



# ***SAFEWAZE***

## **Quadrant Retractable HLL Manual**

**(023-8091)**



<b>OSHA</b>	1926.502, 1910.66, 1910.140
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**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 Quadrant Retractable HLL and all equipment used in conjunction with the product.
- 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 indicated below are designed to minimize risk associated with the use of the Quadrant Retractable HLL.**

- 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.
- Equipment that has been 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 using the product in applications where engulfment hazards exist.
- 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.
- Do not exceed the number of allowable users specified in this manual.
- Do not tie, twist, knot, or allow slack in the lifeline.
- Do not connect to the system for fall protection while it is being transported or installed.
- Do not work below a suspended worker.
- Maintain 100% tie-off at all times.

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## ▶ 1.0 INTRODUCTION

Thank you for purchasing a Safewaze Quadrant Retractable Horizontal Lifeline (HLL). 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.

The Quadrant Retractable HLL is a two person fall protection system. The product is installed between two anchorage points and features two O-ring connection points for Fall Arrest or Restraint applications. It is best practice to install the HLL at a height that limits free fall to a maximum of 6 feet when using energy absorbing lanyards. When using SRLs, overhead installation is recommended.

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## ▶ 2.0 INTENDED USE

The equipment covered in this manual is intended for use as part of a complete personal fall protection 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. If the anchor is used for training, a secondary fall protection system must be used so the trainee is not exposed to accidental fall hazards.

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## ▶ 3.0 APPLICABLE SAFETY STANDARDS

When used according to instructions, this product meets **OSHA 1926.502, 1910.66,** and **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).

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## ▶ 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.**

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## ► 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.

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## ► 6.0 PRODUCT LIMITATIONS

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

- **Capacity Range:** 130-310 lbs. (59-141 kg). \*including clothing, tools, equipment, etc.
- **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.

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.

- **Free Fall:** The distance a user falls before the fall arrester activates. The user must determine the amount of Free Fall present in the system as this can increase or reduce the Fall Clearance. Determine the system height, system setback, system span, and the personal fall arrester being used to select the appropriate clearance chart.
- **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:** The amount of feet required below the working surface for the personal fall arrest system to work correctly.
- **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.
- **Sharp Edges:** Keep work area free of sharp edges. Install system away from sharp edges. If sharp edges are unavoidable, use appropriate equipment.
- Use only the applicable D-ring for intended use.

## ▶ 7.0 ALLOWED ANCHORAGE APPLICATIONS

**Personal Fall Arrest:** Safewaze Anchors are designed as an anchor point to support a maximum of 1 PFAS when utilized for fall protection applications. The structure to which the anchor is attached must withstand loads applied in the directions permitted by the system of at least 5,000 lbs. (22 kN) or be designed with a safety factor of two to one. Maximum allowable free fall is based on the connector used.



**Restraint:** Safewaze Anchors are authorized for use in Restraint applications. The structure to which the anchor is attached must withstand loads applied in the directions permitted by the system of at least 1,000 lbs. NO free fall is permitted. Restraint systems may only be used on surfaces with slopes up to 4/12 (vertical/horizontal). For Restraint applications, the allowable attachment points to the harness are Dorsal, Front/Sternal, Side, and Shoulder D-rings.



## ▶ 8.0 PRODUCT SPECIFICATIONS

- 2-Person HLL Retractable System.
- Collapsible crank handle, dual-action tension release, fall indicator, free wheel mode, and stabilized tensioning design.
- (2) Carabiners included (1 permanently installed with captive pin).
- (2) O-ring connection points for reduced cable wear.
- Power drill retraction adapter included.

- Minimum Breaking Strength (MBS): 5,000 lbs. (2268 kg)
- Peak Dynamic Pullout Load: 2,500 lbs. (1134 kg)
- Working Length: 65 ft. (19.81 m)
- Capacity Range: Maximum of 2 Users. 130-310 lbs.\* (58.96-140.61 kg). \*including clothing, tools, and equipment.
- Item Weight: 24.2 lbs. (11.0 kg)

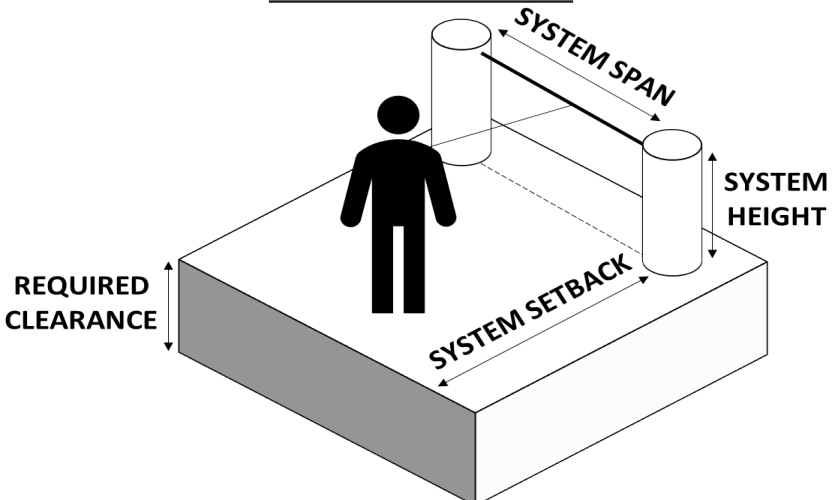
TABLE 1: MATERIALS	
Housing	Nylon and Glass Fiber
Cable	¼ in. Galvanized Steel
Carabiners	YCM Plated Steel
O-Rings	Zinc Plated Steel
Crank Handle	Powder Coated Steel, Aluminum, Rubber
Drill Bit Adapter	Black Oxide Steel

## ► 9.0 FALL CLEARANCE

Always select a fall protection device 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. Use appropriate equipment if free fall exceeds 6 ft.

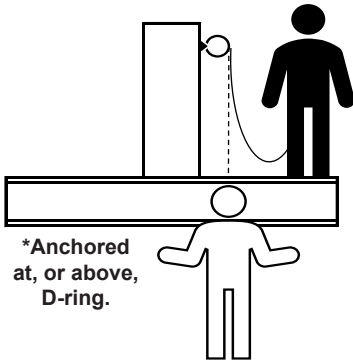
- **Fall Clearance:** There must be sufficient clearance below the anchorage connector to arrest a fall before the user strikes the ground or an obstruction. When calculating fall clearance, account for all applicable factors (Figure 1). A Competent Person must reference the entire system's components to calculate Fall Clearance.

**FIGURE 1: FALL CLEARANCE**

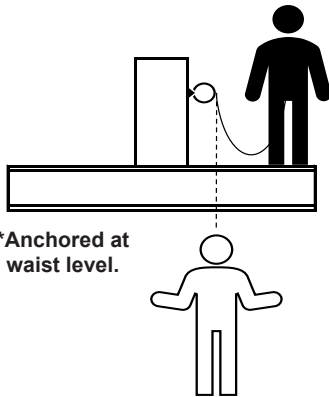




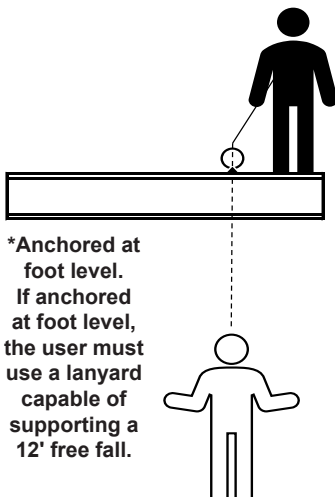
## FALL CLEARANCE FOR ENERGY ABSORBING LANYARDS:



LANYARD WITH 6' FREE FALL		NUMBER OF USERS ≤ 310 lbs. (140 kg)	
		1	2
SYSTEM SPAN	≤ 10' (3.0m)	13'9" (4.2m)	14'10" (4.5m)
	≤ 20' (6.1m)	15'2" (4.6m)	17'4" (5.3m)
	≤ 30' (9.1m)	16'6" (5.0m)	19'10" (6.0m)
	≤ 40' (12.2m)	17'10" (5.4m)	21'8" (6.6m)
	≤ 50' (15.2m)	19'0" (5.8m)	23'5" (7.1m)
	≤ 60' (18.3m)	20'2" (6.1m)	25'2" (7.7m)
	≤ 65' (19.8m)	20'11" (6.4m)	25'11" (7.9m)



LANYARD WITH 8' FREE FALL		NUMBER OF USERS ≤ 310 lbs. (140 kg)	
		1	2
SYSTEM SPAN	≤ 10' (3.0m)	16'4" (5.0m)	17'5" (5.3m)
	≤ 20' (6.1m)	17'9" (5.4m)	19'11" (6.1m)
	≤ 30' (9.1m)	19'2" (5.8m)	22'5" (6.8m)
	≤ 40' (12.2m)	20'7" (6.3m)	24'11" (7.6m)
	≤ 50' (15.2m)	21'10" (6.7m)	26'10" (8.2m)
	≤ 60' (18.3m)	23'1" (7.0m)	28'7" (8.7m)
	≤ 65' (19.8m)	23'10" (7.3m)	29'4" (8.9m)



LANYARD WITH 12' FREE FALL		NUMBER OF USERS ≤ 310 lbs. (140 kg)	
		1	2
SYSTEM SPAN	≤ 10' (3.0m)	20'2" (6.1m)	NOT PERMITTED
	≤ 20' (6.1m)	21'9" (6.6m)	
	≤ 30' (9.1m)	23'5" (7.1m)	
	≤ 40' (12.2m)	24'11" (7.6m)	
	≤ 50' (15.2m)	26'3" (8.0m)	
	≤ 60' (18.3m)	27'7" (8.4m)	
	≤ 65' (19.8m)	28'4" (8.6m)	

\*Note: SRLs can have two users with 6' free falls, but 12' free fall lanyards can only have one user.

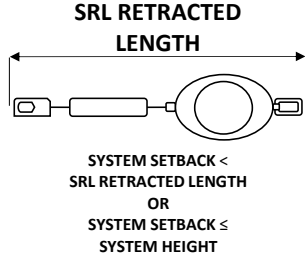
## FALL CLEARANCE FOR SRLs (SMALL SETBACK):

Fall Clearance for Small Setback situations is determined by HLL System Height, HLL System Span, and the number of users connected to the HLL System.

**SMALL SYSTEM SETBACK**

Conditions:

- The **SYSTEM SETBACK** is less than the **SRL RETRACTED LENGTH**.
- OR**
- The **SYSTEM SETBACK** is less than or equal to the **SYSTEM HEIGHT**.



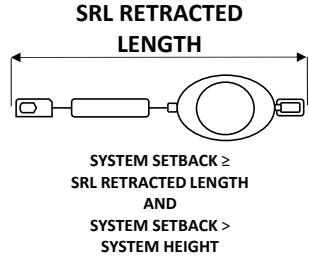
1 USER SRL ≤ 310 lbs. (140 kg)		SYSTEM HEIGHT			
		0'- <3' (0.0m- < 0.9m)	3'- <5' (0.0m- < 1.5m)	5'- <6.5' (1.5m- < 2.0m)	≥ 6.5' (≥ 2.0m)
SYSTEM SPAN	≤ 10' (3.0m)	16'6" (5.0m)	13'4" (4.1m)	10'5" (3.2m)	8'2" (2.5m)
	≤ 20' (6.1m)	17'7" (5.4m)	14'6" (4.1m)	11'7" (3.5m)	9'4" (2.8m)
	≤ 30' (9.1m)	18'9" (5.7m)	15'7" (4.7m)	12'8" (3.9m)	10'5" (3.2m)
	≤ 40' (12.2m)	19'11" (6.1m)	16'9" (5.1m)	13'10" (4.2m)	11'5" (3.5m)
	≤ 50' (15.2m)	21'1" (6.4m)	17'11" (5.5m)	14'11" (4.5m)	12'5" (3.8m)
	≤ 60' (18.3m)	22'3" (6.8m)	19'1" (5.8m)	16'0" (4.9m)	13'4" (4.1m)
	≤ 65' (19.8m)	24'0" (7.3m)	19'10" (6.0m)	16'9" (5.1m)	14'1" (4.3m)

2 USER SRL ≤ 310 lbs. (140 kg)		SYSTEM HEIGHT			
		0'- <3' (0.0m- < 0.9m)	3'- <5' (0.0m- < 1.5m)	5'- <6.5' (1.5m- < 2.0m)	≥ 6.5' (≥ 2.0m)
SYSTEM SPAN	≤ 10' (3.0m)	NOT PERMITTED	14'6" (4.4m)	11'7" (3.5m)	9'4" (2.8m)
	≤ 20' (6.1m)		16'9" (5.1m)	13'10" (4.2m)	11'2" (3.4m)
	≤ 30' (9.1m)		19'1" (5.8m)	15'10" (4.8m)	12'7" (3.8m)
	≤ 40' (12.2m)		21'5" (6.5m)	17'4" (5.3m)	14'2" (4.3m)
	≤ 50' (15.2m)		23'0" (7.0m)	18'9" (5.7m)	15'8" (4.8m)
	≤ 60' (18.3m)		24'6" (7.5m)	20'3" (6.2m)	17'2" (5.2m)
	≤ 65' (19.8m)		25'3" (7.7m)	21'0" (6.4m)	17'11" (5.5m)

**FALL CLEARANCE FOR SRLs (LARGE SETBACK):**

Fall Clearance for Large Setback situations is determined by HLL System Span and the number of users connected to the HLL System.

LARGE SYSTEM SETBACK
<p>Conditions:</p> <ul style="list-style-type: none"> <li>• The <b>SYSTEM SETBACK</b> is greater than or equal to the <b>SRL RETRACTED LENGTH</b>.</li> </ul> <p><b>AND</b></p> <ul style="list-style-type: none"> <li>• The <b>SYSTEM SETBACK</b> greater than the <b>SYSTEM HEIGHT</b>.</li> </ul>

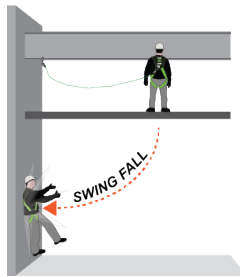


SYSTEM SPAN	MINIMUM SYSTEM SETBACK
≤ 10' (3.1m)	4'0" (1.2m)
≤ 20' (6.1m)	5'6" (1.7m)
≤ 30' (9.1m)	7'2" (2.2m)
≤ 40' (12.2m)	8'11" (2.7m)
≤ 50' (15.2m)	10'8" (3.3m)
≤ 60' (18.3m)	12'5" (3.8m)

SRL ≤ 310 lbs. (140 kg)		NUMBER OF USERS ≤ 310 lbs. (140 kg)	
		1	2
SYSTEM SPAN	≤ 10' (3.0m)	13'5" (4.1m)	13'10" (4.2m)
	≤ 20' (6.1m)	14'7" (4.4m)	15'3" (4.6m)
	≤ 30' (9.1m)	15'9" (4.8m)	16'9" (5.1m)
	≤ 40' (12.2m)	16'11" (5.2m)	18'2" (5.5m)
	≤ 50' (15.2m)	18'1" (5.5m)	20'1" (6.1m)
	≤ 60' (18.3m)	19'2" (5.8m)	22'1" (6.7m)
	≤ 65' (19.8m)	19'11" (6.1m)	22'10" (7.0m)

- **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.

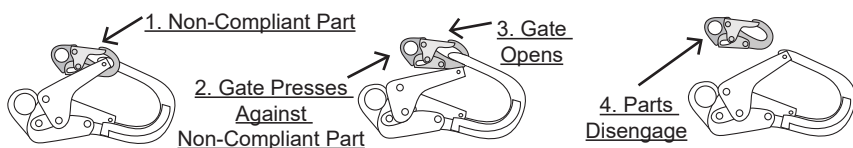
**FIGURE 2: SWING FALL**



## ► 10.0 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.
- Use only the applicable D-ring for intended use.
- 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.

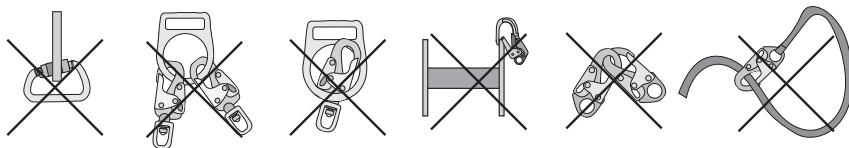
## ▶ 11.0 MAKING CONNECTIONS

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 Z359.1-2020 or ANSI Z359.12-2019 and is equipped with a 3,600 lb. (16 kN) gate.

## ► 12.0 INSTALLATION AND USE OF QUADRANT RETRACTABLE HORIZONTAL LIFELINE

Prior to the installation of the product, a Competent Person must calculate fall clearance and determine that the installation location is capable of supporting intended loads on the two anchorage points. Fully inspect the Quadrant prior to installation. Ensure the fall indicator is not activated (See Section 13). If the fall indicator pin is bent or damaged, the unit has been exposed to fall forces and should be immediately removed from service.

1. Simultaneously press the top button and the trigger beneath the top button to disengage the unit's internal teeth.
2. Connect the carabiner at the end of the product's lifeline to the first anchorage connector.
3. Keep the button and trigger depressed and pull the unit to the second anchorage point\* (Step 3, A). Connect the unit to the second anchorage point with the ANSI compliant carabiner (Step 3, B). The lifeline should be level across anchorage points. **\*Pull the release pin and the handle out to disengage handle. This will prevent the handle from spinning during installation. Reinsert the pin before Step 4.**



4. Crank the handle until there is no visible sag and proper tension is achieved. Then, continue to turn the handle clockwise until one "click" is heard.
5. Ensure the PFAS used is fully compatible. Connect the PFAS to the provided O-Rings on the HLL. There should only be 1 user connected to an O-Ring.



### HOW TO UNINSTALL THE QUADRANT:

Prior to uninstalling the product, the tension on the lifeline must be released. **Make sure all fall protection is uninstalled prior to releasing tension.**

1. Place hand on trigger and button. Turn the handle a quarter turn clockwise. Simultaneously press the top button and the trigger beneath the top button to disengage the unit's internal teeth. **Note:** Do not hammer or allow any impact to the top button of the unit.
2. Once the tension is released, the lifeline will go slack. At this time, disconnect the Quadrant from both anchor points.
3. Crank the handle to retract the lifeline back into the unit. This can be done manually, or with the included drill bit adapter and a power drill.



## HOW TO STOW THE HANDLE:

1. Grab the handle and pull outward to disengage.
2. Swing the handle inwards.
3. Place the handle in the nook of the Quadrant's housing.



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### ► 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 system from service if defects or damage are found, or if 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.

**Frequency:**

- A Competent Person, other than the user, must inspect the Quadrant Retractable HLL 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 21), 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**

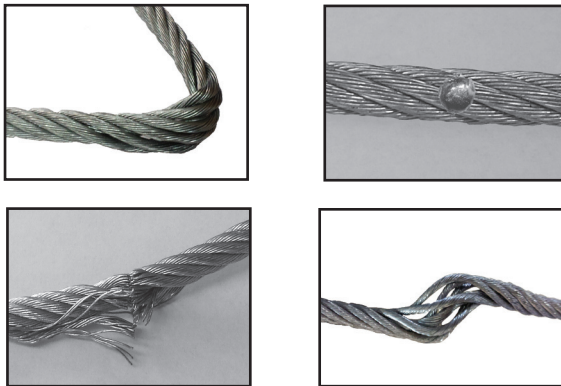
Type of Use	Application Examples	Conditions of Use	Inspection Frequency by Competent Person
Infrequent to Light	Rescue and Confined Space, Factory Maintenance	Good Storage Conditions, Indoor or Infrequent Outdoor Use, Room Temperature, Clean Environments	Annually
Moderate to Heavy	Transportation, Residential 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:**

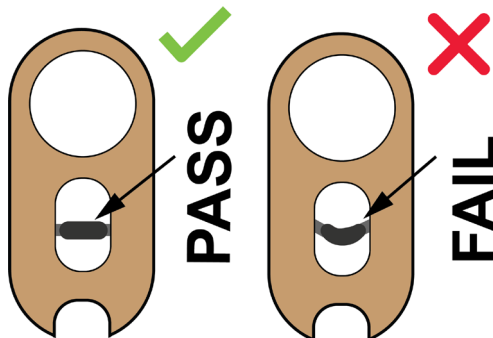
- Prior to each use, inspect the product for possible deficiencies including, but not limited to, missing parts, corrosion, deformation, pits, burrs, rough surfaces, sharp edges, cracking, rust, paint buildup, excessive heating, alteration, and missing or illegible labels. Inspect all components of the device including the housing, lifeline, hardware, handle, and O-Rings.
- Prior to each use, the user must inspect and verify that each individual component (Image 2) of the product is safe for use:
  1. Inspect the housing for wear.

2. Ensure the hardware is present.
3. The handle must move freely and must not interfere with any other component.
4. With the handle pulled out from the unit in the Self-Retracting Device mode:
  - a. Pull the lifeline sharply to test its locking function.
  - b. The lifeline should lock, and subsequently retract, smoothly and completely back into the unit without hesitation or stoppage.
  - c. Inspect the entire length of lifeline for any damage including, but not limited to, fraying, crushing, bird caging, chemical exposure, heat/welding spatter, and kinking. The user should always wear gloves when inspecting the lifeline to prevent injury in the event of cable damage (Image 1).
5. Inspect the unit's fall indicator (Figure 5). If the fall indicator pin is bent or damaged, the unit has been exposed to fall forces and should be immediately removed from service.

**IMAGE 1: CABLE DAMAGE EXAMPLES**



**FIGURE 5: FALL INDICATOR INSPECTION**



**IMAGE 2: COMPONENT INSPECTION**



<b>Crank Handle</b>	1
<b>Top Button/Trigger Below</b>	2
<b>O-Rings</b>	3
<b>Carabiners</b>	4
<b>Cable</b>	5
<b>Housing</b>	6
<b>Drill Bit Adapter</b>	7
<b>Load Indicator</b>	8

## ► 14.0 MAINTENANCE

### Repairs:

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

### Cleaning:

The product 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 system if wet or damp. Allow equipment to fully dry before being stored.

### Storage:

Prior to installation, store the anchor 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 anchor is determined by work conditions, care, and inspection provided. So long as the system and all components pass inspection, it may remain in service.

**Disposal:**

Dispose of the product if inspection reveals an unsafe or defective condition. If damaged and unserviceable, the system should be destroyed and the lifeline cut so as not to allow accidental re-use.

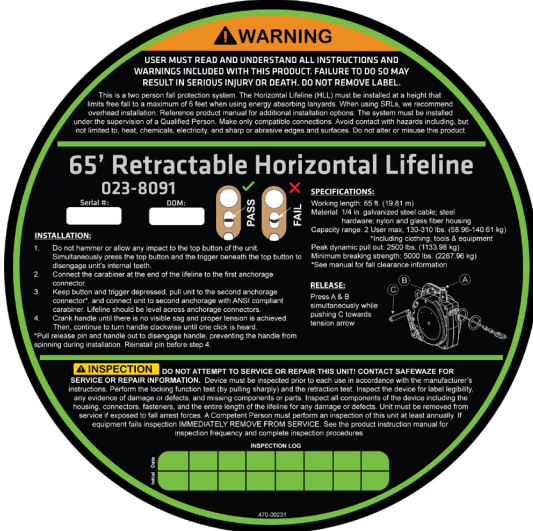
► **15.0 LABELS**



180mmØ





































39.42mmØ



180mmØ



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







***SAFEWAZE***

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