



SAFEWAZE

3-Way System Manual for Confined Space Operations



ANSI	Z359.14-2021, Z359.4-2013
OSHA	1926.502, 1910.66, 1910.140

019-11005	65' 3-Way System with Universal Mount
019-11006	65' 3-Way System with Quick Connect Mount
019-11015	120' 3-Way System with Universal Mount
019-11016	120' 3-Way System with Quick Connect Mount

**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 3-Way System and all equipment used in conjunction with the 3-Way System.
- 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 3-Way System 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 using the 3-Way System 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.

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► 1.0 INTRODUCTION

Thank you for purchasing the Safewaze 3-Way System for Confined Space and Rescue Operations. 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 3-Way System is designed for workers entering, exiting, and working in confined space environments. OSHA defines a confined space as any space that has limited openings for entry and exit, that is large enough for a worker to enter bodily and perform work, and that is not designed for continuous worker occupancy (utility manholes, silos, underground utility vaults, storage containers, pits, pipelines, etc.).

The device serves as the support element for the user, provides fall protection, and facilitates rescue or evacuation if necessary.

The device is equipped with a mounting bracket for easy installation and use. 019-11005 and 019-11015 both require the Universal Mounting Bracket (sold separately as 019-11010). 019-11006 and 019-11016 are equipped with a Quick Mount Bracket that does not require the Universal Mounting Bracket for installation.

► 2.0 INTENDED USE

The equipment covered in this manual is intended for use as part of a complete Personal Fall Protection, Rescue, and Material Handling System. Any system used for Material Handling can no longer be used as a 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.

► 3.0 APPLICABLE SAFETY STANDARDS

When used according to instructions, this product meets **ANSI Z359.14-2021, Z359.4-2013** standards 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/ASSP Z359.7**. The testing does not extend to the substrate to which the system is attached.

The 3-Way System is a Class 1 SRL. ANSI requires SRLs be classified according to their intended use and are tested either as Class 1 or Class 2 units. Dynamic performance testing begins by installing the SRL in a controlled test environment. With the SRL attached to a suitable anchorage, the lifeline constituent is attached to a test weight. The weight is then dropped to simulate a fall arrest event.

Note: The SRL must be tested in all installation configurations allowed per its user instructions. Test results are recorded.

Parameters recorded are the Arrest Distance (AD), Average Arrest Force (AAF), and Maximum Arrest Force (MAF).

The Arrest Distance is the total vertical distance required to completely arrest a fall. AD includes the deceleration distance and the activation distance. The Average Arrest Force is the average of the forces applied to the body and the anchorage by the fall protection system. The Maximum Arrest Force is the maximum amount of force that may be applied to the body and the anchorage by the fall protection system.

These tests are conducted in ambient conditions. The units must also be tested in extreme atmospheric conditions. There are three conditions: Cold, Hot, and Wet (units are saturated in water and tested). Separate units may be used for each test. All test results are recorded. This test data is then used to establish the fall clearance guidelines published in this instruction manual.

Class 1 and 2:

- **Class 1:** Self-retracting devices which shall be used only on overhead anchorages and shall be subjected to a maximum free fall of 2 feet (0.6 m) or less, in practical application.
- **Class 2:** Self-retracting devices which are intended for applications wherein overhead anchorages may not be available or feasible and which may, in practical application, be subjected to a free fall of no more than 6 feet (1.8 m) over an edge.

When the SRL is anchored overhead of the user, ANSI Z359.14-2021 specifies that both Class 1 and Class 2 SRLs shall have an AD of less than 42 in. (1.1 m). AAF must not exceed 1,350 lbs. (612.35 kg). Conditioned testing of the units allows a slightly higher AAF of 1,575 lbs. (714.41 kg), but MAF must always remain below 1,800 lbs. (816.47 kg).

When dynamically tested in accordance with requirements of ANSI Z359.14-2021, Class 1 and Class 2 Self-Retracting Devices must have an AAF of 1,350 lbs. (612.35 kg) or less, and an AD of less than 42 in. (1.1 m).

See Section 8 of this manual for how to calculate your Minimum Required Fall Clearance (MRFC).

Classification information found on product labels is based on test results.

Note: Arrest Distance is one of several parts of the MRFC. OSHA requires an SRL limit the free fall to 2 feet (0.6 m) or less. If the maximum free fall distance must be exceeded, the employer must document, based on test data, that the maximum arresting force will not be exceeded, and the personal fall arrest system will function properly.

► 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) and OSHA up to 420 lbs. (191 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, 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 SRL 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 SRL to engage and lock in the event of a fall.
- **Free Fall:** Safewaze SRLs, when used correctly with the unit anchored directly overhead and no slack in the lifeline, will limit the free fall distance to 0 ft. (0 m).
- **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 Free Fall (FF), Deceleration Distance (DD), and a Safety Factor (SF). Safety Factor calculations may differ by manufacturer, but for the purposes of this manual, the Safety Factor is calculated at 2 ft. The Safety Factor includes D-ring shift and Harness Stretch.

An additional 3 ft. (1 m) of 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.
- **Sharp Edges:** Safewaze **Class 1 SRLs** are NOT designed for use in Leading Edge Environments. Should a specific work area have an extremely sharp edge/edges that may come into contact with the lifeline constituent of the SRL, a Class 2 SRL is required.
- Use only the applicable D-ring for intended use.

▶ 7.0 PRODUCT SPECIFICATIONS

- This system is a Class 1 SRL.
- 6:1 Gear Ratio.
- Fall Arrest Connector: Load Indicating Swivel Snap Hook.

- Minimum Breaking Strength (MBS): 3,600 lbs.
- Working Temperature Range: -40°F (-40°C) to 130°F (54°C)
- Lifting Force: 30 lbs. (13.6 kg)
- Average Arrest Force: 1,350 lbs. (612 kg)
- Maximum Arrest Force: 1,800 lbs. (817 kg)
- Actual Arrest Distance: ≤ 28 in. (71 cm)
- Maximum Arrest Distance: 42 in. (107 cm)
- Maximum Free Fall Distance: 24 in. (61 cm)

TABLE 1: MATERIALS	
Housing	Aluminum
Crank Handle	Steel with Plastic Grip
Mounting Bracket	Zinc Plated Steel
Cable	3/16 in. Galvanized Steel
Load Indicating Swivel Snap Hook	YCM Steel

▶ 8.0 FALL CLEARANCE

- **Actual Arrest Distance (AD):** Safewaze SRLs are tested in accordance with ANSI Z359.14-2021 conditioning test protocols. Table 2 reflects the Actual Arrest Distances of the 3-Way System when subjected to Ambient, Wet, Hot, and Cold testing. These Actual Arrest Distances are typically lower than the 42" maximum as specified per ANSI. In certain instances this may allow for a Qualified Person to adjust Minimum Required Fall Clearances.

TABLE 2: ANSI ABOVE D-RING ACTUAL ARREST DISTANCES				
Description	Ambient*	Wet	Hot	Cold
65' 3-Way System (019-11005/ 019-11006)	25" (63.5 cm)	28" (71.1 cm)	24" (61 cm)	24" (61 cm)
120' 3-Way System (019-11015/ 019-11016)	25" (63.5 cm)	28" (71.1 cm)	24" (61 cm)	24" (61 cm)

*ANSI Z359.6-2016 defines the ambient temperature range as 35°F (2°C) to 100°F (38°C).

- **Minimum Required Fall Clearance (MRFC):** The Minimum Required Fall Clearance distances indicated in Table 3 are based upon Ambient, Wet, Hot, and Cold testing results for each 3-Way System. Fall Clearances indicated are calculated using the greatest Actual Arrest Distance out of the four tests performed on each model.

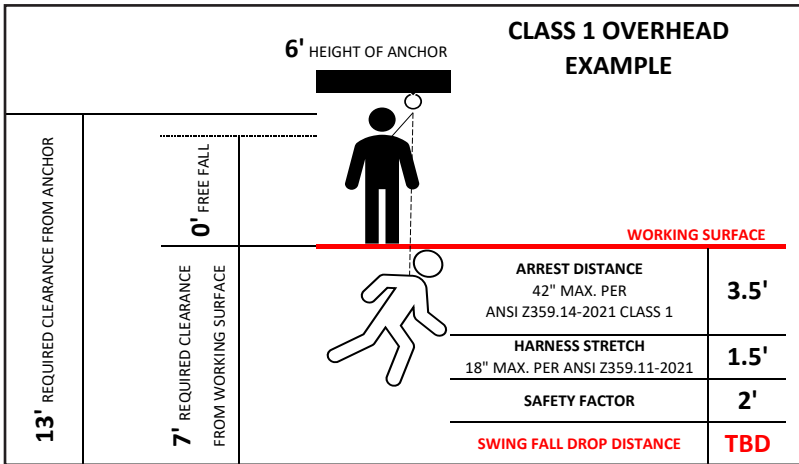
Note: A Qualified Person must determine if MRFCs can be adjusted based upon actual jobsite atmospheric conditions or additional factors.

TABLE 3: ANSI ABOVE D-RING MINIMUM REQUIRED FALL CLEARANCE	
Description	MRFC
65' 3-Way System (019-11005/ 019-11006)	5' 10" (1.8 m)
120' 3-Way System (019-11015/ 019-11016)	5' 10" (1.8 m)

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.

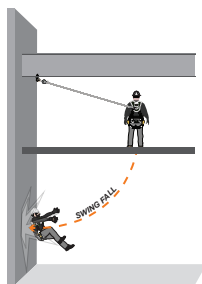
- Fall Clearance:** There must be sufficient clearance below the anchorage connector to arrest a fall before the user strikes the ground or an obstruction. When calculating fall clearance, account for a MINIMUM 2' safety factor, deceleration distance, user height, length of lanyard/SRL, and all other applicable factors (Figure 1).

FIGURE 1: EXAMPLE MRFC CALCULATION (CLASS 1 SRL)



- 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.

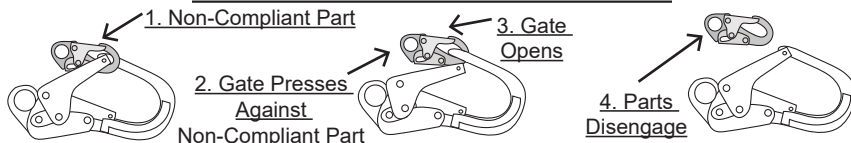
FIGURE 2: SWING FALL



► 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.

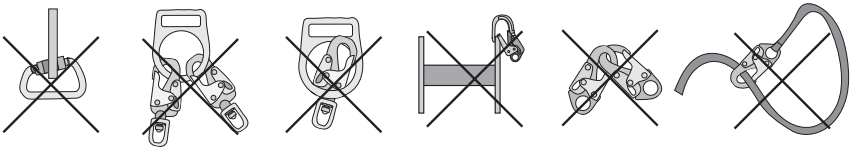
► 10.0 MAKING CONNECTIONS

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 3-WAY SYSTEM WITH UNIVERSAL BRACKET

Prior to installation, ensure the Universal Mounting Bracket is properly installed on the tripod.

Note: The Universal Mounting Bracket (019-11010) is required for installation and not included with this device.

The UMB can be adjusted in height and orientation by loosening the lock nuts on the back of the fixture plate and sliding the plate up or down, or rotating to the inside or outside, of the tripod leg. Choose the preferred location of the device on the tripod leg and adjust the UMB as needed. When in the selected location on the tripod leg, re-tighten the lock nuts to 15 ft-lb. Do not over tighten.

Step 1: Install the 3-Way System onto the tripod by placing the 3-Way System onto the preinstalled tripod's Universal Mounting Bracket (UMB). Seat the hook of the 3-Way Bracket Plate onto the crossbar of the UMB (Images 1 & 2).

IMAGE 1:

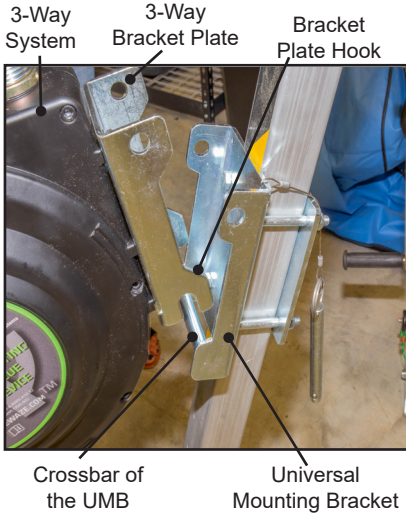


IMAGE 2:

Hook of the 3-Way Bracket Plate Seated onto the Crossbar of the UMB.



Step 2: Rotate the 3-Way System forward to allow for the installation of the detent pin into the predrilled holes in the 3-Way Bracket Plate and the Universal Mounting Bracket (Images 3 & 4). Refer to tripod manual for installation of lifeline.

IMAGE 3:



IMAGE 4:



► 12.0 INSTALLATION OF 3-WAY SYSTEM WITH QUICK CONNECT MOUNT

Step 1: When installing the 3-Way System with the Quick Connect Mount, align the 3-Way System with one of the tripod legs. The cable and snap hook should be facing towards the top of the tripod (Image 5). With the Quick Connect Mount open, place the 3-Way System onto the chosen tripod leg. The tripod leg should be seated in the channel of the Quick Connect Mount (Image 6).

IMAGE 5:

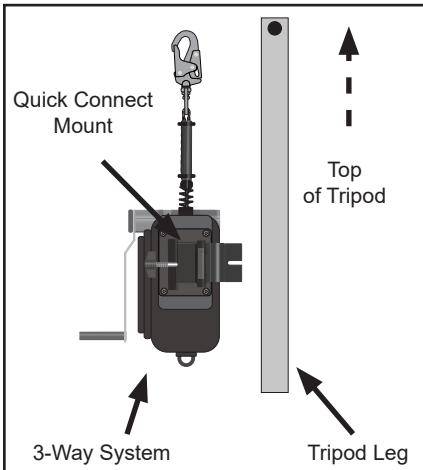
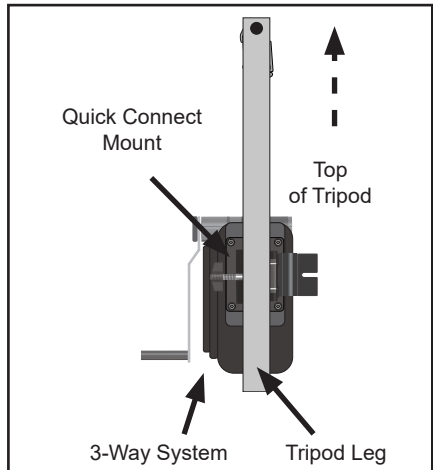


IMAGE 6:



Step 2: Swing the Quick Connect Mount hinged gate shut to enclose the tripod leg within the mount. Slide the tensioning bolt into the precut slot in the hinged gate and tighten the mount to the tripod using the composite wing nut. Tighten as tight as possible by hand. Do not use a tool to tighten further (Image 7). Image 8 represents the 3-Way System fully installed onto the tripod leg. Refer to tripod manual for installation of lifeline.

IMAGE 7:

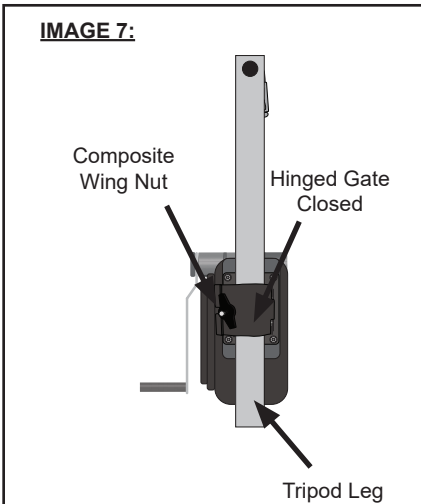
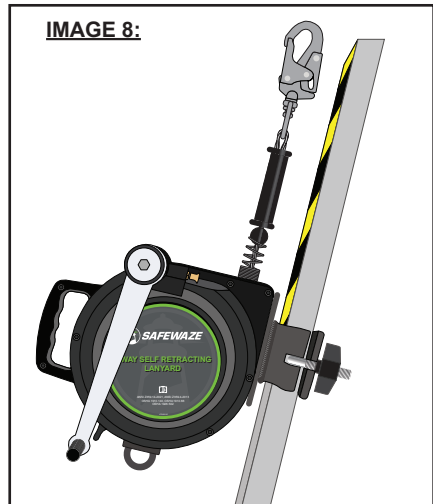


IMAGE 8:



► 13.0 DEVICE INSTALLATION CONFIGURATIONS

The bracket and device can also be moved from one tripod leg to another if necessary and **may be oriented on the inside or outside of the tripod leg**, based on jobsite parameters or user preference.

Additional components may be required to mount the device to the tripod.

Device Installation
(Outside of Tripod Leg)



Device Installation
(Inside of Tripod Leg)



► 14.0 OPERATION OF 3-WAY SYSTEM (019-11005, 019-11015, 019-11006, 019-11016)

The 3-Way System is a PFAS Self-Retracting Lifeline that can be used in a confined space environment or similar working situation. Additionally, the 3-Way System allows for a person of up to 420 lbs. (191 kg) to be raised and lowered in rescue scenarios. However, the system should not be used as a personnel winch.

When utilized as an SRL, the snap hook must be attached to the Dorsal D-ring of a full body harness (FBH). When utilized for recovery operations, the snap hook can be attached to either the Dorsal D-ring or the Front/Sternal D-ring of a FBH, if so equipped.

The device has a collapsible handle for storage convenience. To operate the Safewaze 3-Way System, the crank handle grip should be extended. Grasp the crank handle and crank handle grip simultaneously. Pull the crank handle grip outward from the handle and rotate the handle grip until it extends outward and away from the 3-Way Housing (Images 9-11).

IMAGE 9:



Pull Outwards on the Crank
Handle Grip.

IMAGE 10:



Rotate the Crank Handle Grip.

IMAGE 11:



The Crank Handle Grip in the Extended Configuration.

The crank handle assembly of the unit determines which function is to be employed by either pulling the handle outward from the body of the unit or pushing it into the body. The crank handle assembly position is changed by pulling out on the function switch button and either pushing inwards or pulling outwards on the crank handle assembly.

SRL Mode: Pull the function switch out and then pull the crank handle base outward from the 3-Way Housing to extend the cable from the unit (Images 12 & 13). This places the 3-Way System into its Self-Retracting Lanyard (SRL) configuration.

IMAGE 12:



IMAGE 13:



Rescue/Recovery Mode: Pull the function switch out and push the base of the crank handle assembly inward in order to place the unit into Rescue/Recovery mode (Images 14 & 15).

By turning the crank handle clockwise, the cable is lowered. Turning the crank handle counterclockwise will raise the individual up.

IMAGE 14:



IMAGE 15:



⚠ Important: Prior to operation, ensure the device is secured on the tripod leg and the lifeline is installed properly per the tripod manual.

▶ 15.0 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, if visual fall indicator is deployed, 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 3-Way System 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 22), 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 4 for more information regarding inspection frequency requirements.

TABLE 4: 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 3-Way System 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 applicable brackets, housing, connectors, fasteners, and entire length of lifeline.
- Prior to each use, the user must inspect and verify that **each individual component** (Image 17) of the 3-Way System is safe for use:
 1. The crank handle must move freely and must not interfere with any other component.
 2. With the crank handle pushed into the unit in recovery mode, the cable from the unit should pay out and retract smoothly when rotating the handle in the corresponding clockwise or counterclockwise direction.
 3. With the crank 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 16).

IMAGE 16: CABLE DAMAGE EXAMPLES

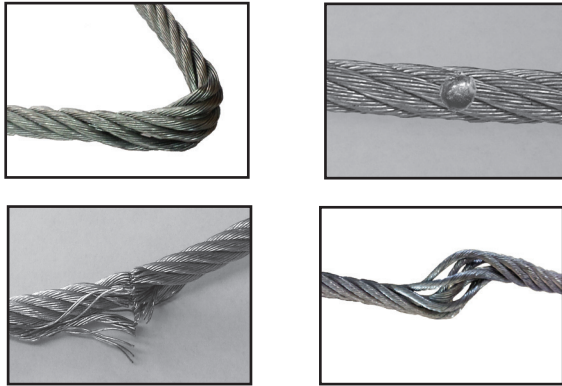
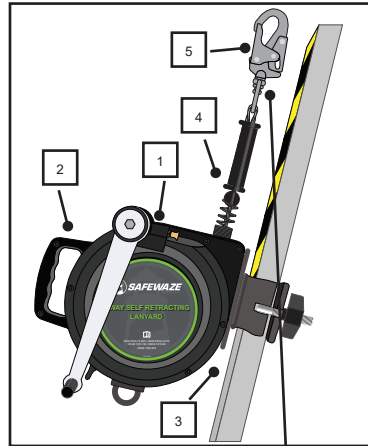


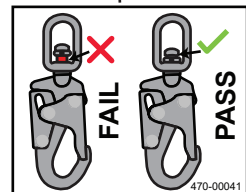
IMAGE 17: COMPONENT INSPECTION

019-11005/019-11015
65'/120' 3-Way System with
Universal Mount

019-11006/019-11016
65'/120' 3-Way System with Quick
Connect Mount



1	Housing
2	Carrying Handle
3	Mounting Bracket
4	Cable
5	Load Indicating Swivel Snap Hook



▶ 16.0 MAINTENANCE

Repairs:

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

Cleaning:

The 3-Way System 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 3-Way System 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 3-Way System 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 3-Way System 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.

▶ 17.0 LABELS

Ø 138mm



Ø 152.5mm

▲ WARNING

USER MUST READ AND UNDERSTAND ALL INSTRUCTIONS AND WARNINGS INCLUDED WITH THIS EQUIPMENT. DO NOT REMOVE LABEL.

This is a single user fall arrester device. Device must be inspected prior to each use. Connection of this device to a full body harness is to be made to the dorsal D-ring only. User must ensure that any connection to anchorage is properly secured prior to use. Make only compatible connections. Dual connections shall only be used for 100% tie-off transitions. Refer to instruction manual for minimum anchorage strength requirements. Not approved for leading edge applications, anchor all or above D-ring only. Fall clearances must be calculated by a competent person prior to use. Avoid swing fall hazards by working directly under anchorage. Avoid contact with sharp surfaces or abrasive edges. Avoid chemical, thermal and/or electrical hazards. This product is not suitable for use horizontally and with horizontal lifelines. Fall clearance calculation for this device is based upon unit installed in an overhead vertical position in-line with the user. Adhere to the hierarchy of controls in Z359.2.

<p>Class</p> <p style="font-size: 2em; font-weight: bold;">1</p> <p>Anchor at or above dorsal D-ring</p>	<p>▲ INSPECTION DO NOT ATTEMPT TO SERVICE OR REPAIR THIS UNIT! CONTACT SAFEWAZE FOR SERVICE OR REPAIR INFORMATION. Device must be inspected prior to each use in accordance with the manufacturer's instructions. Perform the locking function test (by pulling sharply) and the retraction test. Inspect the device for label legibility, any evidence of damage or defects, and missing components or parts. Inspect all components of device including the housing, connectors, fasteners, and the entire length of the lifeline for any damage or defects. Refer to instruction manual for inspection frequency. Unit must be removed from service if exposed to fall arrest forces. If visual fall indicator is deployed, immediately remove unit from service.</p>
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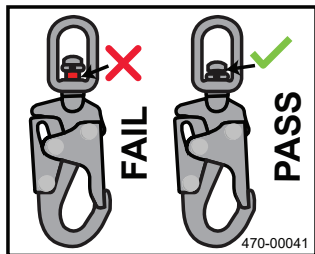
SPECIFICATIONS:
 MATERIAL: 3/16 in. galvanized steel cable; steel hardware; aluminum housing
 Capacity (range):
 ANSI: 130-310 lbs. (59-141 kg)
 OSHA, up to 420 lbs. (191 kg)
 *Including clothing, tools & equipment
 Lifting Force: 30 lbs. (13.6 kg)
 Average arrest force: 1,350 lbs. (612.4 kg)
 Max arrest force: 1,800 lbs. (816.5 kg)
 Actual arrest distance: ≤ 28 in. (71.1 cm)
 Max arrest distance: 42 in. (106.9 cm)
 Max free fall distance: 24 in. (61.0 cm)
 Minimum required fall clearance: ≤ 10' (1.8 m)
 *For fall clearance requirements see user manual

<p>● 65 ft. (19.8 m)</p> <p>● 120 ft. (36.6m)</p>	<p>● OTHER</p> <div style="border: 1px solid black; width: 80px; height: 20px; margin: 0 auto;"></div>
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






























INSPECTION LOG	
Initial	Date

Part #:	019-11005
Description:	OS 3-Way System, Universal Mount
Serial #:	XXXXXXX
Date of MFG:	MM/YYYY

470-00146





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



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