

AIRCRAFT KIT OPTIONS

3/21

Engine	Rotax 582 (64 HP) Engine comes standard from the Rotax factory with oil injection pump, water pump, fuel pump, side mount exhaust, pull starter (recoil) and carburetors. Standard air filters are Green Foam w/ internal spring. Ideal full power RPM is 6450.
“B” Gear Box	Is typically the standard gearbox with the Rotax 582 engine. Prices listed from Kits Price List are with this gearbox. Reduction ratio is 2.5 to 1. Reduces the prop RPM to 2,500.
“C” Box	Allows for a much greater variety of gear ratios. Almost mandatory for float flying or for areas that desire less noise as the prop is spinning slower. Lower gear ratios allow for a larger slower turning prop. Ratio is 3.47 to 11,858 RPM Add \$710.00 for this option. This Gear Box may no longer be available. Sometimes I’m able to source these.
“E” Box	Same as the “C” Box but this gearbox incorporates the electric starter. Availability of various gear sets are changing. Add \$1,280.00 If this option is selected you will also need a “Battery Box”
Clutch	Our “C” Gearbox centrifugal clutch is one of our most popular additions to new aircraft. Only fits the C gearbox. RK400-C adds \$550.00
Propeller	The best all around economy prop for the Rotax 582 with the “B” Gear Box is the 3 Blade 66” Dia. UltraProp II. Anything larger than the B Gear Box will require a minimum 68” dia. Warp Drive prop for reasons explained on our website. If on floats then for sure add the Nickel Leading Edge.
Radiator System	Stock radiator system is Rotax dual mounted on engine. We have found that that the “Factory” system is not sufficient for the higher humidity areas or higher temperatures. The RD600kit is a high capacity system and is cost neutral when ordered with the kit.
Air Filter	Supplied air filter(s) is the Green Weenie foam filter. Most, if not all builders will purchase the K & N Filter that is a more durable and washable product. The Dual Filter for the 503 adds \$51.75 The Dual Filter for the 582 adds \$51.75
Oil Injection System	The Rotax 582 are supplied from Rotax with an oil injection pump attached to the engine. The oil tank, mounts, line, filters and control cable are an option. This oil tank is mounted to the PTO end of the engine and allows easy access to fill the tank. If the oil injection system is not used then the fuel will be pre mixed at a ratio of 50 to 1. Oil Tank Kit adds \$448.00
Electric Start	Pull Start is standard. Two options are available for the electric start. The Rotax electric start kit replaces and eliminates the recoil starter. The GPL electric start kit does have an option whereby you can retain the electric start as a back up. You will need a Battery and Battery Box Assembly. Rotax Starter adds \$903.00.00 The GPL Starter adds \$635.00
Instruments	These are simple airplanes. Ideally the instrumentation should follow this concept. No instruments are supplied with these kits. Our Pre-Wired instrument pods offer a simple way to monitor the engines operation performance and provide the basic flight instruments. The engine instruments should include RPM, EGT, Water Temp (or CHT) and run time (Hobbs). The most basic of flight instruments should at least include Airspeed and Altimeter. We offer several pre wired plug and play instrument packages. Instrument Page or Pre Wired Pods
Inst Pod Mounting	Along with the instrument pods is the choice of mounting configurations. The most common mount arrangement is the IN141 . Our instrument belief is that the sender wires should be as short as possible. The overhead mounted instrument mounts allow unobstructed view with the absolutely shortest lengths of sender wiring. Pod Mounts
Plug N Play Inst PKG	Our Standard Pre-Wired, Mounted Instrument Pod consists of: Altimeter, Air Speed Indicator, Dual Exhaust Temp Gauge and Probes, Water Temperature Gauge and Probe, Tiny Tach (also includes engine run time)

Battery Box	<p>No electrical system is supplied with the airframe kit. If you want an onboard 12 volt electrical system to power items such as Radio, GPS, Intercom, Instruments, Anti Collision lighting, Landing Lights, Electric starter.... etc. You will need a battery. Our Battery Boxes are an all inclusive plug and play type of installation. These assemblies typically include the battery Mount, Regulator / Rectifier, starter solenoid, master switch, push button for starter, fuse holder and associated wires and cables. Our pre wired Battery Boxes are simple to install and all cables and wires are pre made with required terminal ends. Several models are available depending on aircraft type and requirements. Battery Boxes adds \$350.00</p> <p>SVR Lead acid Battery \$101.00 Lithium \$135.00</p>
Push button	<p>Push Button is the default item mounted on the battery box to engage the starter solenoid if an electric starter is added.</p>
Key Switch	<p>Aircraft is shipped with two rotary switches that are used to kill the ignition system. Optional key switch is available in 3 configurations. On/Off is least expensive but does not allow the option of individually checking a dual ignition system. Next is the Off/L/R/Both. This allows the checking of the dual ignition system. Lastly is the Off/L/R/Both/Start Key switch can be mounted on the battery box and replace the push button. Key Switches can also be mounted on the instrument panel.</p> <p>EL2420 \$217.00</p>
Fuse Block	<p>Allows up to six fused circuits in one neat compact assembly. This is typically mounted on the battery box. Does not include the fuses. EL3110 adds \$19.75</p>
Fuel Tanks	<p>Standard tank is the 6 gallon root tube tank. The most popular upgrade of fuel tank is the 12 gallon tank. On the 2-S it's also possible to install the dual 8.5 gallon system. Seat tanks can also be added. FU850-12 adds \$425.00</p>
Dual Fuel valves	<p>The kit is shipped with one fuel on / off valve. If the builder ops for the FU850 fuel tank it is supplied with two threaded outlets. If you want the dual feed fuel system then one additional valve should be added. FU405 adds \$15.00</p>
Dual Filters	<p>As with the fuel valves another option is the dual fuel filter. FU201 adds \$4.00</p>
Aux fuel pump	<p>12VDC switch controlled auxiliary fuel pump. I'm not sure exactly why this is needed but has been requested in the past. It is typically mounted in line with the mechanical pump. FU108 adds \$45.00</p>
Squeeze Bulb	<p>I consider this an essential item. The fuel Squeeze Bulb is incorporated in the routing of the fuel line between the fuel tank and the first fuel filter. The beauty of this jewel is that when squeezed it pumps fuel into and fills the carburetor bowls. This eliminates unnecessary cranking of the engine. FU445 adds \$27.00</p>
Primer Pump	<p>Another essential item... in my opinion. The aircraft / engine is shipped with a choke circuit and associated choke cable system. The choke is handy in very cold area environments as it provides a rich fuel condition at idle RPM. However if the engine has sat for a while there will still be some extended cranking to get the fuel into the engine. The Primer Pump system injects a squirt of fuel directly into the engine by passing the carburetor. This will typically provide an instant start. In most cases this primer eliminates the need for the choke system except for extreme cold conditions. It can replace the cable choke system and can be mounted in the tab supplied for the choke. Dual carb kit is FU450-D adds \$20.00</p>
Headset / Intercom	<p>We currently distribute 2 brands of Headset and or intercom units. The Lynx System is a higher end product and delivers quality performance. I use the Lynx system as I fly a lot and the noise attenuation of this system is excellent.</p>

	<p>The Comtronics Engineering is also a good package for the recreational flyer. Their quality is excellent is serves a great purpose for the economy minded operator. Both systems have the ability to expand and can be powered from the onboard battery. Integration to VHF radio is simply attaching the cables.</p> <p>LYNX SYSTEM COMTRONICS ENGINEERING</p>
Radio	<p>Majority of the operators of these aircraft will utilize a simple (and inexpensive) hand held radio. We stock the Icom line of radios as we feel they are an old name company and most likely will be there when (and if) we ever need them. In all our years of providing Icom radios we very rarely ever need to contact the mfg. for customer issues. My 13 year old A-22 works as good today as it did when it was new. The attached rechargeable battery has lost it's ability to hold a charge but the aircraft's onboard battery keeps it going. While these radios can be a stand alone product, meaning they have their own battery and antenna. Many operators will install a remote antenna usually mounted on the wing or other unobstructed area. The radio is typically interfaced to the intercom / headset with a patch cable. This needs to be discussed, as the details are endless. ICOM Radios & Accessories</p>
Remote Antenna	<p>Our antenna kits are simple and complete. The S.S. Whip Antenna is as simple as an antenna can be. We also have mount kits that can be used to install the whip antenna and we have a kit to remotely mount the Rubber Duck antenna supplied with most hand held radios. Antenna & Supplies</p>
Wide Seat	<p>Standard seat is 14.5" wide at the hip section. As the population becomes increasingly healthy a wider seat is needed. We offer a wider seat that is 16.75" wide at the hips. PE110-W adds \$28.00 each</p>
Trim Tab	<p>The two place aircraft are equipped with a bungee type trim assembly. The primary purpose of this system is to carry the weight of the elevators. Any trim or control pressure assist system should NOT be used to mask an <i>out of rig aircraft</i> or a <i>weight and balance</i> issue. Our cockpit controllable Trim System will allow adjustments as needed for fuel burn or variations in passenger weight. Our trim system is attached to the trailing edge of the elevator and does not increase the load of the elevator control system. Trim Tabs adds \$100.00</p>
Wing Fence	<p>Only available on single surface wing aircraft. These Fences assist in reducing the wing vorticies thereby creating greater lift at a slower speed. Very popular item for operators of float planes or anyone wishing for a shorter takeoff roll or to fly slower that stock. AT108 adds \$138.00</p>
Rudder Brace	<p>Aircraft using an engine larger than the 503 with the B gearbox. This wire brace kit adds rigidity and support to the upper portion of the rudder. AT2002 adds \$54.00</p>
Horiz Brace	<p>This kit is only available for the Sport/Sprint 2-S. The wide stance of the tail on the 2-S aircraft allow the horizontal tail surface to move during flight. This kit adds stiffness to the tail section. AT2001 adds \$25.00</p>
Wheels & Tires	<p>SPRINT II and SPORT II stock wheels are 5" Azusa plastic with 5" X 11" tire. Our WHEEL KITS page on the website shows the various wheel options available. The Sport 2-S stock wheel is the 6" cast aluminum wheel and allows a variety of larger TIRES.</p>

Brakes	Stock brakes on the two place aircraft are the external contracting band type and are an integral part of the airframe. If an upgrade of wheels are selected these brakes will still be used if the selected wheels are Azusa. We stock the Hydraulic Black Max brake and wheel system and can also supply the Hegar System. Hydraulic Brakes
Wheel Pants	These pants have a dual purpose. On the ground the main purpose is to keep debris from the spinning nose wheel off the exposed pilot/passenger. The main wheel pants will reduce the amount of objects getting to the prop. Drag reduction. They might even add a little “top end” to speed envelope. The nose wheel pant is a very popular option for the first reason mentioned. Wheel Pants
Exhaust Clamps	Most if not all 2 cycle exhaust systems use a series of springs to connect the ball joints of the exhaust connections. This unique S.S. clamp system eliminates the springs while allowing the “balls” to still move. EX100 adds \$100.00 (2 sets)
Exhaust Coatings	The exhaust systems are supplied with a high temp primer coating finish. If the exhaust is not subjected to the outdoor elements (the plane lives outside) this coating will provide many years of protective service. One of the options is a shiny aluminum coating called JETHOTT. This heat applied coating is <u>supposed</u> to have a lifetime guarantee against rust thru. This coating looks good and is available in several different colors.
Ballistic Parachutes	The plane does not need this option to fly safely. I am often asked why I have one on my plane. My only simple answer is “cause it’s available”. An aircraft that does not have a chute will not prevent me from flying it. My 1956 J-3 Cub does not have one....yet. Shipping on the BRS parachutes is considered hazardous so there is a flat rate shipping fee, \$200.00 BRS PAGE
Shoulder Harness Kit	All Stock aircraft are supplied with basic Lap Belt. We STRONGLY suggest the additional “Shoulder Harness” assembly which replaces the lap belt. The Steel Mount Tube and mounting hardware is supplied. This option is not included in the kit as several customers have opted to provide their own system Adds \$517 (2 sets)
	ALL options and pricing are subject to change at any time. The above information is for estimate purposes ONLY.