

Europa Aircraft – All Marks Fuel System Inspection

LAA Engineering has recently issued an Airworthiness Information Leaflet (AIL) detailing a required inspection on Europa fuel systems.

The reason for this inspection is that during the investigation into a recent accident involving a Europa aircraft it was discovered that the vapour return line was routed back from the engine to tee into the fuel feed line at the fuel selector valve, in effect allowing the return fuel and any entrained vapour to circulate, rather than being returned directly to the fuel tank where the fuel can be cooled and any vapour can disperse. This may have led to a system vapour lock and therefore the reported loss of power which preceded the accident.

The AIL requiring this inspection LAA/MOD/247/010 issue 2 may be downloaded [HERE](#).



Fig. 1. This picture shows the return tee fitting as found on the aircraft involved in the accident; unused (return) fuel must be returned to the fuel tank where it has the opportunity to release any vapour bubbles that may have formed and can be cooled.

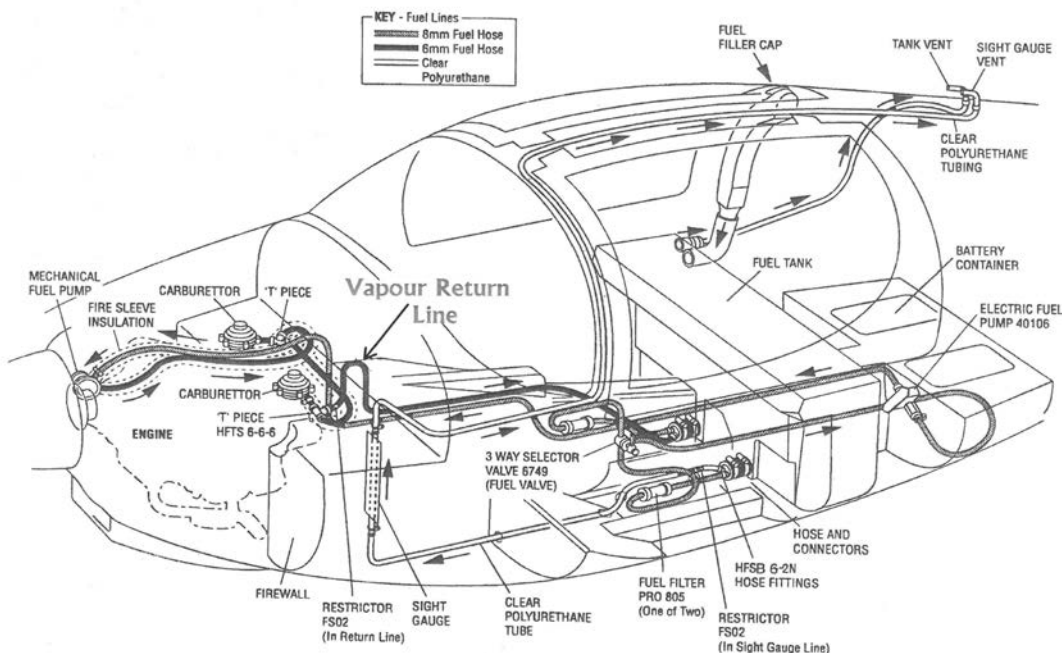


Fig. 2 This schematic of the fuel system on the Europa aircraft shows the return system. Note that the vapour return line takes fuel from a point as close as possible to the carburettor and that the fuel is delivered straight into the starboard fuel tank (reserve on the Europa) via a special fitting.