

Europa Aircraft Kit Maintenance Items

The following items are replacement parts for the typical
Stock Europa Kit Aircraft With Rotax Powerplant

Owners may have made construction changes or engine/system choices that make this list inaccurate. It is highly recommended that builders should include in their weight and balance equipment lists and essential spares for their aircraft.

Typical spares include fuel, air, and oil filters.

Fuel Filters:

Auto Zone

Spectre/Clear view fuel filter element Part Number: 2358 Alternate Part Number: 896G

Advance Auto Parts: **Mr. Gasket Replacement Element for Clearview Fuel Filter Part No. 896G**



New Fuel Filter: Mr. Gasket Clear View Fuel Filters 9747 includes: Fuel Filter, Inline Mount, Clearview, Chrome, 5/16 in. Hose Barb Inlet, Outlet, Each with a round threaded holder. Do not get the cheap flat partial threaded cast part.



Oil Filter:

Lockwood Aviation:

Rotax Oil filter, Replaces 825 706, 3.4mm longer. Part Number 825 012



Oil:

Aeroshell Sport plus 4 - semi synthetic for use with AV gas.

Mobil One MXT4 (ATV Oil) also known as Racing 4T-full synthetic for use with Auto gas.

Coolant:

Dexcool 50/50 for normal operations.

EVANS NPG + COOLANT FOR ROTAX ENGINES Aircraft Spruce Part # 08-04535 for boil over problems.

Spark Plugs:

Plug Type, Socket Electrode Gap

912 A/F/UL : NGK DCPR7E 16mm 0.7-0.8mm/.028-.032"

912 S/ULS/ULSFR: NGK DCPR8E 16mm 0.7-0.8mm/.028-.032"

914 F/UL: NipponDenso X27EPR-U9 12mm 0.6-0.7mm/.024-.028"

Air Filters:

912/912S Air Filter is a lifetime K&N Filter Number 33-2564

914 Air Filter is a lifetime K&N Filter either a straight RU 0800

Or a 20 degree angled filter for better cowl clearance RU1750

Door Struts:

Europa: GS8699-1 £47.76, GS86991 PLASTIC ENDS or metal GS86991

Or Custom Flight Supplied Alternate Strut

CFC Part LST C13-6-110-300-175N for about \$45 US. Metal ends.

Gas Cap:

SPRL cap purchased through Aircraft Spruce. These caps only work on new kits. The pre 2004 XS will need to modify the cap to fit as the angle is different on the flange. The Classic metal cap is still made the same way.

Hoses:

Recommended Fuel Hose: 5/16" or 1/4" for return of R14 or similar odor resistant silicone lined hose.

Recommended Coolant Hoses: Are either Rotax Rubber hoses or I now use Silicone:

5/8" Silicone hose from Amazon Hose such as:

HPS 4-Ply 5/8" (16mm) 1 Foot Long Blue Silicone Hose

5/8" ID x 1 Foot Length. Max Temperature Rating: 350F. HPS High Temp 4-ply Reinforced Blue

Silicone Tube Coupler Hose meet or exceed SAEJ20 standard

Fits 17 mm Rotax fittings fine and can use the existing clamps.

1" shaped hoses are bought directly from Europa. No part number. Europa stocks the new silicone hose at a good price. Highly recommended.

Recommended Oil Lines:

½ " Parker Push-Lok® 836 multipurpose hose delivers high temperature performance, up to 302°F, and higher working pressures than 821 hose. Approved with crimp or push on fittings and with a distinctive blue cover indicating a high temperature rating.

½ " Aeroquip AQP FC332 Push on hose is similar.

New engines come with 13mm hose fittings which are a pain to work with. If you have 13 mm fittings the above hoses must be heated to go onto the fittings. Be careful as Aircraft Spruce labels it as 13 mm oil line but it is really ½ or 12.5mm. You can buy the 13mm hose from a distributor such as: Bavarian motor Works or UK auto supply dealers. Most are sold as 12-13mm so be careful in your order.

Heat shield:

For lower engine coolant and oil lines use: Thermo-Tec Thermo-Sleeve 14015 for 1 to 1.5 inch hoses 14011 for 5/8 to 3/4 "

Fire Sleeve:

For fire protection of fuel lines and or oil lines:

Fire Sleeve: Aeroquip 12 or 10 sized PN FBS2200 I prefer the Parker 2650 Fire Sleeve as it is softer and more flexible. Same size as either a -10 or -12 for ¼ and 5/16 fuel line.

Landing Gear:

Wheels: Trigear Mains: Matco W51L Trigear Nose: NW 501.25 Mono: Europa Part Only

Disks: Matco 5 inch external type. Mono Europa Part Only

Tires Typical: Trigear Main, Air Hawk (Specialty Tires) 5x5; Trigear Nose Lamb (Cheng-Shin now) 11.00-4x5;

Mono McCreary or Air Hawk (Specialty Tires) 7x6

Six ply recommended for all.

Tubes: Michelin or Aero Classic with 90 degree valve Aircraft spruce has experimental tube 800x6 PN 06-01592 no manufacturer name but PN #7138

Brakes Linings:

Trigear: MATCO BRAKE RELINE KIT BRL-1 Part # 06-00571 Aircraft Spruce typical.



Mono: Cleveland Standard



Lube Grease:

Aeroshell for Airmaster Prop, and wheel bearings.

Brake Fluid:

Dot 5 silicon is highly regarded as it doesn't stain, or

Mil Spec 5606 is recommended by Matco for all their brakes. Stains red if it leaks.

Fuel Quick Disconnects:

Colder Products Company General Purpose Quick Disconnects with valves for fuel filters.



Pip Pins for wing and tail:

Avibank Quick Release (Pip Pin) Pins:

BL4R11N is the 1.1 inch grip length $\frac{1}{4}$ inch diameter push pull pin for the wing.

BL4R17N is the 1.7 inch grip length $\frac{1}{4}$ inch diameter push pull pin for the stab before mod 74

BL4R20N is a 2 inch grip length $\frac{1}{4}$ inch diameter push pull pin for the stab for mod 74 length problems associated with some after doing the glass layups.