Glider Canopy Flasher

Operating instructions and safety information — pages for inclusion in the aircraft manual

These instructions are intended to be kept with the aircraft flight manual or pilot operating handbook. Use them together with the approved aircraft documentation and the installation records applicable to the individual glider.

WARNING — The Glider Canopy Flasher is an aid to visual conspicuity only. It does not guarantee that the glider will be seen and does not replace an effective visual lookout, collision-avoidance action, radio procedures, or any installed electronic-conspicuity system.

1. General

Once switched on, the Glider Canopy Flasher operates automatically and requires no routine pilot input during flight. The pilot should not attempt to select patterns, enter test mode, configure the unit, or connect a phone while airborne.

The unit should normally remain switched on throughout the flight unless abnormal operation occurs or the aircraft-specific procedures require otherwise.

2. Normal Operating Procedure

2.1 Pre-flight inspection

- Check that the flasher, control unit, wiring, connectors and mounting are secure, dry and free from visible damage.
- Confirm that no cable or component obstructs the pilot's view, flight controls, canopy locking, canopy jettison or emergency egress.
- Perform any required functional check from an off-axis position. Do not look directly into the light source.
- Confirm that FLARM, radio, instruments and other connected aircraft equipment operate normally with the flasher switched on.
- If the installation is damaged, insecure or does not operate as expected, leave the flasher switched off and have the defect investigated.

2.2 Before take-off

1. Complete boarding, pre-flight preparation and all normal opening and closing of the canopy.
2. Close and secure the canopy. When no further routine canopy opening is expected, switch the Glider Canopy Flasher on just before take-off.
3. Verify normal operation without staring into the light. A brief peripheral or indirect check is sufficient.
4. Check that operation of the flasher has not caused any abnormal indication or interference in other aircraft equipment.

CAUTION — Do not leave the flasher powered while repeatedly opening and closing the canopy. This can create repeated electrical connection and disconnection cycles at the canopy connector. If the canopy must be reopened, switch the flasher off first. After the canopy has been closed and secured again, switch it on once, just before departure.

2.3 In flight

- No normal pilot action is required. The flasher operates automatically according to its configured mode and supported inputs.
- Do not repeatedly switch the unit off and on, run a test, or alter its configuration in flight.
- Continue an effective visual lookout and normal collision-avoidance procedures at all times.

2.4 After landing

1. At the first appropriate safe opportunity after landing, switch the flasher off before opening the canopy.
2. Open the canopy only after the flasher has been switched off, except where immediate opening is required for safety or emergency egress.
3. Record and report any abnormal operation, damage, overheating, intermittent connection or interference observed during the flight.

3. Abnormal Operation

If the Glider Canopy Flasher or any connected equipment does not operate correctly, switch the flasher off as soon as this can be done safely. Do not troubleshoot, reconfigure or repeatedly reset the unit in flight.

Indication or condition	Required pilot action
No flash, unexpected pattern, intermittent operation or continuous illumination	Switch OFF. Do not repeatedly reset or rely on the unit for conspicuity. Record the defect and obtain an inspection before further use.
Smoke, burning smell, sparks, unusual heat, or repeated operation of a protective device	Switch OFF and isolate if safe. Follow the aircraft emergency procedures and land as the circumstances require. Do not re-energise.
Interference with FLARM, radio, instruments or any other aircraft system	Switch OFF. Confirm that the affected equipment returns to normal, report the defect, and obtain a qualified inspection.
Loose mounting, damaged cable, damaged connector, moisture ingress or evidence of arcing	Switch OFF. Do not use again until the mounting, wiring and connectors have been inspected and repaired as necessary.

Aircraft control has priority. Do not allow attention to the flasher to distract from flying the aircraft, lookout or navigation.

4. Safety Warnings and Precautions

4.1 High-intensity flashing light

WARNING — EYE HAZARD — The flasher produces intense pulsed light. Direct viewing at close range can cause glare, temporary flash blindness, after-images and disorientation, and may present a risk of eye injury. Never stare into the illuminated unit or direct it at a person's eyes. Keep people clear during testing and verify operation off-axis.

4.2 Electrical and connected-equipment safety

WARNING — Before connecting the flasher to FLARM or other aircraft equipment, verify the pin allocation, signal type and voltage, supply voltage, polarity and ground against the documentation for both devices. An incorrect connection can damage either device or cause unreliable operation. If uncertain, have the connection checked by a suitably qualified person.

- Do not connect, disconnect or work on the flasher wiring while powered, except where an approved test procedure specifically requires it.
- Do not bypass protection, alter the wiring, or use the unit with moisture ingress, chafing, loose wiring, overheating, arcing or physical damage.

4.3 Canopy, controls and emergency egress

WARNING — The installation must not obstruct canopy locking or jettison, emergency opening, pilot visibility, flight controls or any safety-critical function. Never delay opening or jettisoning the canopy in an emergency in order to switch the flasher off.

4.4 Ground testing and configuration

Carry out configuration and extended testing only on the ground with the aircraft secured and people kept clear of the beam. Avoid prolonged testing, allow a warm unit to cool before touching it, and complete a ground functional check after any software, configuration, wiring or installation change.

5. Inspection Before Return to Service

A flasher switched off because of a defect, electrical smell, overheating, interference, damaged wiring or abnormal illumination must not be returned to service until the cause has been corrected. The installation and connected equipment must then be functionally checked by a competent person using the applicable documentation.