intensity	Part No: 210-0017-001
	Master Switch (One Needed)	Part No: 210-0034-001
	Complete Eight-Switch Installation - 14 Volt	Part No.: 210-0061-501
	Wire Marking System	
	This is an excellent wire marking system, as used on the Glasair III prototype. The system consists of a booklet of tabs that can be marked with a code number, peeled off, and then wrapped around the wire.	Part No: 870-0014-101
	Nav/Strobe Light System         This navigation and strobe light system brings your         Sportsman or GlaStar into full conformity with all FAR         part 23 standards for aircraft position and-collision         lighting. The system consists of two wingtip-mounted         light units, each containing an appropriately colored         position light, a white strobe and an aft-shining white         position light. These light heads are manufactured by         Whelen Engineering, the world leader in aircraft lighting         systems.         We offer the installation kit for those who already have         the Whelen HD60 installation kit, left and right A600 light         heads and A413 power supply. Note: The installation kit         does not includes switches or circuit breakers.         Installation kit only	Part No: 921-02000-02
	Lamps	
210-0359-001/4	Navigation Lamp, 14 V	Part No: 210-0359-001
210 00001/4	Navigation Lamp, 28 V	Part No: 210-0359-004
	Tail Lamp, Glasair I, 14 V	Part No: 210-0359-002
	Tail Lamp, Glasair II, III 14 V	Part No: 210-0508-014
	Tail Lamp Glasair II, III 28 V	Part No: 210-0508-028
	14 Volt Landing Light	Part No: 210-0359-003
210-0359-003/5	28 Volt Landing Light	Part No: 210-0359-005

 electrical components in your Glasair. Two needed per plane.	
Antennas These lightweight, double-element dipole antennas are designed fiberglass aircraft structures. They consist of self-adhesive copp length for tuning and solderred to double-shielded tri-axial cable to install, these are used exclusively on all of our factory aircraft airframe drag! Kits include the pre-soldered antenna and cable and instructions(Note: With the tri-axial cable shortened appropriate	er foil tape trimmed to the proper e with ferrite matching cores. Easy t with excellent results and zero assembly, a male BNC connector
mounted on the fuselage sidewall behind the baggage bulkhead Com (118-1326 Mhz), vertical fin mounting Triax cable length 275"	
MKR (75 MHz) triax cable length 161"	Part No: 211-0112-503
FM entertainment (88-108 MHz) Triax cable length 148"	Part No: 211-0112-504
NAV/VOR (108-118 MHz) Left Wingtip	Part No: 211-0112-506
 Antenna - Transponder	Part No: 211-0112-507
Individual Electrical Components Following is a list of electrical components available for builders system installation in their Glasairs. Other electrical system com	
System installation in their Glasans. Other electrical system components included with the retractable gear kits, are also availy what you need is not listed.         Master Switch, Dual (need cover)	
components included with the retractable gear kits, are also available what you need is not listed.         Master Switch, Dual (need cover)	Part No: 210-1994-011
components included with the retractable gear kits, are also available what you need is not listed.         Master Switch, Dual (need cover)         Master Switch Cover	ailable. Call our parts order desk if
components included with the retractable gear kits, are also available what you need is not listed.         Master Switch, Dual (need cover)	Part No: 210-1994-011
components included with the retractable gear kits, are also avain what you need is not listed.         Master Switch, Dual (need cover)         Master Switch Cover         Control Stick Grip Momentary Switch         These switches are specifically for use in our Glasair stick grips. They are of excellent quality and meet or exceed	Part No: 210-1994-011 Part No: 210-1843-001
components included with the retractable gear kits, are also avait what you need is not listed.         Master Switch, Dual (need cover)         Master Switch Cover         Control Stick Grip Momentary Switch         These switches are specifically for use in our Glasair stick grips. They are of excellent quality and meet or exceed aviation mil-spec. Not useful for autopilot release.         Autopilot Switch	Part No: 210-1994-011 Part No: 210-1843-001 Part No: 620-1111-001
components included with the retractable gear kits, are also availy what you need is not listed.         Master Switch, Dual (need cover)         Master Switch Cover         Control Stick Grip Momentary Switch         These switches are specifically for use in our Glasair stick grips. They are of excellent quality and meet or exceed aviation mil-spec. Not useful for autopilot release.	Part No: 210-1994-011 Part No: 210-1843-001 Part No: 620-1111-001
components included with the retractable gear kits, are also avait what you need is not listed.         Master Switch, Dual (need cover)         Master Switch Cover         Control Stick Grip Momentary Switch         These switches are specifically for use in our Glasair stick grips. They are of excellent quality and meet or exceed aviation mil-spec. Not useful for autopilot release.         Autopilot Switch         Elevator Trim Hat Switch         This handy four way aviation mil-spec switch mounts easily on the Glasair Military stick grip for use with the elevator trim system. It is conveniently marked for easy visual reference. Used for both pitch and roll. Use with	Part No: 210-1994-011 Part No: 210-1843-001 Part No: 620-1111-001 Part No: 620-1212-001
components included with the retractable gear kits, are also avait what you need is not listed.         Master Switch, Dual (need cover)         Master Switch Cover         Control Stick Grip Momentary Switch         These switches are specifically for use in our Glasair stick grips. They are of excellent quality and meet or exceed aviation mil-spec. Not useful for autopilot release.         Autopilot Switch         Elevator Trim Hat Switch         This handy four way aviation mil-spec switch mounts easily on the Glasair Military stick grip for use with the elevator trim system. It is conveniently marked for easy visual reference. Used for both pitch and roll. Use with Stick Grip 621-1460-101	Part No: 210-1994-011         Part No: 210-1843-001         Part No: 620-1111-001         Part No: 620-1212-001         Part No: 210-0098-001
components included with the retractable gear kits, are also avait what you need is not listed.         Master Switch, Dual (need cover)         Master Switch Cover         Control Stick Grip Momentary Switch         These switches are specifically for use in our Glasair stick grips. They are of excellent quality and meet or exceed aviation mil-spec. Not useful for autopilot release.         Autopilot Switch         Elevator Trim Hat Switch         This handy four way aviation mil-spec switch mounts easily on the Glasair Military stick grip for use with the elevator trim system. It is conveniently marked for easy visual reference. Used for both pitch and roll. Use with	Part No: 210-1994-011 Part No: 210-1843-001 Part No: 620-1111-001 Part No: 620-1212-001
components included with the retractable gear kits, are also avait what you need is not listed.         Master Switch, Dual (need cover)         Master Switch, Dual (need cover)         Master Switch Cover         Control Stick Grip Momentary Switch         These switches are specifically for use in our Glasair stick grips. They are of excellent quality and meet or exceed aviation mil-spec. Not useful for autopilot release.         Autopilot Switch         Elevator Trim Hat Switch         This handy four way aviation mil-spec switch mounts easily on the Glasair Military stick grip for use with the elevator trim system. It is conveniently marked for easy visual reference. Used for both pitch and roll. Use with Stick Grip 621-1460-101         Elevator Trim Hat Switch	Part No: 210-1994-011         Part No: 210-1843-001         Part No: 620-1111-001         Part No: 620-1212-001         Part No: 210-0098-001
components included with the retractable gear kits, are also avait what you need is not listed.         Master Switch, Dual (need cover)         Master Switch, Dual (need cover)         Master Switch Cover         Control Stick Grip Momentary Switch         These switches are specifically for use in our Glasair stick grips. They are of excellent quality and meet or exceed aviation mil-spec. Not useful for autopilot release.         Autopilot Switch         Elevator Trim Hat Switch         This handy four way aviation mil-spec switch mounts easily on the Glasair Military stick grip for use with the elevator trim system. It is conveniently marked for easy visual reference. Used for both pitch and roll. Use with Stick Grip 621-1460-101         Elevator Trim Hat Switch         Use with Stick Grip 621-1452-101 and 621-1453-101	Part No: 210-1994-011         Part No: 210-1843-001         Part No: 620-1111-001         Part No: 620-1212-001         Part No: 210-0098-001

	Microswitch, 1XE1	Part No: 210-0100-001
	Microswitch, 411SM1H4 w/actuator	Part No: 210-0411-004
	Circuit Breakers	·
	Circuit Breaker, 2 Amp, Klixon	Part No: 210-0200-002
	Circuit Breaker, 3 Amp, Klixon	Part No: 210-0200-003
	Circuit Breaker, 4 Amp, Klixon	Part No: 210-0200-004
	Circuit Breaker, 5 Amp, Klixon	Part No: 210-0200-005
	Circuit Breaker, 7.5 Amp, Klixon	Part No: 210-0200-007
	Circuit Breaker, 10 Amp, Klixon	Part No: 210-0200-010
	Circuit Breaker, 15 Amp, Klixon	Part No: 210-0200-015
	Circuit Breaker, 25 Amp, E-T-A	Part No: 210-0200-025
	Circuit Breaker, 40 Amp, E-T-A	Part No: 210-0200-025
	Circuit Breaker, 60 Amp, E-T-A	Part No: 210-0200-040
	Diodes	Part No: 210-0200-060
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	400 PIV 1.5 AMP	Part No: 210-5395-015
	IN 5400 3.0 AMP	Part No: 210-5400-001
	Amp Connectors	
	AMP Connector, Male, 3 Pin, w/Pins	Part No: 210-0441-001
	Pin, Contact, 24-18 gauge	Part No: 210-0441-002
	AMP Connector, Female, 3 Socket, w/Pins	Part No: 210-0442-001
	Pin, Sok, 24-18 gauge	Part No: 210-0442-002
	AMP Connector, Male, 2 Pin	Part No: 210-1022-003
	Pins for above	Part No: 210-2103-002
	AMP Connector, Female, 2 Socket	Part No: 210-2022-003
	Pins for above	Part No: 210-1103-002
	Wire	
	Coaxial Cable, Antenna	Part No: 870-0058-001
	Triaxial Cable, Antenna	Part No: 870-0058-002
	Wire, 2 Ga., Single Conductor	Part No: 870-0228-002
	Wire, 4 Ga., Single Conductor	Part No: 870-0228-004
	Wire, 8 Ga., Single Conductor	Part No: 870-0228-008
	Wire, 10 Ga., Single Conductor	Part No: 870-0228-010
	Wire, 14 Ga., Single Conductor	Part No: 870-0228-014
	Wire, 16 Ga., Single Conductor	Part No: 870-0228-016
	Wire, 18 Ga., Single Conductor	Part No: 870-0228-018
	Wire, 20 Ga., Single Conductor	Part No: 870-0228-020
	Wire, 22 Ga., Single Conductor	Part No: 870-0228-022
	Wire, 24 Ga., Single Conductor	Part No: 870-0228-024
	Wire, 16 Ga., 2 Cond., Shielded	Part No: 870-0228-024
	Wire, 18 Ga., 2 Conductor	Part No: 870-0228-182
	Wire, 18 Ga., 2 Conductor Wire, 20 Ga., 2 Cond., Shielded	Part No: 870-0228-182
		Part No: 870-0228-202 Part No: 870-0228-212
	Wire, 20 Ga., 2 Conductor	
	Wire, 20 Ga., 3 Conductor	Part No: 870-0228-203
	Adhesive Mounting Base used for attaching wire to surface	Part No: 210-0345-001
	Terminal Blocks	
	Terminal Block Track	Part No: 210-6018-051
	Terminal Block Assembly	Part No: 210-6041-011
	Terminal Block End Stop	Part No: 210-6041-111
0.00	Spiral Wrap	
	1/4" Spiral Wrap	Part No: 830-0598-001
	3/8" Spiral Wrap	Part No: 830-0598-002

High Temperature Spiral Wrap	
1/8" High Temperature	Part No: 830-0125-001
14" High Temperature	Part No: 830-0250-001
3/8" High Temperature	Part No: 830-0375-001
1/2" High Temperature	Part No: 830-0500-001
Heat-Shrinking Tubing Seal and insulate splices and terminal connections like the pr	os do. Black color. Prices are per foot.
1/8″	Part No.: 830-0352-001
 3/16″	Part No.: 830-0352-002
1/4 "	Part No.: 830-0352-004
3/8"	Part No.: 830-0352-003
Electric Elevator Trim System	
This kit is based on an elevator-mounted electric servo- motor that activates the trim tab through a rigid pushrod in the interior of the elevator. Advantages of electric trim over manual trim include easier installation, much easier removal of the horizontal stabilizer and elevator for trailering or storage, reduced pilot workload when operating the trim, and a cleaner, more aesthetic installation. This kit includes the servo, the pushrod and all linkage hardware; all mounting hardware, a color-coded wiring harness and all electrical connectors; and detailed installation instructions. Note: this kit must be ordered	Part No: 921-01000-04
prior to initial delivery of the tail kit.	Тор

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	Bidirectional Cloth Standard bi-directional weave used in Glasair and supplied with kit. Style 7781. 9 oz. per square yard. 50" width. (10 ft. minimum order). Note: This cloth is chemically treated (chemical sizing) specifically for vinylester resin to achieve maximum strength.	Part No: 270-0110-002
	DBM Cloth (10ft minimum) 3" width	Part No: 027-00002-01
	Milled Fibers Chopped fiberglass strands used for structural bonding and filling when mixed with resin. 250 gram package.	Part No: 270-0130-001
Here's	Q-Cells Quartz microspheres uses as a lightweight filler when mixed with resin, not to be used for structural bonding. 200 gram package.	Part No: 270-0140-001
	Cabosil Finely ground glass powder used as a filler in resin mixtures not to be used for structural bonding. However, small amounts added to mill fiber/resin mixture will help to smooth it out. 100 gram package.	Part No: 270-0131-002
	Partall Film #10 PVA release agent, used primarily as a mold release agent (water soluble). Also used as an aid for surface curing of resins and gelcoat by sealing it from oxygen. 16 oz. bottle.	Part No: 270-0145-101

	Vinylester Resin – 411-45	
	This resin is NOT promoted and does NOT include promoters or MEKP catalyst. Thus, at the time or ordering, please specify if chemicals are needed. (See below). Estimated 6 month shelf life. (1 gallon minimum order).	Part No: 270-0155-301
	NOTE: Hazardous material shipping charges apply for international orders. Domestic orders for this product can <b>only ship ground</b> , but have no hazardous material shipping charges. Call for more information!	
	Vinylester Fire Retardant Resin – 510C350 (1 quart)	
	Will not support a flame once the ignition source has been removed. Specified for Glasair III induction system fabrication.	
ECC-0150-107 ECC-0150-107 Particular	This resin is NOT promoted and does NOT include promoters or MEKP catalyst. Thus, at the time or ordering, please specify if chemicals are needed. (See below). Use same catalyst (MEKP) as standard 411-45 vinylester resin. Estimated 1 to 2 month shelf life. (1 quart minimum order).	Part No: 270-0155-108
	NOTE: Hazardous material shipping charges apply for international orders. Domestic orders for this product can <b>only ship ground</b> , but have no hazardous material shipping charges. Call for more information!	
	Gelcoat (1 quart)	
	Ferro white polyester gelcoat. Used to finish the seam areas on the Glasair and Glastar airframe. Thin with acetone for spraying and catalyze with MEKP. (32 oz. minimum order). Estimated 3 month shelf life.	Part No: 270-0129-103
	NOTE: Hazardous material shipping charges apply for international orders. Domestic orders for this product can <b>only ship ground</b> , but have no hazardous material shipping charges. Call for more information!	
	Cobalt Promoter (1 oz. Boxed UPS)	
	NOTE: Hazardous material shipping charges apply for international orders. Domestic orders for this product can <b>only ship ground</b> , but have no hazardous material shipping charges. Call for more information!	Part No. 270-0135-101
	DMA Accelerator (1 oz. Boxed UPS)	
	NOTE: Hazardous material shipping charges apply for international orders. Domestic orders for this product can <b>only ship ground</b> , but have no hazardous material shipping charges. Call for more information!	Part No. 270-0135-201
	MEKP Catalyst (4 oz. Boxed UPS)	
	NOTE: Hazardous material shipping charges apply for international orders. Domestic orders for this product can <b>only ship ground</b> , but have no hazardous material shipping charges. Call for more information!	Part No. 270-0105-101
	Empty Caulking Tubes	
	These empty caulking tubes are a great time saver and can significantly reduce the preparation and construction time of certain jobs (such as closing the wing). They come in real handy when dispensing Milled Fibers, Q-Cells and Cabosil mixtures.	Part No: 270-0103-001

	Resin Mixing Sticks	
	$34'' \times 6''$ wooden sticks. Use for mixing resin, shimmying, etc. The uses are limited only by your imagination. Box of 500.	Part No: 270-0180-101
The Safety June The Inter-	Surgical Gloves	
The Subdry June	Tight fitting latex gloves for hand protection from the chemicals (resin, catalyst, acetone, etc.) used in composite construction. Box of 100 gloves (fit either hand). One size fits all.	Part No: 270-0230-001
	Resin Brushes	
Autor and a second	Laminator's bristle brushes, with wooden handle. This is the number 1 tool for constructing a fiberglass airplane. Don't run short!	
	Resin Brushes – 1" Size	Part No: 270-0185-001
	Resin Brushes – 2" Size	Part No: 270-0185-002
	Box of 36, 1" Size	Part No: 270-0185-101
and public	Box of 24, 2" Size	Part No: 270-0185-102
	Resin Mini-Pump The Resin Mini Pump screws directly onto a gallon container (just like the one supplied by Glasair Aviation, LLC for one gallon resin shipments) and gives out about 35 grams of resin per pump. They come in a set of two so you can either keep one as a spare or use it for acetone.	Part No: 270-0172-101
	Syringe (5 pack) 5.0 ml. all plastic syringe. Molded polypropylene piston will not dissolve in MEKP as most rubbers will. Calibrated in 0.1 ml. increments. Accurately measures catalyst; helps prevent skin contact with catalyst. Needles not included and not needed for measuring catalyst.	Part No: 270-0190-001
	Squeeze Bottle (Mekp Dispenser)	
	This handy squeeze bottle dispenses MEKP catalyst by the drop for small resin batches. Supplied with a chart calibrated in the number of drops required for different sized resin batches catalyzed at different rates. This is a very easy and accurate method of dispensing catalyst and avoids the dangers of skin contact and accidental eye contamination. (See "Glasair News" #16 for a further description).	
	Mold Release Wax Use for fabricating procured laminates on an aluminum sheet or for any application where parts are formed using a mold and then separated after curing. 14 oz. can.	Part No: 270-0205-001
	Ultralite Body Filler	Part No.: 270-0200-001
MERC	Ultralite Body Filler 1 gal.	Part No.: 270-0200-002

	Vinyl Masking Tape	
	<sup>1</sup> / <sub>2</sub> " wide vinyl tape which we have found works ideally for masking trim stripe details when painting. Forms beautiful inside and outside tight radius curves without dimpling. Does not allow paint-bleed through on the edges as do most masking tapes. Pulls easily without damaging paint underneath. You'll love working with this tape	
	Masking Tape – ½" Roll	Part No: 270-0195-002
	Masking Tape – ½" Roll (Doz.)	Part No: 270-0195-102
	Masking Tape – ¾" Roll	Part No: 270-0195-001
	Masking Tape – 34" Roll (Doz.)	Part No: 270-0195-101
	Rotary Cloth Cutter This "pizza wheel" style cloth cutter cuts neatly and cleanly on a wooden or plastic-surfaced bench or table. Works great for making curved cuts in fiberglass cloth. Reduces fraying and helps prevent stretching of the cloth. The blade is made of sharp tungsten steel, and one extra blade is included with the cutter kit.	
	Rotary cloth cutter	Part No.: 810-0215-501
	Replacement blade for rotary cutter	Part No.: 810-0215-001
MIN MIL	CherryMax Flush-Head Blind Rivets Let's be frank: there are a handful of holes along the forward wing spar in the area of the strut beam that are a bear to rivet with standard, driven rivets. Although it is possible to buck all these rivets, many builders have inquired about the possibility of using blind rivets in these locations. That's perfectly fine, as long as the rivets are equally as strong as regular AN426AD4's, and only CherryMax rivets meet that criterion, These CR3212-4-8 rivets are just the right size for riveting the skins to the forward spar.	Part No: CR3212-4-8
And	Torque SealThis colorful paste is primarily an inspection aid device. The seal paste is placed between two objects (example, the nut on a bolt) that we want to make sure are not moving relative to each other. If the seal is broken, movement has taken place and further action should be taken. Also great for indicating completion or final torque.The set includes five colors (pink, green, blue, yellow and orange). Use one color for gear up hydraulics, one for gear down and so on.	Part No: 620-0642-501
	Wing StrutT Attach Drill, Reamer & Fixture Set         This set consists of special drill bits and reamers, as well as a custom drill jig necessary for precise drilling of the attach holes at the upper end of the wing struts.         Wing strut attach drill reamer & fixture set	Part No.: 981-03000-01

# Safety Equipment

 Safety Equipment		Тор
FireFly3 Strobe Light Features: Manually activated rescue strobe 360° high intensity Xenon strobe visible for up to 2 miles Large sliding switch allows for easy operation by gloved han Newly-designed base platform allows unit to stand upright e Conceived as state-of-the-art replacement for famous Firefly Designed as "electronic flare" to replace day/night pyrotechi Stainless steel retainer securely attaches removable battery Integral strapping slots provide a secure anchor point Ideal backpacks and flight suits. Common Specifications for FireFly3® Size: 4.75 × 2.2 × 1.2 in (12.1 × 5.6 × 3.0 cm) Weight: 3.8 oz (105 g) with Lithium batteries Material: Polycarbonate Waterproof: Factory tested to 10 m (33 ft) Beam Angle: Omni-directional 360° Visibility: Visible up to 2 mi (5 km) Flash Rate: 60 ± 10 flashes per minute Lamp: High intensity Xenon strobe Battery Type: 2 "AA" alkaline or 1.5V lithium (5 year replace Certification: USCG 161.012/58/0 (alkaline or lithium) USCG SOLAS 161.112/58/0; MO LSA Code Res. MSC.81(70) FAA (TSO-C85) approved (with lithium dated batteries only) Limited Warranty: 1 year Operational Life: Minimum 8 hours continuous @ -1°C meet specifications.	easily y forerunners, 4F and 4G nic signal in aviation life rafts door to case for life vests, safety harnesses, ement life) not included	
FireFly3 Strobe Light ACR Part No: 3995.3	FireFly3 Strobe Light ACR Part No: 3995.3	

	ACR Aerofix 406 PLB w/GPS		
	<ul> <li>■ Description: The most advanced Personal Locator Beacon on the market, the AeroFix 406 GPS I/O PLB includes an internal GPS, exclusive FastACQ™ GPS relay technology and an external GPS optical interface, giving you, the user, unparalleled versatility.</li> <li>■ Features Internal GPS acquires your coordinates when the unit is activated and transmits your exact location to within 110 yards to local rescue agencies. ACR Electronic's FastACQ™ technology relays accurate GPS information to the satellites faster than all other internal GPS PLB's</li> <li>■ PLB technology transmits signals that are monitored by NOAA (National Oceanic and Atmospheric Administration) and AFRCC (Air Force Rescue Coordination Center)</li> <li>Each unit contains and transmits a 15-digit Unique Identifying Number (UIN) which is picked up by satellites and provides rescuers with your name, address and other pertinent information</li> <li>Transmits two signals: 406 MHz via COSPAS-SARSAT satellite system and on 121.5 MHz (SAR homing frequency)</li> <li>The 406 MHz signal allows rescuers to locate your position within a 2 mile radius, while the 121.5 MHz signal allows rescuers to locate your position</li> <li>External GPS public linterface (NNEA 0183) allows you to download your GPS coordinates from your hand-held GPS unit into your PLB</li> <li>When activated, your GPS coordinates will be automatically included in your emergency transmission to satellites - saving valuable time for your distress message to reach local rescue centers</li> <li>The flat, stainless steel antenna wraps compactly around bottom case for easy stowage and is easily positioned when needed</li> <li>Functional test switch for battery power and 406 MHz transmission</li> <li>The flat, stainless steel antenna wraps compactly around bottom case for easy stowage and is easily positioned when needed</li> <li>Functional test switch for battery power and 406 MHz transmission</li> <li>The unit floats to avoid loss if d</li></ul>		
in the palm of your			
	Specifications Weight: 12 ounces Dimensions: 1.74 x 5.71 x 3.03 inches Material: Glass reinforced polycarbonate blend Deployment: Manual Frequency: 406.038 MHz, 121.5 MHz Battery type: Lithium Radiating Power: 5 watts ± 2dB (406.025 MHz) 50 mW ± Operational Life: In excess of 24 hours @ -40°C (-40°F), temperature Made in USA		
	ACR Aerofix 406 PLB w/GPS ACR Part No: 2799.4	Part No: 014-02231-01	
	HotShot Signal Mirror w/Whistle		
	ACR Part #: 1700 Our Part #: 014-02233-01 Customer Price: call for price		
	Sighted signaling mirror with float and whistle Designed to provide optimum sighting "spot" with hologra When target image, mirror and sun are in proper alignme reflection is on target Telescope quality second surface reflective mirror is brigh Buoyant float for easy recovery if dropped overboard Patented whistle (meets USCG) for audible alerting in low Lanyard for securing to person or life-raft Simple, total safety signaling package	ent, red dot on target ensures mirror t, provides focused image	
	Size: 4.25 x 2.75 x .19 in. (10.8 x 7.0 W x .5 cm)		
	Weight: 1.8 oz (51 g)		
	HotShot Signal Mirror w/Whistle ACR Part No: 1700	Part No: 014-02233-01	

	Miscellaneous	Тор
	Towbars	
	Handle your Glasair on the ground as easily as it handles in the air with our custom towbar! Made of strong but lightweight aluminum tubing and anodized bright red for high visibility, the tow bar can easily be carried in the baggage compartment and is easy to engage and disengage with a sliding nylon sleeve to lock in place.	
	RG Towbar	Part No: 471-0644-301
	FT Towbar	Part No: 471-0645-101
MISSING PHOTO	"Experimental" decal 2-1/4" x 18", black on white	Part No: 620-0215-009
MISSING PHOTO	Passenger Warning placard 1" x 3-7/8", black on white, FAA required wording	Part No: 620-0215-010
	Sportsman Decal (White)	Part No: 621-0225-005
	Sportsman Decal (Black)	Part No: 621-0225-006
	GlaStar Decal (White)	Part No: 621-0225-003
	GlaStar Decal (Black)	Part No: 621-0225-004
	Jack Stand Kit This custom jack stand kit comes with two sturdy, tripod style jack stands and two fiberglass jack pads custom-molded to fit the Glasair wing. Jack pads bolt into the tie-down holes and support the wing under the spar. Easy to use screw-jack style jack stands come with long crank handles so you don't have to be under the wing while jacking. Jack stands' height adjusts from 23" to 38". Capacity: 1 ton per jack. Exclusive fold-up feature for easy storage. Indispensable for RG builders to check the gear retraction cycle and the gear door fit, as well as for periodic maintenance and inspections. (A retraction test should be performed at least at every annual condition inspection).	Part No: 381-0362-501
Internet-	Glasair - Decals3" x 18" Black Glasair logo on clear backing.Pressure sensitive adhesive. For use as an attractive identifying logo on your Glasair in conjunction with your paint scheme.3" x 18" black Glasair logo on white backing.	Part No: 621-0225-001
	Pressure sensitive adhesive for use as a bumper sticker.	Part No: 621-0225-002
CAUTION UR 1961. AVAILOR DAAD FUR.	"100LL Only" fuel filler decal 1-7/8" x 3-7/8", silver and black	Part No: 620-0215-004
	End of Document	