



QUICK REFERENCE GUIDE

This document is intended to serve as a quick reference for frequently asked questions and is not intended as a substitute for reading and understanding the Perfect Descent Operations Manual in its entirety. **ALWAYS** read the manual before installing and using Perfect Descent Auto Belays and have it readily available to staff and other responsible parties.

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RESOURCES

Operations Manual

www.perfectdescent.com/manuals

Product Registration

www.perfectdescent.com/product-registration

Service Centers

www.perfectdescent.com/service-centers

Certification/Conformity Documents

www.perfectdescent.com/certifications

RECERTIFICATION REQUIREMENTS

1. Perfect Descent Auto Belays require periodic recertification by an authorized service center. Failure to recertify your auto belay will void any available warranty and may expose users to significant risk.
2. Perfect Descent Auto Belays with a manufacture date of July 2020 and later are sold with a Class A certification and require periodic examination at least once every 12 months. This same interval applies to any older model that has been updated to the Class A certification.
3. Perfect Descent Auto Belays with a manufacture date of June 2020 and earlier were sold with a with a Class C certification and require periodic examination at least once every 24 months.
4. The established timeframe for periodic examination is the maximum amount of time that should lapse before an auto belay is recertified. Auto Belays with a high volume of use, those used in competition climbing, and used in harsh environments may require more frequent examinations.

IMPORTANT: Immediately remove from service any auto belay that is observed to be performing outside of its normal characteristics, and appropriately quarantine the device until it can be returned to an authorized service center for evaluation.

UNPACKING YOUR AUTO BELAY

1. **KEEP YOUR BOX** and original packaging for storage and return shipment to an authorized service center for recertification and repairs.
2. [Register](#) each auto belay 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.

ABOUT LANYARD LENGTH

1. The lanyard must **ALWAYS** be equivalent to or greater in length than the anticipated mounting height.
2. Auto belays with excessive lanyard length may experience improper lanyard spooling that can result in a jerky or rapid descent.
3. **ALWAYS** select the lanyard that most closely matches the mounting height and avoid using long lanyards on short walls.
4. The user may replace long lanyards with shorter lanyards to accommodate lower mounting heights.
5. **NEVER** replace a shorter lanyard with a longer lanyard as the auto belay will not operate properly. Longer lanyards can only be installed by C-3 Manufacturing or an authorized service center. Refer to section 2.0 of the Operations Manual for further mounting height information.

WHERE TO INSTALL

1. Install the auto belay over the intended descent path with the housing oriented vertically and lanyard nozzle facing down. The lanyard should hang unobstructed by the climbing wall or climbing holds and should not be allowed to pass over sharp edges or drag on the wall or holds during descent. **NEVER** install the auto belay where there is risk that the lanyard could become lodged behind hand holds or other obstructions.
2. Mount the auto belay in a manner that prevents a climber from climbing above the device.
3. Ensure that the height of the wall does not exceed the length of the lanyard and ensure that climbers cannot forcibly extract the lanyard beyond its max length.
4. Avoid routes where climber movements while ascending or descending could present hazards or affect climber safety.
5. **DO NOT** allow the lanyard to pass over, under, or around the path of another climber.
6. **DO NOT** install the auto belay on jumping style activities or in a manner where it can be repeatedly shock-loaded. Repeated shocking loads can cause damage that may result in an accelerated descent rate.
7. **NEVER** install the Perfect Descent Climbing System where the housing or lanyard can encounter electrical hazards.

ANCHOR REQUIREMENTS

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. In all cases and prior to first use, anchors used in conjunction with Perfect Descent Auto Belays should be verified by a qualified engineer, or person of equivalent competency, and deemed sufficient to comply with minimum load capacity as determined by the controlling requirements, standards, or regulations.
4. 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.

HARDWARE REQUIREMENTS

1. 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.
2. **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.
3. 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.**

KEY INSTALLATION CONSIDERATIONS

1. **ALWAYS** mount the Perfect Descent with the instruction label facing the wall and the brake housing facing away from the wall.
2. The auto belay must only be mounted using the attachment points on the installation handle. **ALWAYS** mount the device upright so that the lanyard nozzle is pointing downward in line with the climbing path.
3. For maximum lanyard life, avoid rigid mounting strategies. The preferred mounting method is to freely hang the auto belay away from the wall using a single connector to the center eye of the installation handle with an unloaded secondary connector to one of the offset eyes.
4. When mounting the auto belay flush to the wall or when using double point mounting, the connectors should be equalized and attached to the opposing offset eyes of the installation handle.

PRE-USE INSPECTIONS

1. Users are required to perform regular inspections of the auto belay as set forth in the Operations Manual.
2. If any inspection, observation, or notification from a user suggest any abnormality or improper function, remove the auto belay from use immediately and properly quarantine the device until it can be submitted to a authorized service center for evaluation.
3. **DO NOT** use the Perfect Descent Climbing System if inspection reveals an unsafe condition.

Daily Inspection

1. Inspect the auto belay before use each day to confirm that the device is functioning properly.
2. Verify smooth, even deployment of the lanyard by pulling the lanyard out until it stops. Return the line back into the housing in a controlled manner.
3. Verify proper function of the retraction system by confirming a static retraction force greater than 2kg (4.4lbs) with at least 65% of the lanyard length extended.
4. Check carabiner(s) for damage or deformity and confirm proper function of the gate and locking mechanism.
5. Inspect the lanyard for wear and damage (refer to Operations Manual, section 13.7) and verify proper brake function by making a short descent of 1-1.5m (3-5 feet).

PRE-USE INSPECTIONS, cont.

Weekly Inspection

1. In addition to completing the daily inspection, inspect the lanyard along its entire length looking for excessive wear or damage, paying particular attention to the stitching near the termination on each end (refer to Operations Manual, section 13.7 for examples of acceptable and unacceptable lanyard wear).
2. Remove from use any auto belay showing excessive lanyard wear or damage, or stitching that is broken, frayed, or missing threads, until the lanyard can be replaced.
3. Check that the carabiner functions properly and automatically closes and locks when released.
4. Confirm all fasteners on the housing are consistently seated and tight; also confirm that none are missing, damaged, or have been improperly substituted or altered in any way.
5. Verify that the housing is not damaged, dented, cracked, or corroded and that the installation handle is not excessively worn or otherwise compromised.
6. Evaluate the nozzle and check anchor hardware for excessive wear, loose or missing components, or damage.

PRE-USE INSPECTIONS, cont.

Formal Inspection

1. A competent person should complete the Formal Inspection at intervals of no more than six (6) months.
2. It is recommended that auto belays exposed to high-volume usage or severe conditions undergo a Formal Inspection more frequently. The frequency of inspection must be established by the operator's organization based on such factors as the nature and severity of conditions, frequency of use, and exposure time of the equipment.
3. Reference section 13.3 of the Operations Manual for step-by-step procedures for completing and recording the Formal Inspection.

CLIMBING & STORING

1. Use belay gates to reduce the likelihood that a climber may forget to connect to the auto belay before climbing.
2. The device is approved for use by a single person weighing 11.5 - 140 kg (25 - 310 lbs).
3. Like other critical life-safety equipment, climbers must be instructed on the safe use of auto belays.
4. We recommend establishing standard operating policies and procedures regarding the specific use and supervision of auto belays at your facility. This should include requirements for orientation on the use of auto belays and a process to measure competency of the user.
5. Climbers should not allow a slack line to develop. A slack line resulting in free-fall could seriously injure a climber or break the line. Climbers should be instructed to look for slack developing in the line as they ascend, and in the event of a slack line, should stop climbing immediately, remain stationary on the wall, and notify the operator.
6. During operating hours, store the lanyard clipped to a belay gate or similar connection point near the base of the wall. Lightweight tag lines should be used to guide the lanyard into the fully retracted position for overnight and extended storage. **ALWAYS** remove tag lines from the climbing area before use as they can become a hazard if left unattended.
7. **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.

CLEANING & MAINTAINING YOUR AUTO BELAY

1. Learn more about COVID cleaning and disinfecting protocol [here](#).
2. Regularly clean the auto belay housing with a clean, damp cloth to remove chalk, dirt, or other contamination.
3. Thoroughly clean and dry the auto belay anytime there is exposure to water or damp conditions.
4. **NEVER** use solvents or abrasives to clean the housing as this may damage the plating and labels.
5. Major maintenance can only be performed by an authorized service center. **NEVER** attempt to open or otherwise disassemble the auto belay.
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. Lanyards may 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.
8. 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.
9. Wipe away excess lubricant and **DO NOT allow lubricant to contact the nylon webbing as this may cause damage.**
10. Remove from service any auto belay that is damaged or in need of maintenance, and appropriately quarantine the device until it can be returned to an authorized service center for evaluation.

TROUBLESHOOTING YOUR AUTO BELAY

Lanyard is retracting slowly or does not retract completely.

1. Check the lanyard for excessive wear and fuzz
 - As the lanyard wears, it can develop excess fuzz that creates friction between the lanyard and nozzle. This friction can slow retraction and, in some cases, may prevent the lanyard from fully retracting. Check the condition of your lanyard and replace if excessively worn.
2. Check for internal contaminants
 - Excessive debris from worn lanyards and heavy chalk use may slow retraction speed. Remove the lanyard and use a high-powered vacuum to remove excessive buildup. **NEVER** blow compressed air into the auto belay.
3. Check retraction force
 - Perfect Descent uses a redundant duplex-spring retraction system. Test the retraction force using [these guidelines](#) to determine if both retraction springs are functional.
4. Check your tag line
 - If you notice slow or incomplete retraction when using a tag line to retract the lanyard for temporary or overnight storage, the weight of the tag line could be your problem. Perfect Descent auto belays are designed to exert minimal forces on the climber and it doesn't take much weight to slow retraction. **ALWAYS** use small diameter and lightweight tag lines.

TROUBLESHOOTING YOUR AUTO BELAY, cont.

5. Check lanyard spooling

- Occasionally, the lanyard can become twisted inside the auto belay. This usually occurs when a Speed Drive™ lanyard retracts unguided back into the device. To remove any twists in the line, slowly extract the entire lanyard, and using a lightweight tag line, slowly guide the lanyard back into the fully-retracted position.

Auto belay is making noises.

1. It sounds like a tape measure spooling

- It is common to hear a sound similar to a tape measure spooling when the device is retracting. This is the retraction spring coiling inside the auto belay and is normal.

2. One auto belay is louder than another

- Perfect Descent are among the quietest auto belays on the market. Decibel levels emitted during use can vary from device to device and can be more or less amplified by their position and attachment to a structure.

3. The auto belay is making a pronounced ratcheting noise

- A pronounced ratcheting or grinding noise can be an indication of internal damage or excessive wear. **If you hear this noise stop use immediately and quarantine the device until it can be inspected by and authorized technician.** You can hear an example of an auto belay needing immediate attention [here](#).

Descent is choppy or faster than normal.

1. Check lanyard spooling

- The lanyard may have spooled improperly. Use a lightweight tag line to fully retract the lanyard. Once retracted, pull the entire length of lanyard from the device using the tagline.

TROUBLESHOOTING YOUR AUTO BELAY, cont.

2. Check lanyard length

- Using a lanyard that is considerably longer than the mounted height of the auto belay can cause improper spooling. Make sure to mount devices using a lanyard length that most closely matches the intended mounting height.
- Avoid using long lanyards on short walls. Follow the steps for checking lanyard spooling if descent is choppy or faster than normal. Perform the lanyard spooling check before each operating day on auto belays with persistent choppiness. This is especially important when the auto belay is mounted at heights below 5.5m (18ft).

Carabiner gate is not functioning properly

1. Carabiner gate fails to fully close and/or lock

- Inspect carabiner for deformation or other damage. Clean all loose chalk and debris from the carabiner using a clean, damp cloth. For heavily soiled carabiners, gently washing in warm water and a mild detergent may be needed. Use compressed air to remove hard-to-reach debris.
- Carefully lubricate the gate, hinge, swivel, and locking collar with a light machine oil such as 3-IN-ONE or Cam-Lube. **DO NOT** allow the lubricant to contact the nylon lanyard as this may cause damage.
- Activate the locking gate and swivel several times to assist lubricant penetration. Test the gate and if still not functioning properly, replace the lanyard.