

# Contents

- [Introduction](#)
- [Safety](#)
- [The Winch's Perspective](#)
- [The Skylaunch 2](#)
- [Daily Inspection \(DI\)](#)
- [Setting Up](#)
- [Launching](#)
- [Unplanned Emergencies](#)
- [Simulated Launch Failures](#)
- [Maintenance](#)

## Overview

**Launch failures initiated by the winch driver must be coordinated with the winch driver in-person, not over the radio, by the instructor.**

Instructors should ensure that the winch driver is comfortable providing the type of launch failure that is being requested. Winch drivers should not perform any actions that they are not confident in providing or have not been trained to perform.

	Pilot Initiated	Winch Initiated
Ultra-low	N/A	The winch driver will cut power during the ground roll causing the glider to slightly lift off the ground before landing ahead.
Cable Break	The instructor will pull the release at a predefined height. The winch driver will treat the release as if the cable or weak link had broken.	The winch driver will cut power at a predefined height. <b>The instructor must tell the winch driver their required height.</b>
Power Failure	N/A	The winch driver will progressively reduce power at a predefined height, simulating the winch's engine losing power. <b>The instructor must tell the winch driver their required height.</b>

## Power Failures

Whilst a real power failure is rather unlikely, it is still a regular part of training before going solo. You may be asked by an instructor to perform a 'simulated power failure', where the winch driver slowly decreases the throttle in the full climb until they reach idle. The student pilot should notice and abandon the launch.

For power failures, your back-off from the throttle must be smooth and slow. If you back-off too suddenly, it will just feel like a cable break. If you back-off too slowly, the aircraft will climb higher up the launch than we wanted.

## High-Level Power Failures

This simulates the winch losing power during the full climb. It is the most common power failure you can expect to do. Usually, the instructor will want the power to completely fail by 500ft, however you should ask them for their requirements. Avoid asking them in front of their student as they may not be aware of their instructor's plans!

Launch the glider as usual. A few seconds after it has entered the full climb, begin to back-off from the power. Continue to back-off until reaching idle power. Once the glider has abandoned the launch, treat it as a normal launch failure.

## Low-Level Power Failures

This simulates the winch losing power during the rotation. The student pilot must notice the loss in power immediately.

As soon as the glider begins its rotation into the full climb, start to back-off the power. Continue to back-off until reaching idle power. Once the glider has abandoned the launch, treat it as a normal launch failure – **expect that they will land ahead.**

## Ultra-Low Cable Breaks

During pilot training, the ultra-low cable break is demo-only, and the student does not get to try to recover from one. The ultra-low can be very dangerous when not handled correctly.

As soon as you reach the required power setting for launch, quickly release the power back to idle. Select Neutral and apply the brake immediately. If you see the glider whilst still applying power, you did not back-off quickly enough.

From:

<https://pilots.scottishglidingcentre.co.uk/> - **Portmoak Pilot's Information and Airfield Manual**

Permanent link:

[https://pilots.scottishglidingcentre.co.uk/doku.php/winch/simulated\\_launch\\_failures](https://pilots.scottishglidingcentre.co.uk/doku.php/winch/simulated_launch_failures)

Last update: **2025/02/21 09:09**

