

LAA/AWA/20/06
27th March 2020

Aerotechnik EV-97 Eurostar (All Marks)

Publication of Airworthiness Information Leaflet LAA/MOD/315/005 Issue 1 - Inspection of Fuel Filler Hose

Following the report of a recent in-flight incident, where a pilot became aware of a strong smell of fuel in the cockpit of an Aerotechnik EV-97 Eurostar aircraft, LAA Engineering has issued an Airworthiness Information Leaflet (AIL) (LAA/MOD/315/005 Issue 1) mandating the manufacturer's annual inspection requirement to inspect fuel hoses, specifically, the fuel filler hose.

Though many owners of EV-97 Eurostar aircraft, operating under an LAA administered Permit to Fly, will be maintaining their aircraft under a Tailored Maintenance Schedule (TMS), (which allows discretion with regard to explicitly following a manufacturer's maintenance schedule); recently discovered field experience, coupled with this event, reveals that this component has a history of failure and so regular inspections are necessary.

The aircraft involved in this event was assembled from a kit of parts which was originally delivered in 2009. When delivered, the kit included the flexible fuel filler hose. So, this part was possibly at least ten years old when it eventually succumbed to the natural ageing process, a process normal to all components manufactured from rubber.

The 'event' aircraft received its first Permit to Fly in 2019, though the fuselage (including the fuel tank fit) was completed 'some time ago'. It is possible that, despite this component's age, it hadn't been inspected for many years.

LAA/MOD/315/005 Issue 1 may be downloaded [HERE](#).

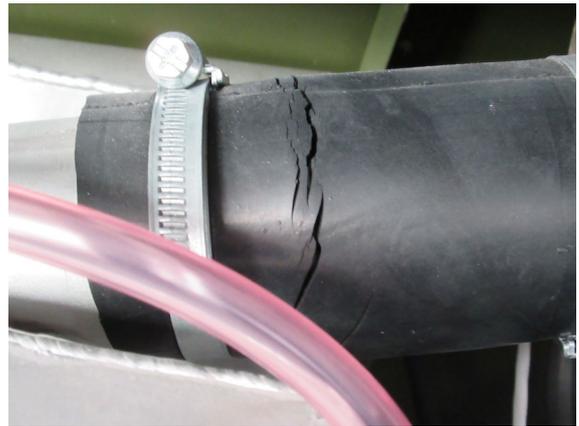


Fig. 1 This rubber fuel filler hose has failed such that fuel has leaked from the pipe. Naturally, this fuel has the very real potential of causing an in-flight cockpit fire. Note though, this pipe didn't degrade completely in one go, and that this splitting is likely to affect both the external and internal structure. Material degradation inside the pipe will mean that there's a huge risk of a fuel blockage (and therefore engine failure) due to 'breakaway' rubber debris collecting in the fuel system.



Fig. 2 This picture shows the external fuel filler cap and the baggage compartment in an EV-97 Eurostar Aircraft; it's a very neat arrangement. Note that there are about twenty screws holding this floor in place; possibly the reason why some owners have been reluctant to lift the panel annually. This new AIL requires the baggage compartment floor to be removed annually to inspect the fuel filler pipe.