



SAFEWAZE

42" Beam Stanchion For Horizontal Lifelines



Meets OSHA 1926.502 and 1910.140 Requirements

This manual is intended to meet the Manufacturer's Instructions as required by the American National Standards Institute (ANSI) Z359 and should be used as part of an employee training program as required by the Occupational Safety and Health Act (OSHA).

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These instructions must be provided to any person utilizing this equipment. The worker must read and understand the manufacturer's instructions for this, and all other components of the complete Fall Protection System. These instructions must be followed for the proper use, maintenance, and inspection of this equipment. These instructions must be kept and made available to worker's at all times. Any alteration, misuse, or use of this equipment outside the scope of the manufacturer's instructions, may result in serious injury or death.

This product is part of a complete fall protection system. This Stanchion product can be used in conjunction with any SafeWaze HLL's offered, or other HLL systems so long as that system's anchor requirements are below 4,000 lbs in order to meet the 2 to 1 safety factor on this 8,000 lbs. anchor point. User's must utilize, and connect to a SafeWaze HLL system with ANSI Z359 compliant restraint or Personal Fall Arrest Systems (PFAS). This product is not designed, nor should be used as a component for a Positioning, Suspension, or Rescue System. A PFAS is typically composed of a Full Body Harness, Anchorage, and a Connecting Device. Connecting Devices used with SafeWaze HLL's are Energy Absorbing Lanyards (EAL's) or a Self Retracting Device (SRD). The connection point to the FBH for use of a SafeWaze HLL is the Dorsal D-ring.

A comprehensive Fall Protection Plan must be kept on file and available to all employees at all times. The employer and user's of this equipment must be properly trained in the installation, use, inspection, and maintenance of this equipment.

Consult your doctor if there is reason to doubt your fitness to safely absorb the shock from a fall arrest. Age and fitness seriously affect a worker's ability to withstand falls. Pregnant women or minors must not use this equipment. Failure to heed this warning may result in serious injury or death.

The maximum weight capacity of this equipment is 310 lbs. (including tools and equipment) as specified by ANSI. Certain SafeWaze products mentioned in this manual may have maximum weight capacities in excess of 310 lbs. Although certain components of the overall Personal Fall Arrest System may have weight weight capacities in excess of 310 lbs., use of the SafeWaze Stanchion in a Horizontal Lifeline System limits the weight of each user to 310 lbs.

User's of this equipment must read and understand this manual in it's entirety prior to use.

Contact SafeWaze if you have questions, regarding compatibility of this equipment, that are not covered in this manual. Do not alter or misuse this equipment. Some subsystem components could affect the performance and the operation of this equipment. Do not anchor this product to moving machinery, or hazards that have chemical, electrical or gaseous characteristics. Failure to comply with this warning could result in serious injury or death.

Introduction & Scope of Use

Thank you for purchasing a SafeWaze Stanchion for Horizontal Lifelines (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.

This manual and any other instructional material must be available to the user of the equipment. The user must understand how to safely and effectively use the SafeWaze Stanchion, and all fall protection equipment used in conjunction with the stanchion.

The SafeWaze Stanchion has been designed for your safety. These stanchions, when used in conjunction with HLL systems are designed to offer users a flexible and easily removable anchor point.

Applicable Safety Standards and Regulations

ANSI STANDARDS

ANSI	Z359.0	Definitions and Nomenclature Used for Fall Protection and Fall Arrest
ANSI	Z359.1	Safety Requirements for Personal Fall Arrest Systems, Subsystems, and Components
ANSI	Z359.2	Minimum Requirements for a Comprehensive Managed Fall Protection Program
ANSI	A10-14	Safety Requirements for Safety Belts, Harnesses, Lanyards, and Lifelines for Construction and Demolition Use
ANSI	A10.32	Personal Fall Protection use in Construction and Demolition

OSHA REGULATIONS

OSHA	1910.66	Personal Fall Arrest Systems
OSHA	1926.502	Fall Protection Systems Criteria and Practices

Worker Classifications



Understand the definitions of those who work in proximity of or may be exposed to fall hazards.

Qualified Person: A person with an accredited degree or certification, and with extensive experience or sufficient professional standing, who is considered proficient in planning and reviewing the conformity of fall protection and rescue systems.

Competent Person: A highly trained and experienced person who is **assigned by the employer** to be responsible for all elements of a fall safety program, including, but not limited to, its regulation, management, and application. A person who is proficient in identifying existing and predictable hazards, and who has the authority to stop work in order to eliminate hazards.

Authorized Person: A person who is assigned by their employer to work around or be subject to potential or existing fall hazards.

It is the responsibility of a Qualified or Competent person to supervise the job site and ensure safety regulations are complied with.

Product Specific Applications

Personal Fall Arrest: SafeWaze Stanchions, when installed as part of a HLL System, can be used as part of a complete Personal Fall Arrest System (PFAS). The maximum number of users is dictated by the SafeWaze HLL system being utilized with the stanchions. The structure utilized for attachment must be capable of withstanding a load of 5,000 lbs in all directions permitted by the system. The maximum allowable free fall is 6 ft, with the maximum combined length of the fall arrester, lanyard extension, and D-ring being 36 inches.

Limitations

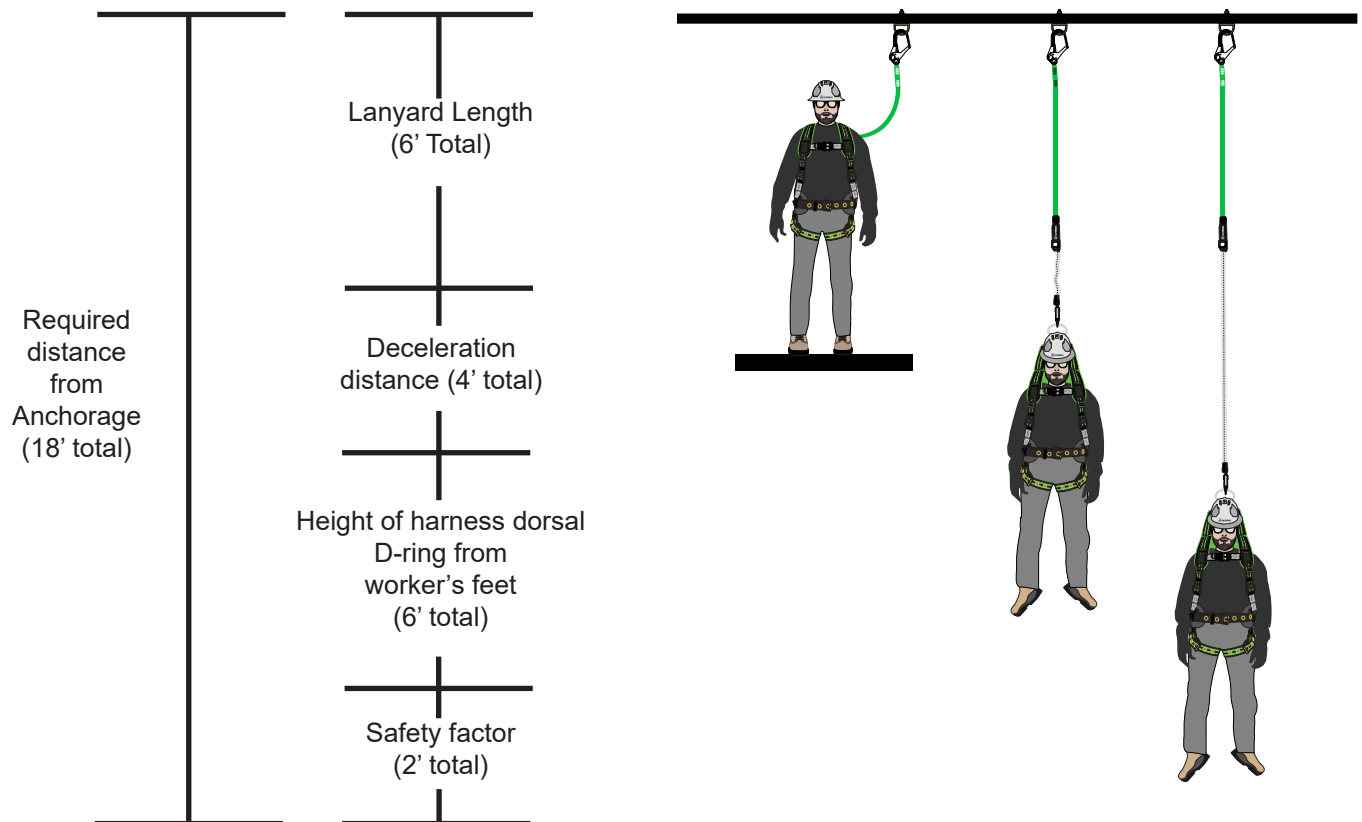
Fall Clearance: There must be sufficient clearance below the anchorage connector to arrest a fall before the user strikes the ground or an obstruction. When calculating fall clearance, account for a MINIMUM 2' safety factor, deceleration distance, user height, length of lanyard/SRL, and all other applicable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

Fig. 1

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

Fall Clearance Diagram

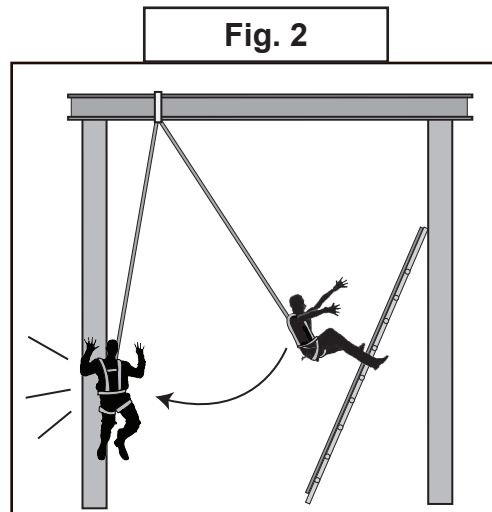
***Diagram shown is an example fall clearance calculation ONLY.



****USER SHOULD REFER TO HLL INSTRUCTIONS FOR PROPER CLEAR FALL SPECIFICS****

Connections

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 in line with the anchor point as possible. Swing falls significantly increase the likelihood of serious injury or death in the even of a fall. (See Figure 2)



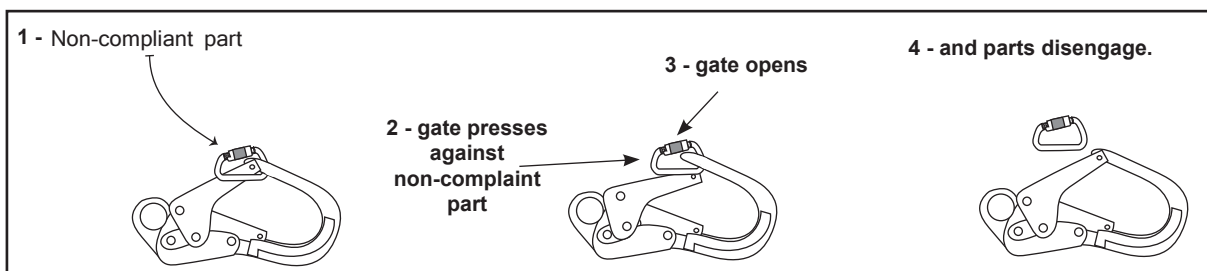
COMPATIBILITY OF CONNECTIONS

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. (22.2 kN). Connectors must be compatible with the anchorage or other system components (see Figure 4). Do not use equipment that is not compatible. Non-compatible connectors may unintentionally disengage (see Figure 3). Connectors must be compatible in size, shape, and strength. Self-locking snap hooks and carabiners are required by ANSI Z359 and OSHA guidelines. Contact SafeWaze if you have any questions about compatibility.



NOTE: SOME SPECIALITY CONNECTORS HAVE ADDITIONAL REQUIREMENTS. CONTACT SafeWaze WITH QUESTIONS.

Fig. 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.

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 (snap hooks and carabiners) are designed to be used only as specified in each product's user's instructions. See Fig. 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).

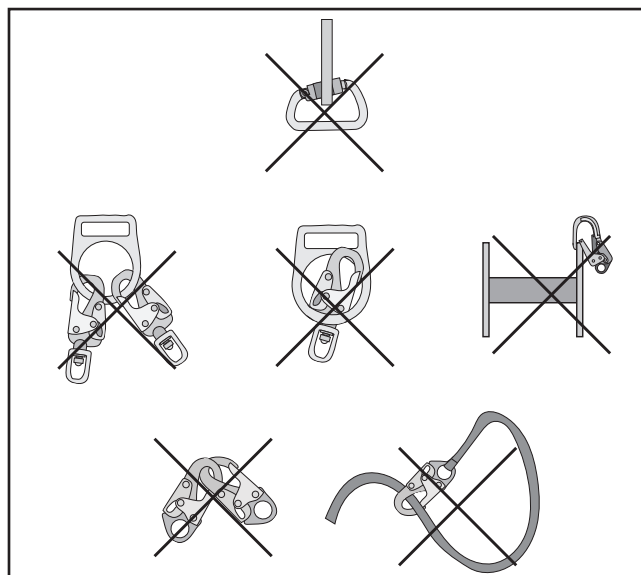


NOTE: Large throat snap hooks must not be connected to standard size D-rings or similar objects which will result in a load on the gate if the hook or D-ring twists or rotates, unless the snap hook complies with ANSI Z359.12 and is equipped with a 3,600 lb (16 kN) gate. Check the marking on your snap hook to verify that it is appropriate for your application.

- 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.

Specifications

Fig. 4 - INAPPROPRIATE CONNECTIONS



Care should be taken to avoid moving machinery, and chemical or electrical hazards during installation of the stanchion. Contact with such hazards may cause serious injury or death.

Weight capacities defined in this manual for the stanchion and HLL systems must be adhered to in order to avoid possible failure of the system.

The stanchion and any other associated PFAS subsystems must be removed from service if exposed to Fall Arrest Forces.

Contact SafeWaze if using this equipment in a manner, or in combination with other equipment, not specifically defined in this manual.

Avoid sharp or abrasive surfaces.

Electrical hazards must be avoided. Potential Arc Flash from arc welding operations, as well as accidental Arc Flash from electrical equipment, can damage equipment and cause serious injury or death.

Never use combinations of components or subsystems that may affect, or interfere with the safe function of each other.

The SafeWaze Stanchion, Horizontal Lifeline system, and its subsystems, must be inspected prior to each use for:

- Wear, damage, and other deterioration.
- All snaphooks and carabiners must be able to self-close and lock.
- Check the operation of self retracting lanyards by pulling smoothly on the lifeline, then pull sharply on the lifeline to engage the locking mechanism.
- All rope / wire rope must be inspected for tears, cuts, fraying, abrasion, unsplicing, discoloration, corrosion, heat damage, bird caging, burrs, kinks, or other signs of wear and damage.
- Sewn terminations should be secure, complete, and not visibly damaged.
- All rope splices / cable connections should be secure.
- Systems used with the SafeWaze stanchion must be properly tensioned per system instructions.
- No load indicators shall be deployed.
- Damaged and other deteriorated and defective components must be immediately removed from service, in accordance with the requirements of OSHA 29 CFR 1910.66 and 1926.502.



WARNING: The SafeWaze Stanchion is NOT designed for use as a single point connection for an individual PFAS system. Never attach a PFAS system directly to the stanchion for individual use as this may cause improper loading of the stanchion, resulting in damage to, or failure of, the stanchion. The SafeWaze Stanchion for Temporary Lifelines is designed for use with all SafeWaze Horizontal Lifeline Systems unless an Intermediate Stanchion is required. If an Intermediate Stanchion is utilized, a cable HLL system must be installed.

Installation and Use

Before Each Use

Users of personal fall arrest systems must have a rescue plan in place, if the user cannot rescue themselves, as well as the means to carry out the rescue.

The user must read and understand these User Instructions, as well as the User Instructions for every component/subsystem of the personal fall arrest system.

The SafeWaze Stanchion is available with 2 different clamp sizes from 4" minimum to either 18" or 24" maximum. The stanchion secures to the top flange of an I-Beam. The stanchion will fit a maximum flange thickness of 2-1/4". Installation of two stanchions in line on an I-Beam provides an attachment / anchorage point for SafeWaze Horizontal Lifeline Systems. Some SafeWaze Horizontal Lifeline systems allow for intermediate stanchions to be installed along the Horizontal Lifeline span to provide stability and possible reduction of required fall clearances. In the event an intermediate post is required, an intermediate post pass through assembly (Part # 019-8039) is available, which does not require a user to disconnect from the system to pass by the intermediate stanchion.



WARNING: If utilizing an intermediate post with a Rope HLL, the user should pay special attention when inspecting the rope lifeline. Use of the intermediate stanchions with a Rope HLL system could enhance wear of the lifeline component. Additional inspection of the rope lifeline is required at intermediate post attachments.

All components of the stanchion must be inspected prior to installation and before each use. During pre-use inspection, all mounting bolts, and the wing-nut should be re-tightened to ensure proper installation of the stanchion. Additionally the stanchion must be inspected by a Competent Person on an annual basis. Recording of inspections can be completed on the inspection grid of the stanchion's label. Inspections can also be recorded in the Inspection Log on Page 17 of this manual.

SafeWaze horizontal lifeline stanchions are designed to be installed on horizontal steel beams that are straight with no bends. When installed, the stanchion provides a 42" connection height from the top surface of the beam.

When installing the SafeWaze stanchions with SafeWaze Horizontal Lifelines, the user must pay close attention to the instructions provided with each particular Horizontal Lifeline System. Each SafeWaze Horizontal Lifeline system has unique characteristics in regards to the maximum number of users, required fall clearances, and dynamic sag. Each SafeWaze HLL system must be installed per the manufacturer's instruction manual provided with the system.

If multiple user's are connected to the HLL system simultaneously (See specific HLL instructions for maximum number of user's allowed), the user's must be aware that in the event of a fall by one worker, the other individuals connected to the system could also be pulled off of the working surface as the lifeline deflects. It is recommended that each person has an independent HLL system, or that shorter span lengths are used to minimize the potential for other worker's falling.

Specific information such as fall clearances, maximum span length, maximum number of users, and other technical data is included in the individual HLL system instruction manuals. The maximum Horizontal Lifeline span length for use with the SafeWaze Stanchions is 60 ft. The span length can be increased with the use of intermediate stanchions to create multiple spans.

Unpackage the upright and base. Inspect both components to ensure no damage has occurred during shipment (See Fig.5). Unpackage the provided bolts and lock nuts to be used for assembly. Slide upright into base and align holes in each component. Insert stanchion bolts through the assembly (See Fig. 6). Thread a lock nut onto the end of each stanchion bolt and tighten to ensure secure fit.

Fig. 5

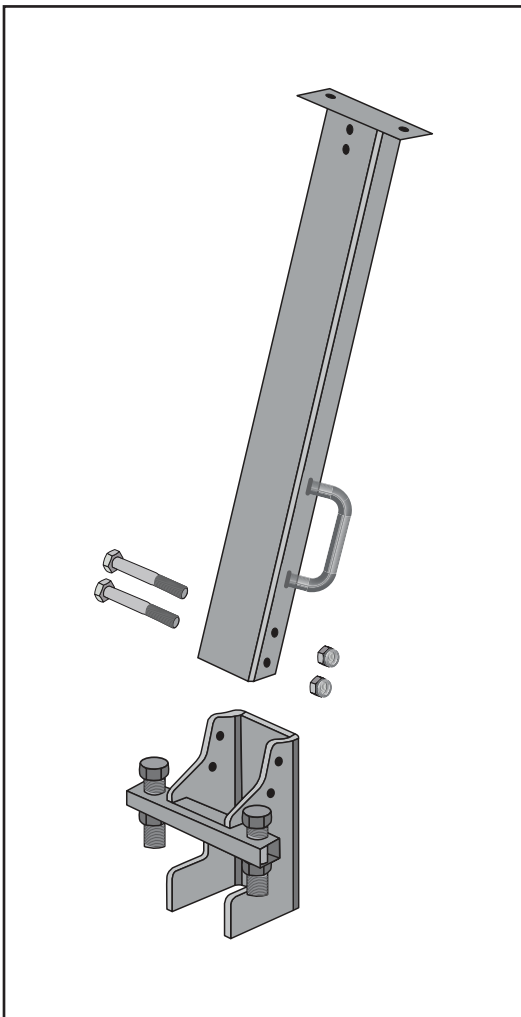
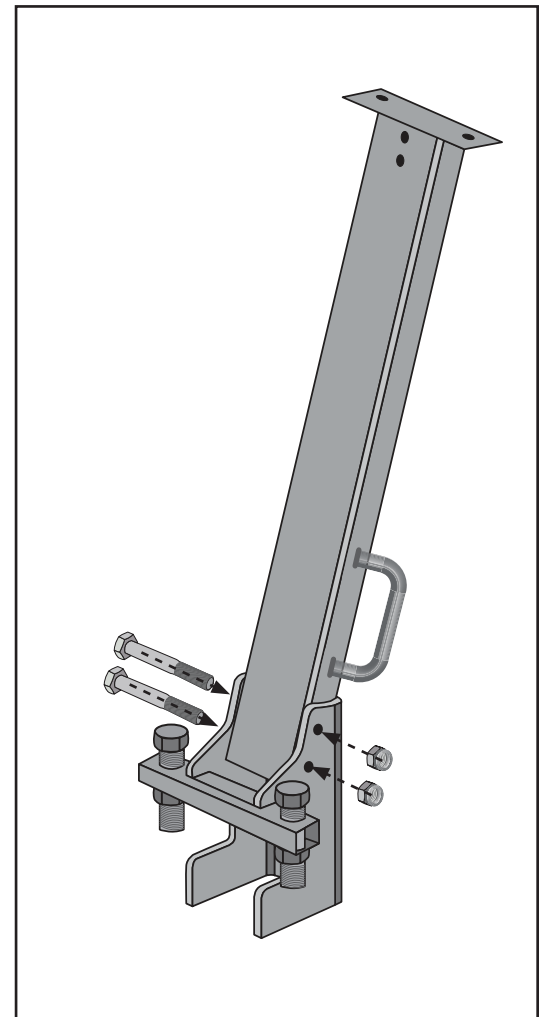
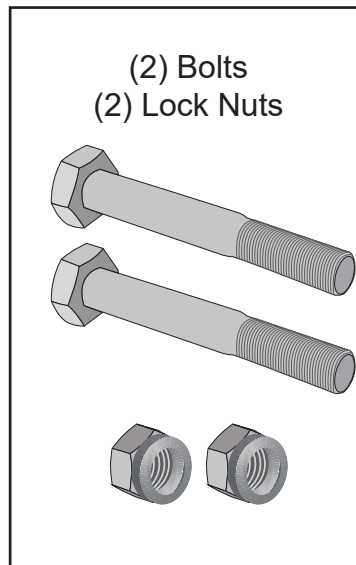
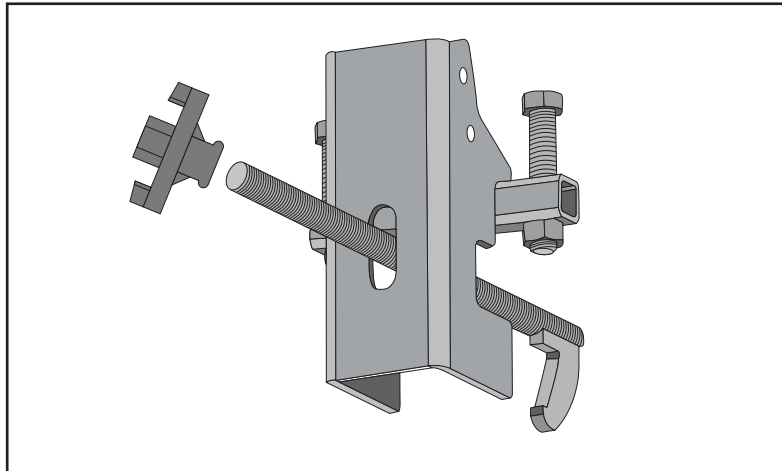


Fig. 6



Insert threaded end of clamp assembly through the pre cut slot in base. Loosely thread the wing nut onto the end of the clamp assembly (See Fig. 7).

Fig. 7



Place entire assembly on top surface of I-Beam at desired installation location. Capture top of I-Beam with the clamp assembly on one side, and the slotted portion of the base assembly on the other side. Tighten the clamp assembly to the top of the I-Beam by rotating the wing nut in a clockwise direction until secure (See Fig 8-A). When hand tight, strike the wing nut with a hammer or further tighten with an adjustable wrench to ensure stanchion is secured to I-Beam. Tighten the mounting bolts down onto top of I-Beam to secure the stanchion into place (See Fig 8-B). Install Cotter Pin through end of Beam Clamp. Installed assembly should appear as indicated in Fig. 9 (See Page 12).

Fig. 8

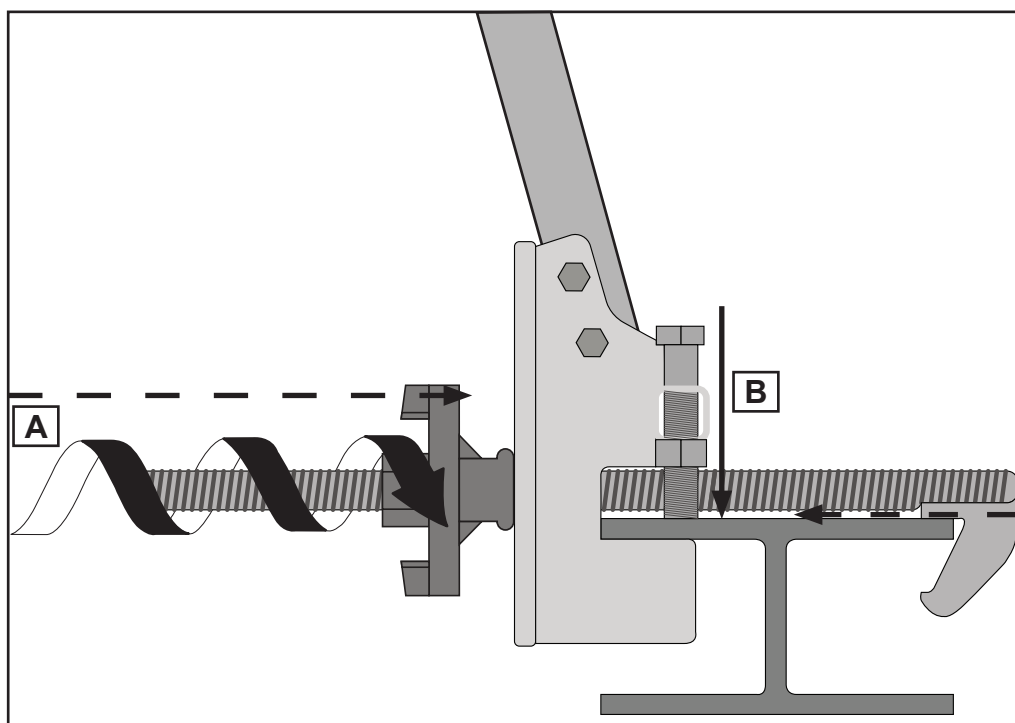
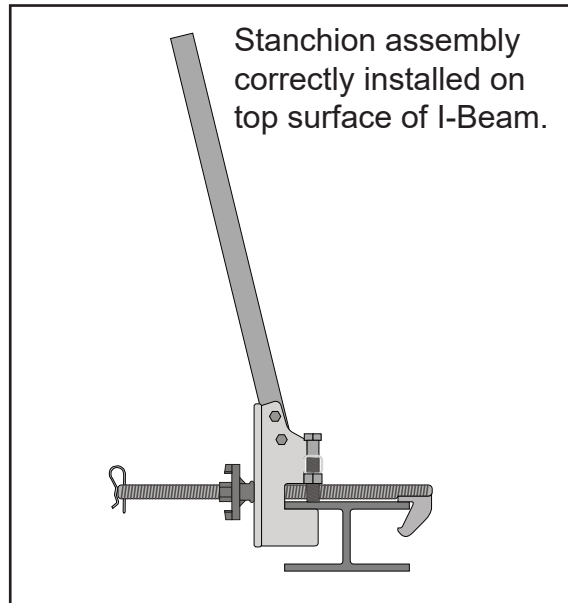
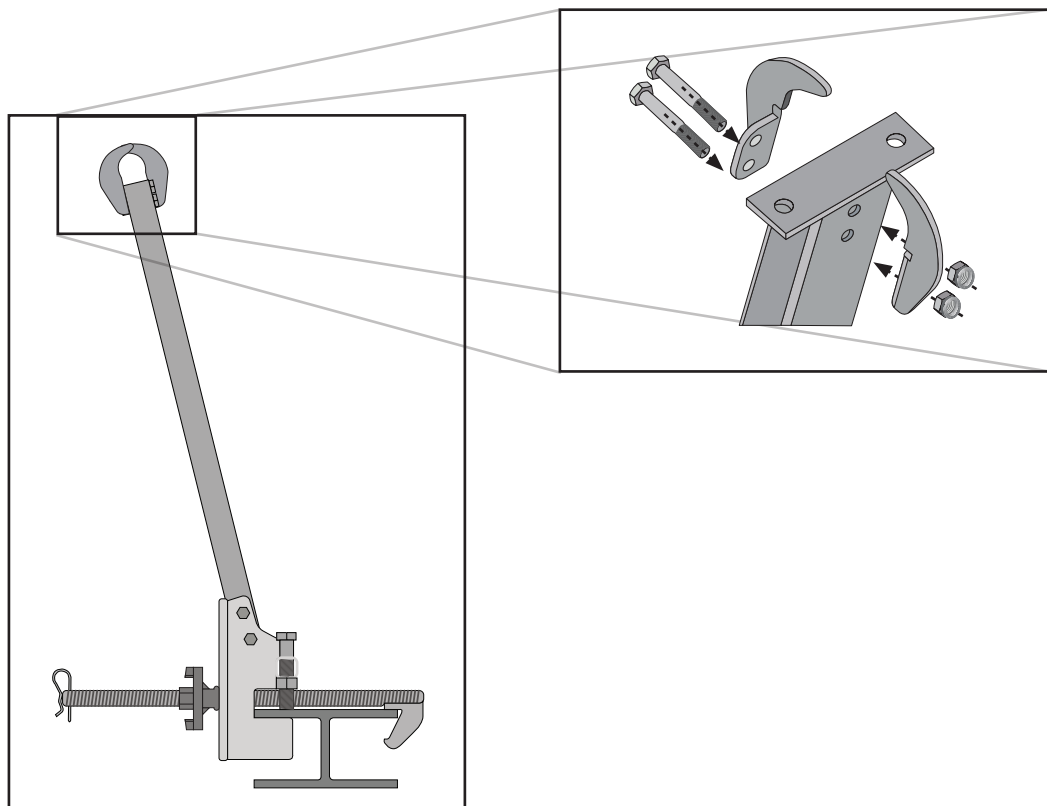


Fig. 9



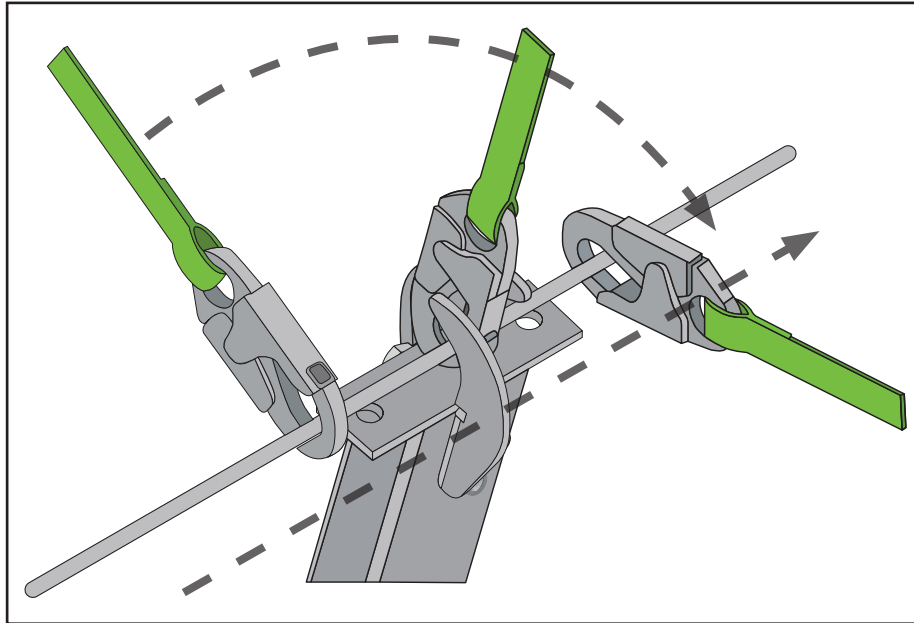
If stanchion is to be used as an intermediate post, the intermediate pass through bracket must be installed. At the top of the upright, align the pre-drilled holes in the pass through bracket with the pre-drilled holes in the stanchion (See Fig. 10). Insert the provided bolts through the holes and thread the locking nuts onto the end of the bolts. Tighten until pass through bracket is secure to the top of the upright.

Fig. 10

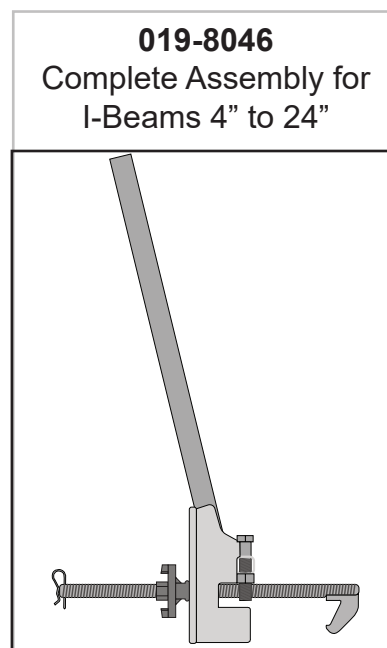
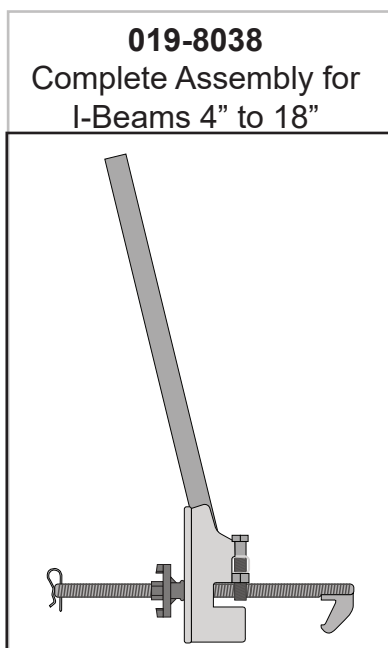


As the user reaches an intermediate stanchion, pass the snap hook under the first side of the intermediate bracket. When the snap hook is between both sides of the intermediate bracket, rotate the snap hook to the other side of the Horizontal Lifeline, and pass the snap hook under the other side of the intermediate bracket (See Fig 11). There is no need to disconnect the snap hook from the Horizontal Lifeline.

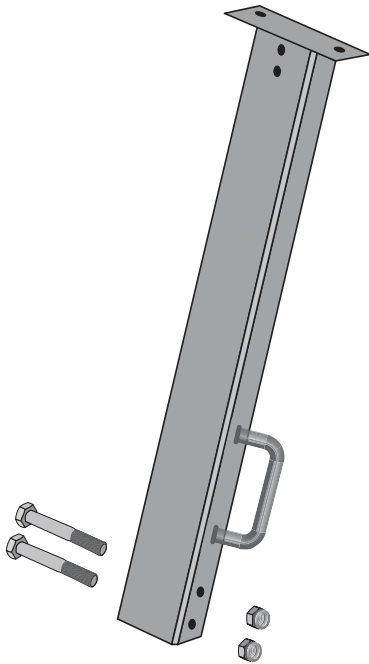
Fig. 11



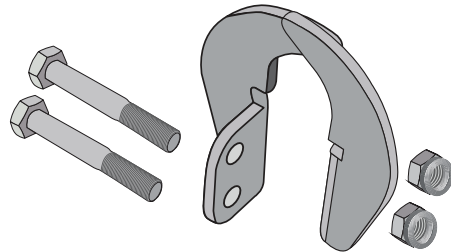
Stanchion Components and Part Numbers



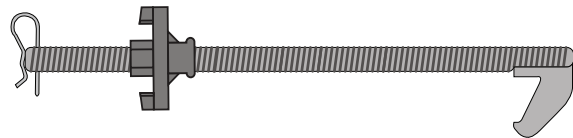
019-8040
I-Beam
Upright



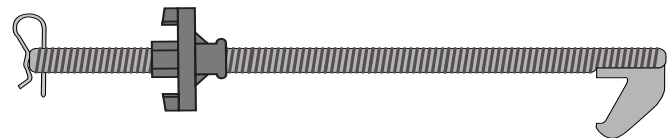
019-8039
Upright Pass Through
Bracket



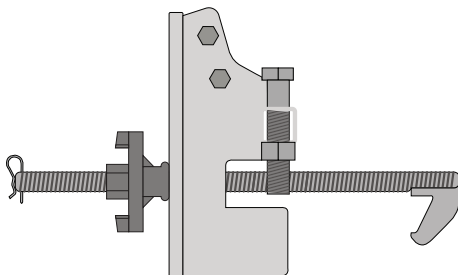
019-8045
I-Beam Clamp for I-Beams 4" to 18"



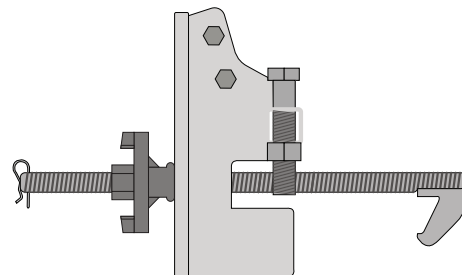
019-8042
I-Beam Clamp for I-Beams 4" to 24"



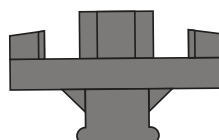
019-8047
Base for I-Beams 4" to 18"



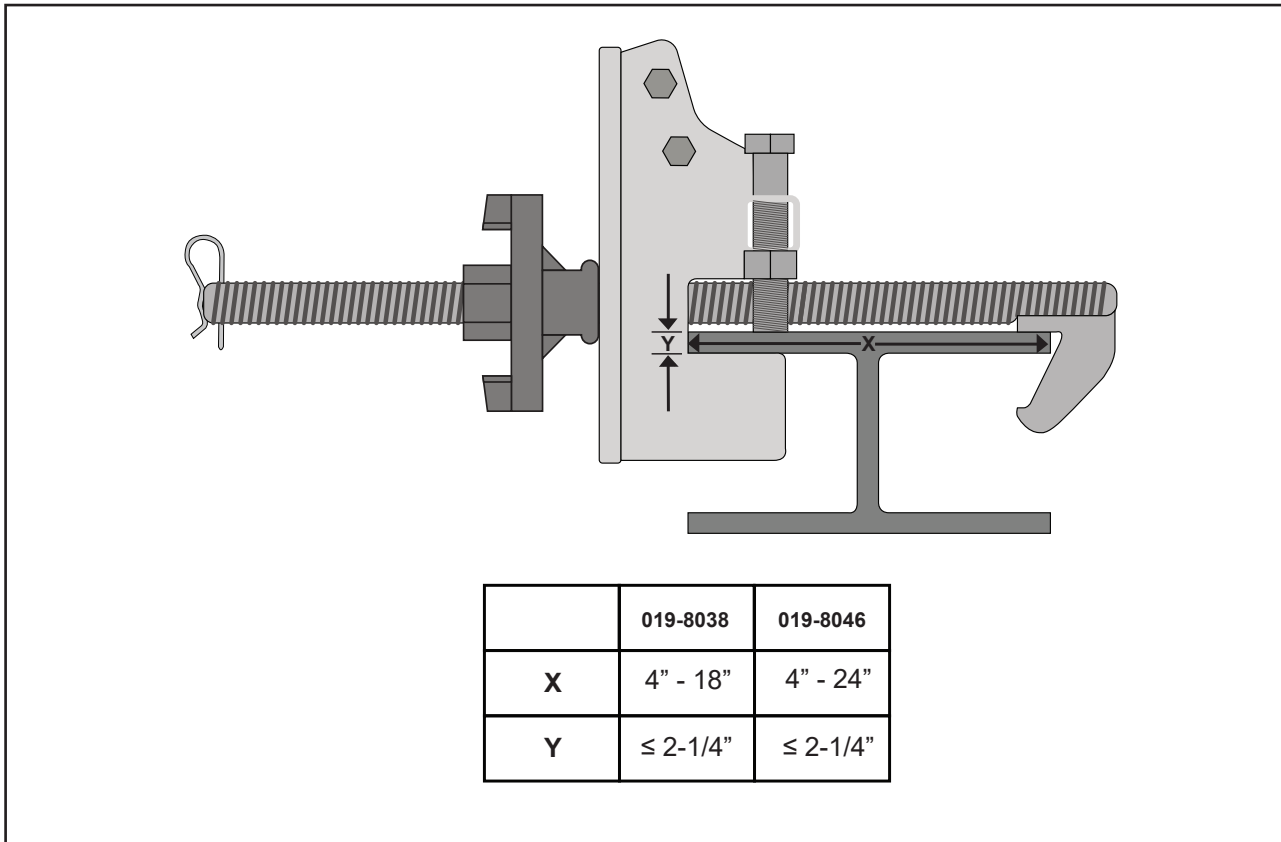
019-8041
Base for I-Beams 4" to 24"



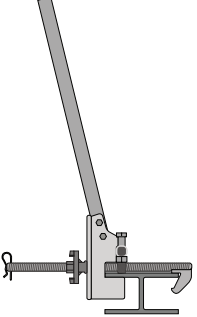
019-8043
I-Beam Clamp Wing Nut



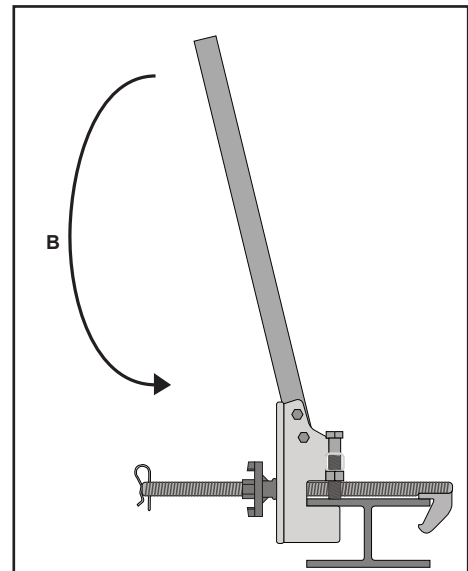
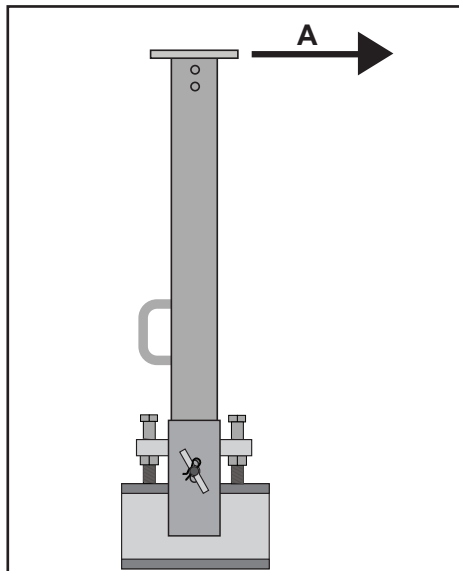
Beam Clamp Sizing Diagram



Specifications Table

Part #	Minimum Tensile Strength and Material	Maximum User Capacity	Standards and Regulations	I-Beam Stanchion
019-8038 I-Beams 4"-18" Width	8,000 lbs. Minimum Tensile Strength	Refer to SafeWaze HLL Instruction Manuals	OSHA 1926.502 OSHA 1910.140	
019-8046 I-Beams 4"-24" Width	Stanchion Upright: Steel			
	Stanchion Base: Steel			
	Fasteners: Grade 5			

Beam Load Requirements - End Anchor Stanchions



SafeWaze HLL System	Part Number	Configuration	A	B
2 Person Kernmantle HLL	019-8000	1 Worker	2,800 lbs.	1,500 ft-lbs.
	019-8001 019-8002 019-8003	2 Workers	5,400 lbs.	3,000 ft-lbs.
4 Person Double Braid Rope HLL	019-8012	1 Worker	3,400 lbs.	1,500 ft-lbs.
	019-8013 019-8014 019-8015	2 Workers	5,400 lbs.	3,000 ft-lbs.
		3 to 4 Workers	8,200 lbs.	6,000 ft-lbs.
2 Person Cable HLL	019-8016	1 Worker	5,400 lbs.	1,500 ft-lbs.
	019-8017 019-8018 019-8019	2 Workers	6,600 lbs.	3,000 ft-lbs.
4 Person Cable HLL	FS-EX10000 FS-EX10500	1 Worker	2,000 lbs.	1,500 ft-lbs.
		2 Workers	4,000 lbs.	3,000 ft-lbs.
		3 to 4 Workers	8,000 lbs.	6,000 ft-lbs.

Inspection and Maintenance

Inspection

Inspect the stanchion for corrosion and/or damage.

Check the upright and base for signs of distortion or deformation.

Inspect stanchion assembly bolts and nuts prior to each use, and re-tighten as needed.

Inspect all components of HLL system per the manufacturer's instructions.

Frequency

All components of the SafeWaze stanchion assembly must be inspected prior to each use, and annually by a "competent person" (other than the user), as defined by OSHA.

Criteria

If inspection reveals any defect, inadequate maintenance, or unsafe condition, remove from service until a "qualified person" as defined by OSHA 1926.32(m) can determine the need for authorized repair or disposal.

Maintenance

Any SafeWaze stanchion components requiring maintenance must be tagged "unusable" and removed from service. Bolts and lock nuts can be replaced if necessary by the user so long as equivalent to those provided during shipment.

Cleaning maintenance may be performed by the user.

Repairs to the product may only be made by the manufacturer or entities authorized in writing by the manufacturer.

**THIS SYSTEM MUST ONLY BE SERVICED BY A TRAINED AND COMPETENT INDIVIDUAL!
NEVER ATTEMPT TO SERVICE THIS UNIT OR TAMPER WITH ITS FUNCTION IN ANY WAY!**


Storage

When not installed, the SafeWaze stanchion should be stored in a cool, dry place out of direct sunlight. Do not store in areas where damage from environmental factors such as heat, light, excessive moisture, oil, chemicals and their vapors, or other degrading elements may be present. Do not store damaged equipment or equipment in need of maintenance in the same area as product approved for use. Equipment that has been stored for an extended period must be inspected as described in these User Instructions prior to use.

Inspection Log

DATE	CONDITION OF SYSTEM	INSPECTED BY:

Labels



SAFEWAZE

SAFELINK

STANCHION

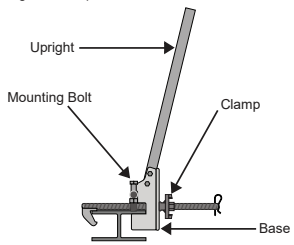
WARNING

This product must be used in accordance with the manufacturers instructions provided at shipment. For use only with approved SafeWaze temporary Horizontal Lifeline (HLL) systems. Specific information such as fall clearances, number of users, span length, etc., for approved HLL systems are included in the individual HLL system instructions. User's must be trained in the use of this product and associated HLL systems. This equipment must be installed and used under the supervision of a Qualified Person. Failure to follow instructions, misuse, or alteration of this product may result in serious injury or death. Use of this equipment near thermal, electrical, chemical or other hazards should be avoided. Do not utilize this equipment if unsafe or hazardous conditions are present. Inspection results should be recorded in the inspection log on this label, and the inspection log located in the instruction manual.

DO NOT REMOVE THIS LABEL

INSTALLATION
SafeLink 42" I-Beam Stanchion

Tighten the clamp to the I-Beam using the supplied wing nut. After hand tightening, strike the wing nut with a hammer, or continue tightening with an adjustable wrench to ensure clamp is secure to I-Beam. Once complete, tighten mounting bolts to top of I-Beam.



Model #:

019-8038
 019-8040
 019-8046

Date of Mfr.: XX/XXXX

Serial Number: XXXXXXXX

Material: Steel
Meets OSHA 1926.502 and 1910.140 Requirements

	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC

019717 www.safewaze.com



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STANCHION



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