



# COMPETITION REFERENCE GUIDE

This document is intended to aid competition hosts with the management and use of Perfect Descent Auto Belays. This guide is not intended to supersede or replace other product documentation. Owners and operators must read, understand, and heed all instructions, labels, markings, and warnings supplied with Perfect Descent Auto Belays and any associated products intended for use with the Perfect Descent Climbing System.

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# RESOURCES

## Operations Manual

[www.perfectdescent.com/manuals](http://www.perfectdescent.com/manuals)

## Product Registration

[www.perfectdescent.com/product-registration](http://www.perfectdescent.com/product-registration)

## Service Centers

[www.perfectdescent.com/service-centers](http://www.perfectdescent.com/service-centers)

# GETTING STARTED

1. **Keep your box** and original packaging for storage and return shipment to an authorized service center for recertification or repairs.
2. **Register each auto belay** and be the first to receive service alerts, recertification notices, and exclusive product updates and offers.
3. **Make a record** in your Equipment Management System with the auto belay serial number and set a reminder for the recertification date listed on each device.
4. Upon receipt of a new auto belay, owners and operators should **read the Perfect Descent Operations Manual in its entirety and register their device** with the manufacturer. Be sure to enter the permanent address and telephone number of the owner. **DO NOT** enter the address and phone number of a temporary job site or temporary office. Product registration enables C3 Manufacturing to directly notify owner/operators of important product information, bulletins, and updates.



## ANCHORS AND HARDWARE

1. Anchor points must be engineered to support the maximum possible load capable of being generated with the appropriate safety factor.
2. Minimum requirements must conform to those of **EN 12572: Climbing wall anchor points** and **EN 795: Anchor Devices**.
3. Make sure that anchor points are a suitable size to correctly install mounting hardware and connect the auto belay so as to prevent accidental disengagement or rollout.
4. Installation methods and hardware must meet the minimum requirements set forth by controlling standards and regulations and in no case, less than the minimums stated in the Operations Manual.
5. **NEVER** use installation methods and hardware other than those recommended in the Operations Manual unless such other hardware and methods have been deemed to be suitable by a qualified engineer.
6. All secondary connectors and hardware used in the installation of the Perfect Descent must conform to the requirements of **EN 362: Types of connectors for personal protection and/or EN 12275- Types of connectors for mountaineering**.



# INSTALLATION CONSIDERATIONS

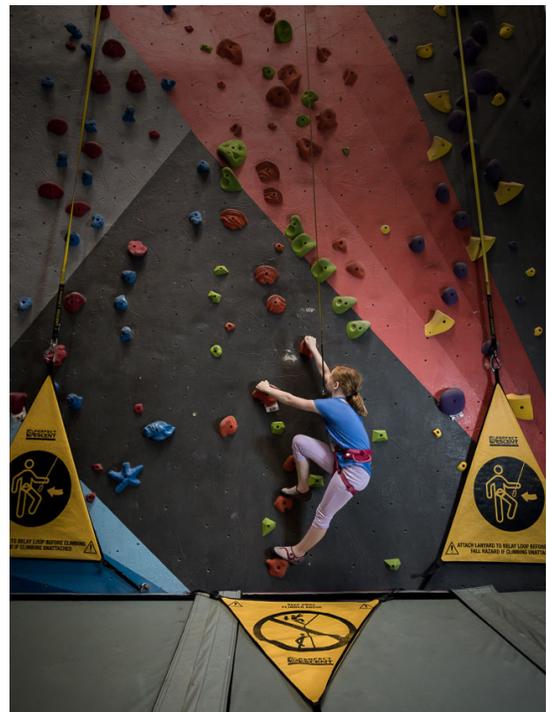
1. Perfect Descent Auto Belays should be installed by following the requirements and steps in the Perfect Descent Operations Manual that came with your device. Any deviation from the instructions as outlined in the Operations Manual should be approved by the manufacturer.
2. The lanyard length should be equivalent to or greater than the anticipated mounting height. The maximum mounting height of the 16.1m (53ft) lanyard is 16.3m (53ft 6in).

**NOTE:** *The lanyard's carabiner will not reach the ground when mounted at the maximum mounting height. The carabiner will only reach the ground when mounted at a height of 16.1m (53ft) or lower.*

3. Mounting heights are measured from bearing point to bearing point; the top bearing point is where the installation hardware connects to the Installation Handle, and the bottom bearing point is where the lanyard's carabiner makes contact with the climber's belay loop.

4. When mounting the Perfect Descent Auto Belay, **avoid rigid anchors** that restrict the rotational movement of the device. Doing so can result in premature wear to the lanyard.

5. If the anchor point exceeds the maximum mounting height, anchor extensions can be used, provided the method and materials meet manufacturer requirements and the manufacturer has provided written approval.



# PRE-USE INSPECTION

1. You are required to perform regular inspections of the auto belay as set forth in the Operations Manual. If any inspection, observation, or notification from a user suggests any abnormality or improper function, remove the auto belay from use immediately and properly quarantine the device until it can be submitted to a factory service center for evaluation. **DO NOT** use the Perfect Descent Climbing System if inspection reveals an unsafe condition.
2. The Perfect Descent Operations Manual outlines the requirements for daily and weekly inspections in addition to a Formal Inspection performed by a competent person.
3. The Formal Inspection must be completed at intervals of no more than 6 months; however, exposure to severe conditions may require more frequent formal inspections. Requirements for the Formal Inspection are outlined in the Operations Manual and include diagrams, a checklist, and an inspection log.
4. The operator's organization must establish and enforce a policy and procedure whereby any Perfect Descent Climbing System that is found to be defective, damaged, or in need of maintenance be immediately removed from use, marked as "UNUSABLE" and immediately submitted to custody of the person responsible for Formal Inspection.



# SPEED WALL CONSIDERATIONS

1. Several factors can affect auto belay performance and lanyard retraction speed including:

- *time since last service,*
- *time since last lanyard replacement,*
- *frequency of use, and*
- *severity of the environment.*

**NOTE:** *Contact Perfect Descent if you observe inconsistencies or change in retraction performance of two (2) or more auto belays.*

2. To ensure consistent performance on dual-lane Speed walls, use the same model device with equal lanyard lengths and connection types. It is recommended to install new lanyards prior to the start of the competition.

3. When auto belays are used regularly for training or general climbing, maintain separate lanyards for competition use only. **Competition lanyards should be stored in a clean, cool, and dry environment and used only for the duration of the event.**

4. Competition hosts are **strongly encouraged** to maintain a backup auto belay of the same model and configuration as the two primary competition devices.

5. Keep at least one replacement lanyard on-hand in the event a lanyard becomes damaged during competition.



# CARE, MAINTENANCE, AND STORAGE

## CARE

1. Regularly clean the auto belay housing with a clean, damp (not wet) cloth to remove chalk, dirt, or other contamination.
2. Thoroughly clean and dry the auto belay anytime there is exposure to water or damp conditions.
3. **NEVER** store the auto belay with a wet lanyard retracted into the device. Lanyards that become wet must be allowed to air dry before retracting and storing.
4. **NEVER** use solvents or abrasives to clean the housing as this may damage the plating and labels.
5. Major maintenance must only be performed by an authorized service center. **NEVER** attempt to open or otherwise disassemble the device.
6. Auto belays in regular operation should have the lanyard replaced annually or anytime an inspection finds damage, excessive wear to the connector and/or webbing, corrosion on the carabiner, or stitching that is broken, frayed, or missing threads.
7. **ALWAYS** keep a replacement lanyard and the appropriate tools for replacement on hand in the event that a lanyard requires immediate replacement.
8. Lanyards must be stored in a clean, cool, and dry setting away from chemicals or other corrosives for **up to 5 years** from the manufacture date indicated on the lanyard label.



# CARE, MAINTENANCE, AND STORAGE, cont.

## MAINTENANCE

9. Maintain the lanyard carabiner by removing loose dirt and chalk (if necessary, carabiners can be cleaned using warm water with a mild detergent) before lubricating the gate hinge, swivel, and locking collar with a light machine oil (such as 3-IN-ONE oil or Cam Lube) between all moving parts. Wipe away excess lubricant and **DO NOT** allow lubricant to contact the nylon webbing as this may cause damage.
10. Lanyards should **ALWAYS** be replaced if, at any point, they no longer pass inspection or if retraction is impaired due to lanyard wear. To ensure consistent retraction, the manufacturer recommends replacing lanyards at least once every 12 months.

**NOTE:** *With wear, lanyards become fuzzier and thicker, which can slow the retraction rate. A heavily worn lanyard can prevent full retraction of the lanyard into the device.*

## STORAGE

11. Store the Perfect Descent Climbing System in a cool, dry and clean place. Avoid areas where heat, moisture, oil and chemicals or their vapors, or other degrading elements may be present. Heavily soiled, wet, or otherwise contaminated equipment should be properly maintained (e.g. cleaned and dried) prior to storage. Ensure that the exposed parts of the lanyard **DO NOT** come in contact with grease, oils, gas, or other chemicals that may weaken it.
12. **ALWAYS** store the device with the lanyard fully retracted. **Prior to using equipment which has been stored for long periods of time, a Formal Inspection should be performed by a competent person.**
13. Remove from use, tag, and quarantine any equipment deemed to be unusable and contact an authorized service center to arrange inspection or service of the device.

## PRODUCT RECERTIFICATION

1. Perfect Descent Auto Belays used regularly for Speed training and competitions should be recertified every 12 months or after being stored for extended periods of time.

**NOTE:** All Class A auto belays require recertification at least every 12 months and Class C devices require recertification at least every 24 months. All devices used regularly for Speed training and competition are recommended to be upgraded at their next recertification cycle to the Class A certification.

2. On average, Perfect Descent Auto Belays can be recertified and returned in 5-10 business days following the receipt of a device. Lead time can vary according to service volume in addition to other factors. We recommend sending devices for service at least 6 weeks in advance of a competition or other intended use. You can contact your nearest service center to confirm estimated lead time prior to shipping.
3. Periodic recertification includes the disassembly, cleaning, inspection, reassembly, and testing of each auto belay. Additional components may be replaced during the recertification process according to established replacement schedules and measured wear.

