

Europa Aircraft (All Variants)

Flap Drive Pin Inspection for Security



Fig. 1 This picture shows the flap drive pin visible through the viewing hole in the upper surface of the flap, the hole is there for lining-up purposes when rigging the aircraft.

The landing was uneventful but, as the aircraft slowed, the port outrigger, which is in turn connected to the port flap, retracted and the aircraft ground looped.

On investigation it was found that the flap drive pin, which should be both screwed and bonded into the flap, had unscrewed itself from the flap; after close examination there was no sign of any adhesive being present.

Disconnect and slide out each wing in turn from the fuselage so that the flap pin can be checked for security; the flap pin can be considered secure if it cannot be unscrewed using a moderate hand-grip force.

As a result of this incident LAA Engineering has issued an Airworthiness Information Leaflet (AIL) (MOD/247/009) requiring owners of Europa aircraft to check the flap pins on their aircraft for security: this AIL may be downloaded [HERE](#). Additional advice was supplied to Europa owners via the accompanying letter: this letter may be downloaded [HERE](#).

During the take-off the pilot of a Europa Monowheel aircraft noted that, as the airspeed increased, an increasing amount of starboard aileron was needed to maintain wings-level flight. When the undercarriage was retracted the tendency to roll to port disappeared so the pilot assessed that the port flap, normally automatically deployed when the undercarriage is lowered, had partially retracted during the take-off roll.

On reaching his destination the pilot rehearsed a few approaches at height and, as he was able to maintain wings level flight at a normal approach speed, decided to commit to a landing.

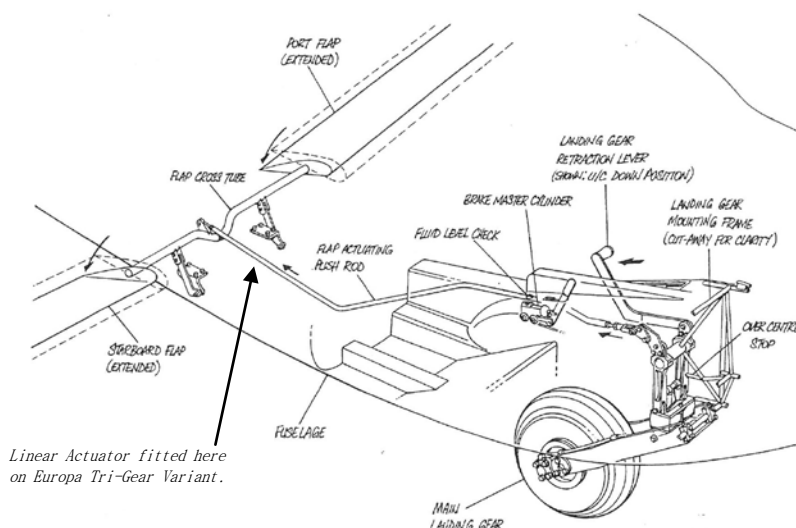


Fig. 2 This schematic of the mechanism involved in lowering the flap: flap lowering on the Monowheel variant is semi-automatic being connected to the main undercarriage – the Trigear variant uses an electrically powered linear actuator.