Evolution Aircraft, Inc. 39440 South Ave. Zephyrhills, Fl. 33542

SAFETY ALERT

REPLACEMENT OF FINE FUEL FILTER ON 912iS SPORT EQUIPPED REVOS

SD-1015 RELEASED AUGUST 10TH 2015

STATUS: MANDATORY

BACKGROUND:

Foreign material has been reported found in the fuel pressure regulator on the 912iS Sport engines installed on REVOs. This can cause an above normal fuel pressure which can cause roughness in the engine and reduction of power. There is a possibility of causing engine damage or failure (although there are no known cases of this).

The fuel pressure regulator filter must be checked within the next 5 hours of flight time. The fine fuel filter installed on REVOs must be replaced within 100 hours of use with part Bosch # EAFF0-127 fine fuel filter.

If foreign material is evident, the fuel pressure regulator screen must be cleaned and the new fine filter must be installed before the next flight. This new Bosch filter is a disposable type, which must be replaced every 200 hours thereafter.

Revos with serial number #000603 and lower have the fine filter mounted below the fuel tank. This location has been updated with placing the fine fuel filter next to the mast under the seat (as shown in photo). Relocating the fine fuel filter to the new location is recommended for easier future maintenance. To do this, order the fine fuel filter relocation kit #EVOM0001 from Evolution Aircraft. This kit includes a coupler to replace the old filter and 2 new female fittings to connect to the new Bosch fine fuel filter. These basic Aeroquip (or similar) fittings may be purchased locally as well.

SCOPE:

THE FOLLOWING SERIAL NUMBERS OF REVO WEIGHT SHIFT CONTROL THAT ARE AFFECTED BY THIS SAFETY DIRECTIVE: 000588, 000590, 000593, 000596, 000598, 000599, 000603-000608, 000610-000614

AUTHORIZED PERSONS:

An owner/operator is allowed to execute this safety directive in accordance with the instructions in this directive.

TOOLS:

5/32 Allen wrench 7/16", ½", 9/16" wrench Hose cutter Zip ties

COMPLIANCE:

Compliance is **mandatory** to check the fuel pressure regulator (FPR) for debris within the next 5 flight hours. If the FPR screen is clean it can be checked every 20 hours up to 100 hours in which the new Bosch fine fuel filter # EAFF0-127 must be installed. However, if debris is found in the FPR upon **any** inspection, the aircraft shall be grounded until the replacement filter is installed and the FPR is cleaned. Replacement of fine fuel filter right away is recommended.

How to comply with this directive:

- 1) Check your FPR (fuel pressure regulator) for debris by removing the clamp ring and removing the FPR from its housing. Flip over the FPR (you do not need to unplug it) and inspect the round screen for debris.
- 2) Order new Bosch fine fuel filter by writing an email to evolutiontrikes@yahoo.com There is no charge for this kit and no charge for standard ground shipping through the USPS.
- 3) If you choose to relocate your fine fuel filter, purchase kit #EVOM0001 at time of order.
- 4) Install male adaptors on each end of new Bosch fine fuel filter making sure the crush washers are installed. Tighten ¼ turn passed the point the fittings "bottom out" for proper torque.
- 5) Remove the seat pan from the REVO.
- 6) If you are relocating the fine fuel filter you must cut the supply line to the engine in line with the bottom mast pivot bolt on the mast block. Install new fittings onto fuel line by pressing them on until they seat ALL THE WAY. If your REVO has the fine fuel filter next to the mast already, proceed to Step 7.
- 7) Disconnect both ends of the old filter from the fuel line and replace with the new Bosch filter making sure all connections are tight and zip tie to coolant hose next to it. Also, rubber may be added to shield it from rubbing on the mast block as shown in the photo.
- 8) If relocating old filter (Step 6) drain all of the fuel. If your REVO has a BRS you must remove the BRS mounting bands and slide the BRS out the side of the body. Route the BRS handle cable under the fuel tank to get enough slack to remove the canister and set the canister on a platform or chair next to the opening in the body.
- 9) Remove the old fine fuel filter and replace with the male/male adaptor supplied in the kit #EVOM0001.
- 10) Then run the fuel pumps and inspect for any leaks.
- 11) After 1-5 hours of flight, recheck the FPR for debris. If any found, clean and check again in 1-5 hours. If no debris is found check on each annual/100 hour inspection.



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LOGBOOK ENTRY:

Aircraft logbook should be marked with the following entry and dated and signed with mechanic's or pilot owner/operator's license number (if applicable):__"Safety Directive 1015 from the manufacturer satisfied as per instructions. Compliance with ASTM standards maintained."