



SAFEWAZE

022-7025 Drift 7/16" (11mm) Rope Fall Arrester Manual



ANSI	Z359.15-2014*
OSHA	1926.502, 1910.66, 1910.140

*To be a compliant ANSI Z359.15-2014 system, the fall arrester must be used in conjunction with a compatible and approved vertical lifeline with energy absorbing lanyard.

**Read and understand instructions before using equipment!
Do not throw away instructions!**

**Always verify the latest revision of the Safewaze Manual is being utilized.
Visit the Safewaze website, or contact Customer Service, for updated manuals.**

⚠️ IMPORTANT:

- Please refer to this manual for essential instructions on the use, care, or suitability of this equipment for your application. Contact Safewaze for any additional questions.
- Record all important product information prior to use. Documentation of all Competent Person annual inspections is required in the Inspection Log.

▶ USER INFORMATION

Date of First Use: _____

Serial Number: _____

Trainer: _____

User: _____

▶ SAFETY INFORMATION AND PRECAUTIONS

- The manufacturer’s instructions must be provided to users of this equipment.
- The user must read, understand, and follow all safety and usage information contained within this manual.
- The user must safely and effectively use the Drift Rope Fall Arrester and all equipment used in conjunction with the Drift Rope Fall Arrester.
- Failure to follow all safety and usage information can result in serious injury or death.

Warnings:

Regulations included herein are not all-inclusive, are for reference only, and are not intended to replace a Competent Person's judgment or knowledge of federal or state standards.

The warnings/notices indicated below are designed to minimize risk associated with the use of the Drift Rope Fall Arrester and associated equipment:

- Users should consult with their doctor to verify ability to safely absorb the forces of a fall arrest event. Fitness level, age, and other health conditions can greatly affect an individual's ability to withstand fall arrest forces. Women who are pregnant and individuals considered minors must not use any Safewaze equipment.
- Do not alter or misuse equipment. Only Safewaze, or entities authorized in writing by Safewaze, may make repairs to Safewaze fall protection equipment.
- A Competent Person must conduct an analysis of the workplace and anticipate where workers will be conducting their duties, the route they will take to reach their work, and any existing and potential fall hazards. The Competent Person must choose the fall protection equipment to be utilized. Selections must account for all potential hazardous workplace conditions. All fall protection equipment should be purchased in new and unused condition.
- If work is conducted in a high heat environment, ensure that Arc Flash or other suitable fall protection equipment is utilized.
- Use of a body belt is not authorized for fall arrest applications.
- Work directly under the anchor point as much as possible to minimize swing fall hazards.
- The user must ensure that there is adequate fall clearance when working at height.
- Anchors that are exposed to fall arrest forces must be immediately removed from service and destroyed.
- Training of Authorized Persons to correctly install, inspect, disassemble, maintain, store, and use equipment must be provided by a Competent Person. Training must include the ability to recognize fall hazards, minimize the likelihood of fall hazards, and the correct use of personal fall arrest systems.
- Equipment designated for fall protection must never be used to lift, hang, support, or hoist tools or equipment unless specifically certified for such use.
- Avoid moving machinery, sharp and/or abrasive edges, and any other hazard that could damage or degrade the component.
- Utilize extra caution to keep lifeline free from any obstructions including, but not limited to, surrounding objects, tools, equipment, moving machinery, co-workers, yourself, or possible impact from overhead objects.
- User must ensure the rope grab is installed in the correct orientation to the rope.
- Do not use this equipment when working on an unstable surface such as fine grain, sand, or coal. Avoid using the Drift Rope Fall Arrester in applications where engulfment hazards exist.
- Do not use combinations of fall arresters, lanyards, and lifelines which may interfere with the safe function of each other.
- Only one user can be attached to the Drift Rope Fall Arrester.
- The Drift Rope Fall Arrester should be attached to only one lifeline at a time.
- The maximum working angle between the user and the device must not exceed 30°.
- Never work above the device.

TABLE OF CONTENTS

1.0 ▶ Introduction	5
2.0 ▶ Intended Use	5
3.0 ▶ Applicable Safety Standards	5
4.0 ▶ Worker Classifications	5
5.0 ▶ Rescue Plan	6
6.0 ▶ Product Limitations	6
7.0 ▶ Product Specifications	7
8.0 ▶ Fall Clearance	8
9.0 ▶ Compatibility of Connectors	9
10.0 ▶ Making Connections	10
11.0 ▶ Installation of Drift Rope Fall Arrester	10
12.0 ▶ Use of Drift Rope Fall Arrester	13
13.0 ▶ Inspection	14
14.0 ▶ Maintenance	16
15.0 ▶ Annual Inspection Form	17

► 1.0 INTRODUCTION

Thank you for purchasing the Safewaze Drift Rope Fall Arrester. This manual must be read and understood in its entirety and used as part of an employee training program as required by OSHA or any applicable state agency.

A rope grab is a deceleration device that is part of a personal fall arrest system (PFAS) and is used in conjunction with a vertical lifeline (VLL). The Drift Rope Grab allows for safe and hands free climbing, automatically trails the user as they move up and down the VLL, and immediately engages/locks to arrest a fall in the event of an accident.

022-7025 is designed to work with 7/16" Low Stretch Kernmantle Rope. It is necessary to use this device in combination with a shock absorber to be ANSI Z359.15-2014 compliant. The 022-7025 was designed for maximum efficiency and allows the sliding plate to open and close without removing the carabiner.

► 2.0 INTENDED USE

The equipment covered in this manual is intended for use as part of a personal fall arrest system. Use of this equipment for any other purpose including, but not limited to, sports or recreational activities, non-approved material handling applications, or other action not described in these instructions is not approved by Safewaze. Use of this equipment in a manner outside the scope of those covered within this manual can result in serious injury or death. The equipment covered in this manual must only be used by trained personnel in workplace applications.

► 3.0 APPLICABLE SAFETY STANDARDS

When used according to instructions as part of a complete assembly, this product meets **ANSI Z359.15-2014** standard and **OSHA 1926.502, 1910.66, 1910.140** regulations. Applicable standards and regulations depend on the type of work being done and may include state-specific regulations. Refer to local, state, and federal requirements for additional information on the governing of occupational safety regarding Personal Fall Arrest Systems (PFAS). The system has been tested in compliance with requirements of **ANSI/ASSE Z359.7**. The testing does not extend to the substrate to which the system is attached.

► 4.0 WORKER CLASSIFICATIONS

Read and understand the definitions of those who work in proximity of, or may be exposed to, fall hazards:

Qualified Engineer: A person with a Bachelor of Science in Engineering degree from an accredited college or university. They are able to assume personal responsibility for the development and application of engineering science and knowledge in the design, construction, use, and maintenance of their projects.

Qualified Person: One who, by possession of a recognized degree, certificate, or professional standing, or who by extensive knowledge, training, and experience, has successfully demonstrated their ability to solve or resolve problems relating to the subject matter, the work, or the project.

Competent Person: One who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

Authorized Person: A person approved or assigned by the employer to perform a specific type of duty or duties, or to be at a specific location or locations, at the jobsite.

It is the responsibility of a Qualified Person or Engineer to supervise the jobsite and ensure safety regulations are met.

► 5.0 RESCUE PLAN

Prior to the use of this equipment, employers must create a rescue plan in the event of a fall and provide the means to implement the plan through training. The rescue plan must be specific to the project. The rescue plan must allow for employees to rescue themselves or be promptly rescued by alternative means.

This plan must be communicated to/understood by all equipment users, authorized persons, and rescuers. Rescue operations may require specialized equipment beyond the scope of this manual. Every user must be trained in the inspection, installation, operation, and proper usage of their Rescue Equipment and Rescue Plan. See ANSI Z359.4-2013 for specific rescue information. Immediately seek medical attention in the event a worker suffers a fall arrest incident. **Note:** Special rescue measures may be required for a fall over an edge.

► 6.0 PRODUCT LIMITATIONS

When installing or using this equipment always refer to the following requirements and limitations:

- **Capacity Range:** ANSI 130-310 lbs. (59-141 kg). *including clothing, tools, equipment, etc.
- **Lifeline Requirement:** Use with 7/16" (11mm) rope.
- **Fall Protection:** Use with an ANSI approved full body harness. Only use the applicable D-ring for intended use.
- **Maximum Working Angle:** Must not exceed 30° between user and device.
- **Anchorage:** Anchorages selected for fall arrest systems shall have a strength capable of sustaining static loads applied in the directions permitted by the system of at least:
 1. 5,000 lbs. (2267.9 kg) for non-certified anchorages, or
 2. Two times the maximum arresting force for certified anchorages, or
 3. 3,100 lbs. for Rescue applications.

When more than one fall arrest system is attached to an anchorage, the strengths set forth in one of the above shall be multiplied by the number of systems attached to the anchorage.

From OSHA 1926.502 and 1910.66: Anchorages used for attachment of personal fall arrest systems shall be independent of any anchorage being used to support or suspend platforms and capable of supporting at least 5,000 lbs. (2267.9 kg) per user attached. Or, anchorages for attachment should be designed, installed, and used as part of a complete PFAS which maintains a safety factor of at least two and is under the supervision of a Qualified Person.

- **Locking Speed:** The nature of this equipment requires a clear fall path to ensure the fall arrester will lock in the event of a fall. Working in obstructed fall paths, cramped areas, or on moving materials like sand and grain, may not allow the user's body to gain enough speed buildup to cause the drift rope fall arrester to engage and lock in the event of a fall.
- **Free Fall:** The maximum allowable free fall is 6 feet. Limit free fall distance by keeping anchorage overhead and in-line with work area.
- **Swing Falls:** As the user moves laterally away from an overhead anchor point, the risks related to swing falls increase. The force of striking an object involving swing fall can in some instances generate more forces than a fall with the user wearing no fall protection equipment. Minimize swing falls by working as directly below the anchorage point as possible
- **Fall Clearance:** Fall Clearance (FC) is the total combined values of the Rope Elongation, Lanyard Length, Deceleration Distance, Harness Stretch, Height of Worker, and Safety Factor. Safewaze uses a 2 ft. Safety Factor. The Safety Factor includes fall arrester slippage.

Additional Fall Clearance is required for falls from a kneeling or crouched position. If a Swing Fall hazard exists, the total vertical fall distance will be greater than if the user had fallen directly under the anchor point. This manual provides information regarding Swing Fall hazards and additional Fall Clearance Requirements in Section 8.

- **Hazards:** Extra precautions should be taken if this equipment is used in an environment where hazards exist. Hazards can include, but are not limited to, moving machinery, high voltage equipment or power lines, caustic chemicals, corrosive environments, toxic or explosive gases, or high heat. Avoid working in an area where overhead equipment or personnel could fall and contact the user, fall protection equipment, or the lifeline. Areas where the user's lifeline may cross or tangle with the lifeline of another user should be avoided. Do not allow the lifeline to pass under arms or between the legs.

▶ 7.0 PRODUCT SPECIFICATIONS

- Minimum Breaking Strength (MBS): 3,600 lbs. (16 kN).
- Use with 7/16" (11mm) rope.
- Item weight: 0.7 lbs. (0.3 kg)
- Lightweight aluminum design with high grade 7075 aluminum housing.
- Stainless steel internal components.
- Wear resistant Zytel® nylon rollers.
- Visual indicators for upright installation.
- Ergonomically placed mode control switch.

- Flared housing for pinch free use and reduced rope friction.
- Double locking gate.
- Connect and disconnect with one hand without removing carabiner.
- Includes backup anchor descent cord for use in rescue scenarios.

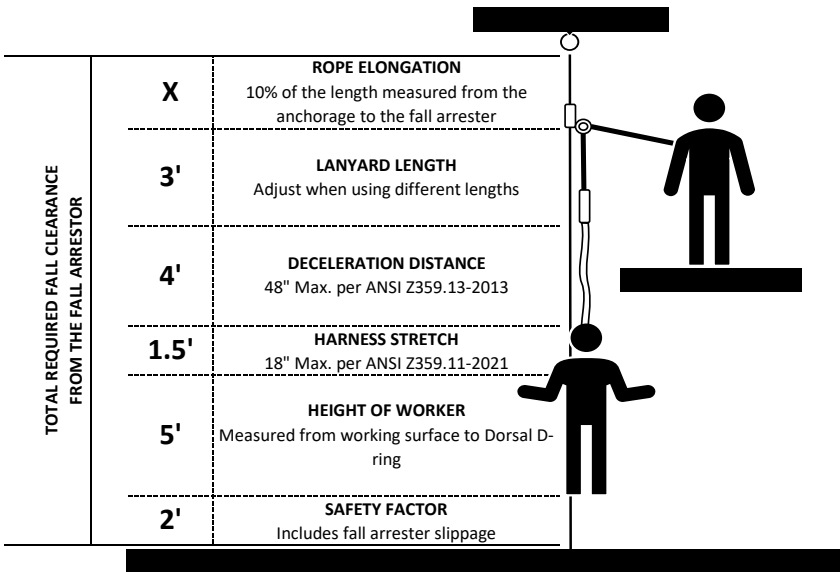
► 8.0 FALL CLEARANCE

Always select a lanyard and anchor point location that limits free fall and swing fall as much as possible. A free fall of more than 6 ft. could cause excessive arrest forces that could result in serious injury or death.

- **Fall Clearance:** There must be sufficient clearance below the anchorage connector to arrest a fall before the user strikes the ground or an obstruction. When calculating fall clearance, account for all applicable factors (Figure 1).

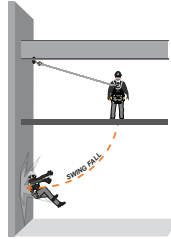
FIGURE 1: MINIMUM REQUIRED FALL CLEARANCE

*For all applications: Worker weight capacity range is 130-310 lbs. (including all clothing, tools, and equipment).



- **Swing Falls:** Prior to installation or use, make considerations for eliminating or minimizing all swing fall hazards. Swing falls occur when the anchor is not directly above the location where a fall occurs. Always work as close to, or in line with, the anchor point as possible. Swing falls significantly increase the likelihood of serious injury or death in the event of a fall (Figure 2). Ensure a Competent Person includes swing fall in calculations if the hazard exists.

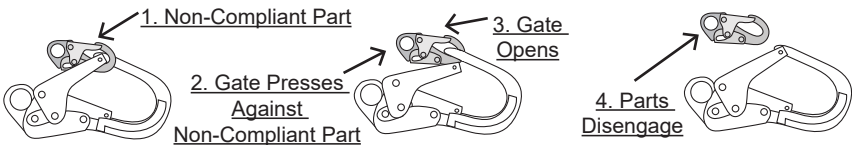
FIGURE 2: SWING FALL



► 9.0 COMPATIBILITY OF CONNECTORS

- Safewaze equipment is designed for, and tested with, associated Safewaze components or systems. If substitutions or replacements are made, ensure all components meet the applicable ANSI requirements. Read and follow manufacturer's instructions for all components and subsystems in your PFAS. Not following this guidance may jeopardize compatibility of equipment and possibly affect the safety and reliability of the system.
- Connectors are compatible with connecting elements when they have been designed to work together in such a way that their sizes and shapes do not cause their gate mechanisms to inadvertently open regardless of how they become oriented.
- Connectors (hooks, carabiners, and D-rings) must be capable of supporting at least 5,000 lbs. (22 kN).
- Connectors must be compatible with the anchorage or other system components.
- Do not use equipment that is not compatible. Non-compatible connectors may unintentionally disengage (Figure 3).
- Connectors must be compatible in size, shape, and strength.
- Self-locking snap hooks and carabiners are required by OSHA guidelines.
- Some specialty connectors have additional requirements. Contact Safewaze if you have any questions about compatibility.

FIGURE 3: UNINTENTIONAL DISENGAGEMENT



Using a connector that is undersized or irregular in shape (1) to connect a snap hook or carabiner could allow the connector to force open the gate of the snap hook or carabiner. When force is applied, the gate of the hook or carabiner presses against the non-compliant part (2) and forces open the gate (3). This allows the snap hook or carabiner to disengage (4) from the connection point.

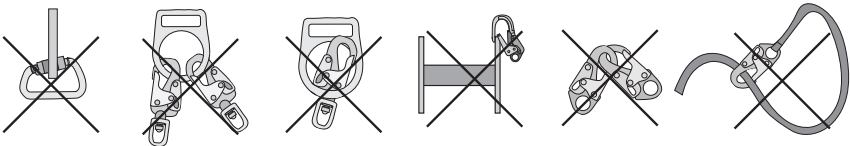
► 10.0 MAKING CONNECTIONS

Snap hooks and carabiners used with this equipment must be double locking and/ or twist lock. Ensure all connections are compatible in size, shape, and strength. Do not use equipment that is not compatible. Ensure all connectors are fully closed and locked.

Safewaze connectors (hooks, carabiners, and D-rings) are designed to be used only as specified in each product's manual. See Figure 4 for examples of inappropriate connections. Do not connect snap hooks and carabiners:

- To a D-ring to which another connector is attached.
- In a manner that would result in a load on the gate (with the exception of tie-back hooks).
- In a false engagement, where features that protrude from the snap hook or carabiner catch on the anchor, and without visual confirmation seems to be fully engaged to the anchor point.
- To each other.
- By wrapping the web lifeline around an anchor and securing to lifeline, except as allowed for tie-back models.
- To any object which is shaped or sized in a way that the snap hook or carabiner will not close and lock, or that roll-out could occur.
- In a manner that does not allow the connector to align properly while under load.

FIGURE 4: INAPPROPRIATE CONNECTIONS



Large throat snap hooks must not be connected to standard size D-rings or similar objects which will result in a load on the gate if the hook or D-ring twists or rotates, unless the snap hook complies with ANSI Z359.1-2007 or ANSI Z359.12 and is equipped with a 3,600 lb. (16 kN) gate.

► 11.0 INSTALLATION OF DRIFT ROPE FALL ARRESTER

Prior to installation, the user must inspect the 022-7025 for any obvious signs of damage or defects prior to each use. Figure 5 illustrates the components of the Drift Rope Fall Arrester. Additionally, the user must be aware of, and seek to minimize, any swing fall hazards that may exist. The user must ensure adequate fall clearance exists for the equipment being used with the associated work operations.

Step 1: Rotate the sliding plate open by pushing the green sliding gate to the left, while simultaneously pressing the red button. (Dwgs. 1 & 2). The 022-7025 was designed for maximum efficiency and allows the sliding plate to open and close without removing the carabiner from the grab.

Step 2: Verify the position of the mode control switch is in the Trail position (Dwg. 3). With the sliding plate open, install the drift grab onto the VLL, ensuring the device remains in the correct vertical orientation designated by an UP arrow (Dwg. 4).

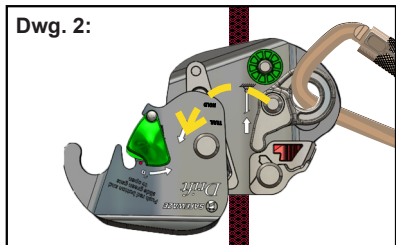
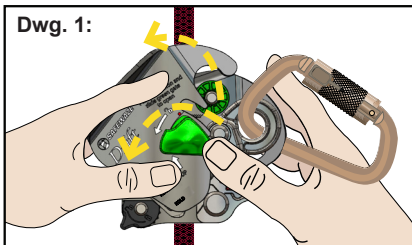
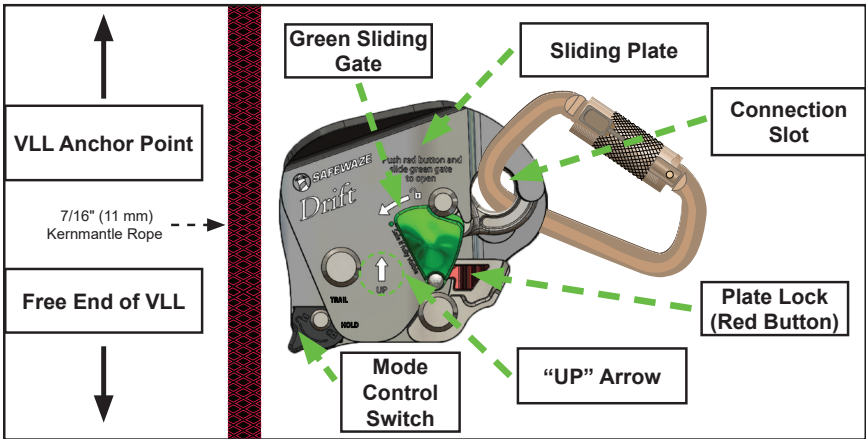
Step 3: Rotate the sliding plate closed over the VLL. Make sure the red dot warning indicator is not visible on the plate gate (Dwg. 5).

Step 4: When used with an ANSI compliant Energy Absorbing Lanyard (EAL), the energy absorber's snap hook attaches directly to the User's Dorsal D-ring, with the D-ring end of the lanyard attaching to the rope grab's carabiner. Connect the EAL to the installed rope grab's carabiner. (Dwg. 6).

Step 5: Pull upward on the connector to verify that the rope grab moves freely along the lifeline (Dwg. 7).

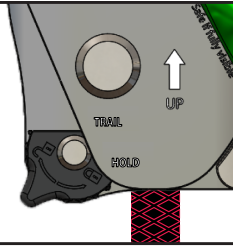
Step 6: Proper function of the 022-7025 can be tested by again pulling up on the connector, and then rapidly pulling downward to ensure the grab locks onto the rope and stops (Dwg. 8).

FIGURE 5: COMPONENTS

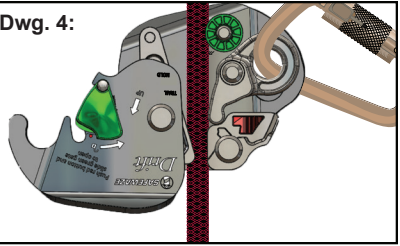


Dwg. 3:

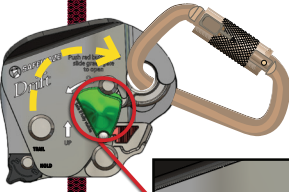
TRAIL
and
HOLD
Mode Control
Switch



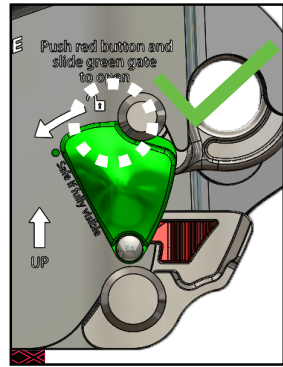
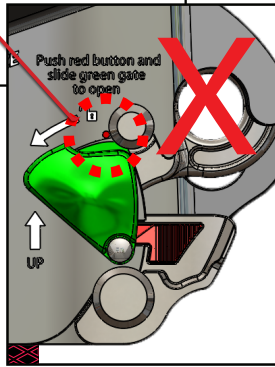
Dwg. 4:



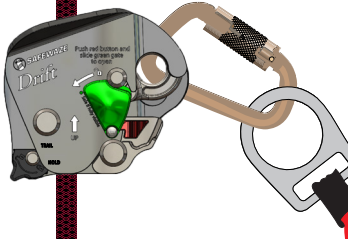
Dwg. 5:



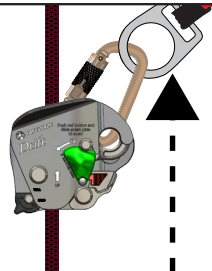
WARNING INDICATOR



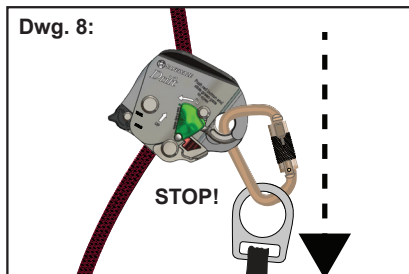
Dwg. 6:



Dwg. 7:



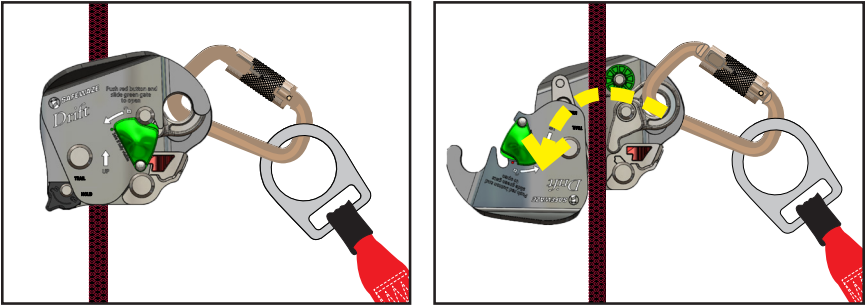
Dwg. 8:



To stop the trailing function of the 022-7025, rotate the mode control switch to the HOLD position. As the user needs to move up or down the VLL, they must rotate the mode control switch back to the TRAIL position (Dwg. 3).

To remove the Drift Rope Grab from the VLL, rotate the sliding plate open (Figure 6). DO NOT ATTEMPT TO DISCONNECT WHILE IN USE!!

FIGURE 6: DISCONNECTION FROM VLL



► **12.0 USE OF DRIFT ROPE FALL ARRESTER**

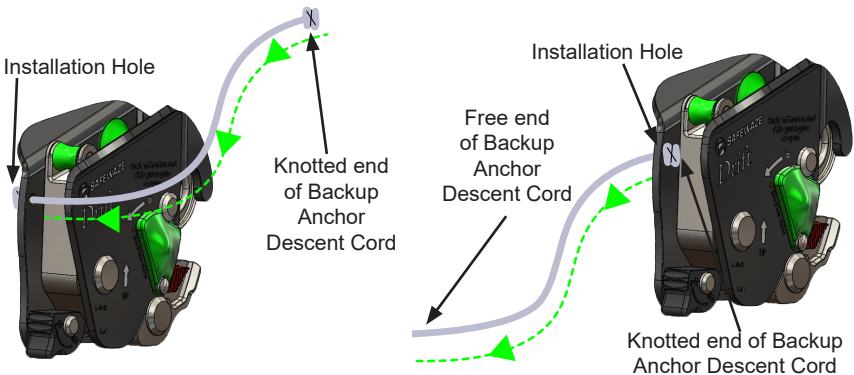
The Drift Rope Grab is suitable for use in VLL controlled descent scenarios and rescue operations. The Drift Rope Fall Arrester should not be used for fall restraint applications.

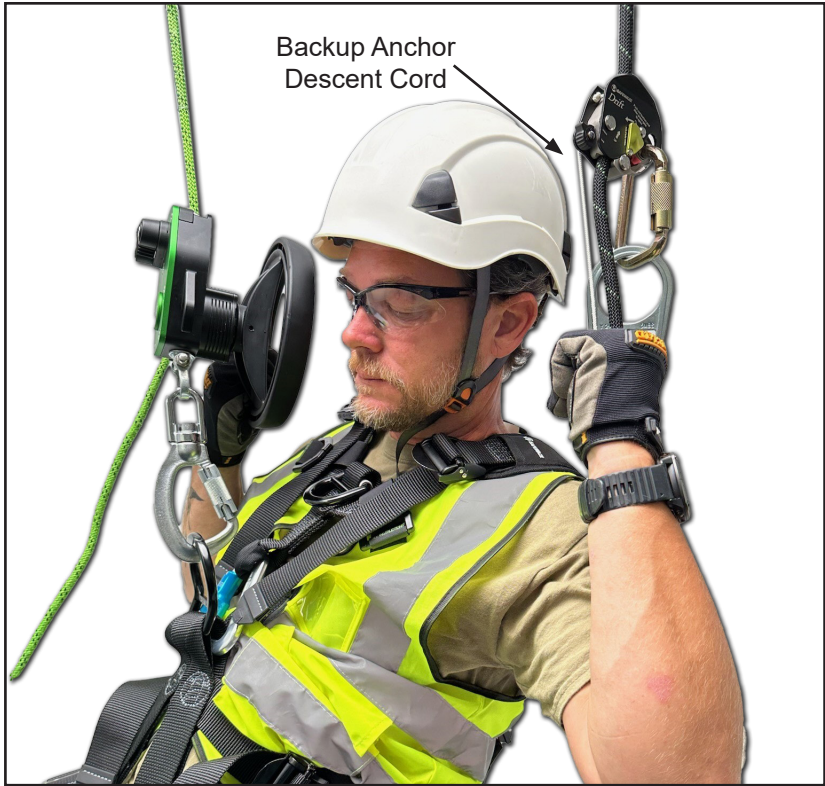
If used to facilitate descent to an injured worker, the Backup Anchor Descent Cord should be utilized. The Backup Anchor Descent Cord is simple to install and is included with the grab at time of shipment.

To install the Backup Anchor Descent Cord, tie a knot at one end of the cord. Thread the untied end of the cord through the pre-drilled hole on the grab from the inside out. Pull the cord through the hole until the knotted end of the rope cinches against the plate of the grab.

Figure 7 illustrates the proper installation and use of the Backup Anchor Descent Cord.

FIGURE 7: BACKUP ANCHOR DESCENT CORD INSTALLATION





The Drift Rope Fall Arrester, when used in rescue operation, will rotate to the HOLD orientation on the rope lifeline simply due to the rescuer's weight. Pull down on the Backup Anchor Descent Cord to descend. Placing tension on the Backup Anchor Descent Cord orients the Drift Rope Grab in a more perpendicular position on the rope lifeline. This allows the rope to travel through the grab, allowing the user to descend.

► 13.0 INSPECTION

The user must keep instructions available for reference and record the date of first use on Page 2.

The user must immediately remove the Drift Rope Fall Arrester from service if defects or damage is found, or if device is exposed to forces of fall arrest.

Work Area:

- Inspect the work area to ensure the location is free of any damage including, but not limited to, debris, cracking, rot, decay, structural deterioration, rust, and any hazardous materials.
- A Competent Person must determine that the installation location to be utilized will support the intended loads.
- Check the condition of the VLL according to its manufacturer instructions.

Frequency:

- A Competent Person, other than the user, must inspect the Drift Rope Grab Fall Arrester at least once annually.
- While conducting inspections, the Competent Person must consider all applications and hazards that the equipment may have been subjected to while in use.
- Competent Person inspections must be recorded in the Inspection Log included in this manual (Page 17), as well as the inspection table labels on each product individually. The Competent Person must place their initials in the block which corresponds with the month and year that the inspection is performed. All individual labels on the equipment will be initialed in the same manner.
- See Table 2 for more information regarding inspection frequency requirements.

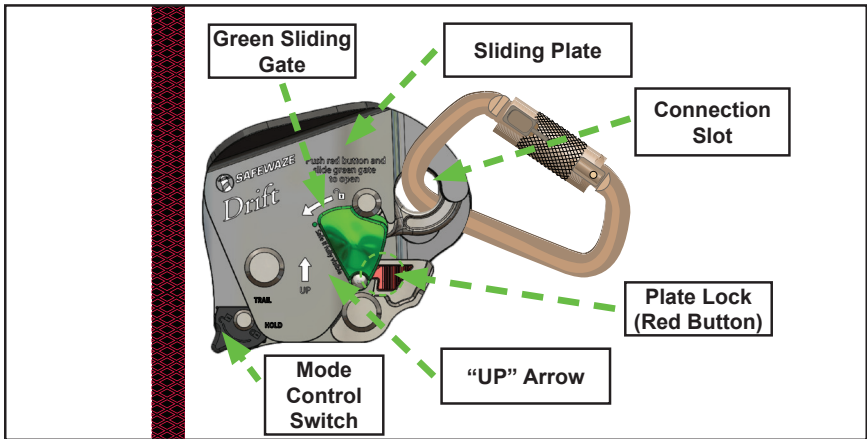
TABLE 2: INSPECTION FREQUENCY

Type of Use	Application Examples	Conditions of Use	Inspection Frequency by Competent Person
Infrequent to Light	Rescue and Confined Space, Factory Maintenance	Good Storage Conditions, Indoor or Infrequent Outdoor Use, Room Temperature, Clean Environments	Annually
Moderate to Heavy	Transportation, Residential Construction, Utilities, Warehouse	Fair Storage Conditions, Indoor and Extended Outdoor Use, All Temperatures, Clean or Dusty Environments	Semi-Annually to Annually
Severe to Continuous	Commercial Construction, Oil and Gas, Mining	Harsh Storage Conditions, Prolonged or Continuous Outdoor Use, All Temperatures, Dirty Environment	Quarterly to Semi-Annually

Directions:

- Prior to each use, inspect 022-7025 for possible deficiencies including, but not limited to, missing parts, corrosion, deformation, pits, burrs, rough surfaces, sharp edges, cracking, rust, paint buildup, excessive heating, alteration, and missing or illegible labels. Inspect all components of the device including the housing, plate gate, mode control switch, connection slot, sliding plate, "UP" arrow, and red button.
- Prior to each use, the user must inspect and verify that **each individual component** (Figure 8) of the system is safe for use.

FIGURE 8: COMPONENT INSPECTION



► 14.0 MAINTENANCE

Repairs:

Only Safewaze, or entities authorized in writing by Safewaze, may make repairs to Safewaze fall protection equipment.

Cleaning:

The Drift Rope Fall Arrester can be cleaned with water and mild soap. The user should remove all dirt, possible corrosives, and contaminants from the system prior to, and after, each use. Never use any type of corrosive substance to clean the system.

Excess water should be blown out with compressed air. Hardware can be wiped off with a clean, dry cloth. Do not store device if wet or damp. Allow device to fully dry before being stored.

Storage:

Prior to installation, store the Drift Rope Fall Arrester in a cool, dry area where it will not be exposed to extreme light, extreme heat, excessive moisture, or possibly corrosive chemicals or materials.



































Lifespan:

The working life of the Drift Rope Fall Arrester is determined by work conditions, care, and inspection provided. So long as the system and all components pass inspection, it may remain in service. However, the user must immediately remove the Drift Rope Fall Arrester from service if device is exposed to forces of fall arrest.

Disposal:

Dispose of the Drift Rope Fall Arrester if inspection reveals an unsafe or defective condition. If damaged and unserviceable, the device should be destroyed so as not to allow accidental re-use.



Inspection Date:	Inspector:	Pass/Fail:  	Comments/ Corrective Action:
		 	
		 	
		 	
		 	
		 	
		 	
		 	
		 	
		 	
		 	
		 	
		 	
		 	
		 	
		 	
		 	



SAFEWAZE

Address: 225 Wilshire Ave SW, Concord, NC 28025

Phone: 800-230-0319

Fax: 704-262-9051

Email: info@safewaze.com

Website: safewaze.com