Service Note: Kamo battery backup facility

This applies only to boats with a standard Flysky i6x setup, only where SWC switch is used to activate the spinner and backup facility.

Switch functions:

Switch positions SWC Top position = battery backup active and back up wire is live at all times, even when boat is turned off.
Switch positions SWC Middle position = Neutral, functions are all off
Switch positions SWC Bottom position = Spinner is now active

Scenario:

Users forget to boot boat in neutral position with SWC switch as per user guide indications, as well as keeping the boat in battery backup mode constantly which is only intended for emergency usage.

If the SWC is kept in top position, battery backup is active constantly. This feature is only to be used in emergencies once the boat goes into battery failure, which is normally indicated by the voltage sensor or when the boats ESC puts the boat into a crawl mode which reduces the speed automatically to protect the battery from excessive discharge. Only then should a user activate the battery backup facility. The user should get the boat back safely at low speeds and deactivate backup before turning the boat off. Then proceed to charge your main batteries for normal use.

Ramifications:

If battery backup is constantly engaged, the backup battery link is constantly live. Even if a battery is not installed on that plug, it is possible for the user to move that cable and earth it and cause a dead short.

In some cases users neglect to pay attention to matching battery cell counts and mixing different voltages between the main battery and backup. When battery backup is activated the smaller cell battery could overload and explode, causing excessive damages.

Even with matched cell count batteries in use, keep in mind the backup is a smaller rated battery and capacity size. It is only intended to be used as a small boost of power once the main battery is depleted. Activating it prematurely could also cause it to overload in some circumstances.

Solution:

We are going to eliminate the use of SWC on future builds and users will have to use the right stick up and down to activate the spinner and backup facilities. This will resolve the situation of users forgetting to return to SWC neutral position. Unfortunately this means the user will need to hold the right stick up constantly to maintain battery backup activation. SWC was very convenient, but the margin for user error has increased dramatically in this regard.

Video link to change your system if you wish to do so: