

Paramotor Li-Po battery fire

A BHPA member recently reported experiencing a fire in flight on their paramotor. The pilot managed to land safely but discovered that the fire had burned his harness and insulated jacket. The Lithium Polymer (Li-Po) battery fitted to the paramotor's electric starting system (which incorporated a charging circuit for a non-Li Po battery) had caught fire and burned through its 'fireproof' bag. The battery had been retro-fitted to the charging circuit by a previous owner, who had replaced the manufacturer-supplied non-Li Po battery with a Turnigy Nano-Tech Li-Po battery.

If your engine is fitted with a charging circuit for a non-lithium based battery (eg lead-acid or NiCad), do not fit a lithium-based battery (e.g. Li-Po, Li-ion) without first consulting your power unit's manufacturer. Lithium based batteries can become a fire risk without circuitry specific to the battery type.

In respect of general battery care we reiterate our message from January 2020 Skywings – if you have a Li-Po battery used for electric start or for strobes, it must form part of your Daily Inspection. If you have had a previous heavy landing on your powered hang glider or paraglider equipped with a Li-Po/Li-ion battery, you are urged to check the battery for obvious signs of damage.

Even a battery that has not been dropped may 'pillow', a condition where the internal components of the battery break down and swell, causing the external casing to expand like a pillow. The pillow shape indicates battery failure which may lead to rupture and fire. The battery should not be used but disposed of in accordance with the manufacturer's guidance. A Li-Po/Li-ion battery that is subjected to a forceful impact may present a significantly greater risk of becoming involved in fire.

