Latitude 6’ Tie-Back Instruction Manual

WARNING

This product is part of a personal fall arrest, work positioning, or rescue system. The manufacturer’s instructions must be provided to users of this equipment. The user must follow the manufacturer’s instructions for each component of the system. The user must read and understand these instructions before using this equipment. Manufacturer’s instructions must be followed for proper use and maintenance of this equipment. Alterations to this product, misuse of this product, or failure to follow instructions may result in serious injury or death.

IMPORTANT

Questions regarding the use, care, or suitability of this equipment for your application? Contact Safewaze.

IMPORTANT

Record identification information before using this product. Identification information may be found on the equipment label (see figure 18). This information should be recorded in the “Inspection and Maintenance Log” located at the back of this manual (p 20).

ANSI Z359.14 and ANSI/ASSE A10.32 - OSHA 1910.66 and OSHA 1926.502
This manual is intended to meet the manufacturer’s instructions as required by ANSI Z359.14 and should be used as part of an employee training program as required by OSHA.

1.0 Descriptions

Table 1 illustrates the connector options available for our Latitude 6' Tie-Back Retractable series when ordered in a Single Leg configuration. Table 2 illustrates the connector options available for the series when ordered in a Dual Leg configuration.

Safewaze Latitude Tie-Back Self Retracting Lanyards contain 5 ft (1.52 m) of Ultrahigh Molecular Weight Webbing within the housing, and an additional length of webbing extending beyond the external housing to allow for Tie-Back connections.

Latitude Tie-Back SRL units extend and retract freely with normal movement. If a fall occurs the system locks automatically, arresting the fall, and keeps the worker from falling further.

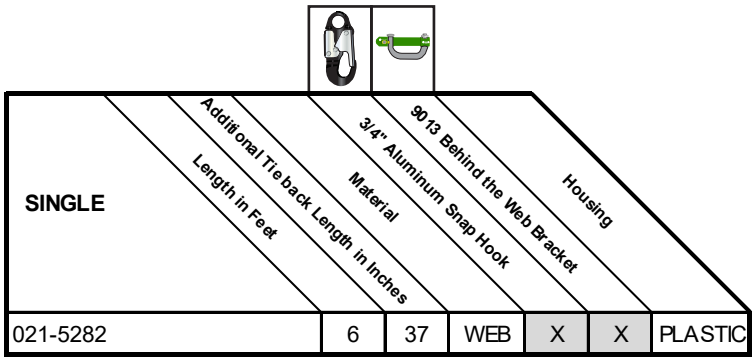
All connectors utilized in our Tie-Back series SRLs meet the criteria as specified in ANSI Z359.12 and are stamped indicating compliance with the standard.

Labeling for the Tie-Back series is divided between one housing label, with the remaining mandatory labeling contained within a velcro fastening enclosure incorporated into the webbing below the sewn in fall indicator.

Safewaze Latitude Tie-Back series SRLs are tested to ANSI Z359.14 requirements. However, due to the extended Tie-Back webbing, which is external of the housing the Latitude Tie-Back units are OSHA compliant only. However, with the Tie-Back Sling removed, and the unit used as a standard SRL, the Latitude Tie-Back units are Class A if used above the Dorsal D-ring, and Class B if used below the Dorsal D-ring up to a maximum of 5' below the D-ring.

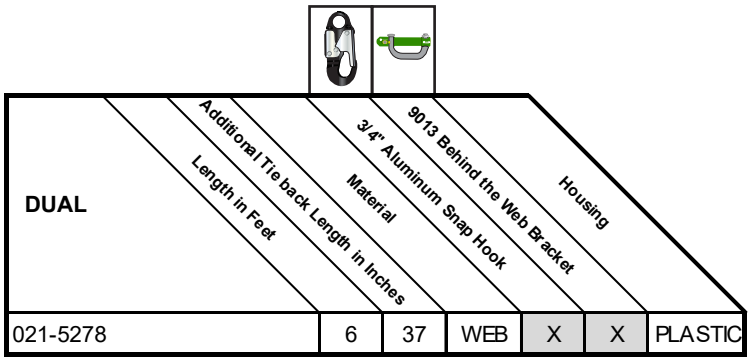
Safewaze Tie-Back SRLs have 5' of extendable/retractable webbing within the housing. This does not however define the products "working length", or limit the use of this product to 6'. Since this is a Tie-Back device, the size and location of the anchorage connection point defines the maximum working length. Please refer to Figures 8, 9, and 10 for suitable anchor connections and locations for a final description of the working length of this product (Maximum Length of 9').

TABLE 1 - SINGLE LEG CONFIGURATION OPTIONS



021-5282	6	37	WEB	X	X	PLASTIC

TABLE 2 - DUAL LEG CONFIGURATION OPTIONS



021-5278	6	37	WEB	X	X	PLASTIC

FIGURE 1 - TIE-BACK CONNECTION TO ANCHOR POINT

Tie-Back Example

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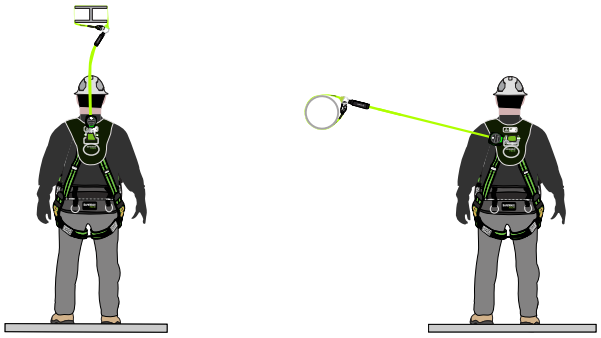
FIGURE 2 - TIE-BACK CONNECTION EXAMPLE



1.1 Applications

1.2 Purpose

Safewaze Latitude Tie-Back series SRLs are designed for use in environments where a fall could occur. The purpose is to prevent the fall or limit the potential free fall as much as possible. Applications include, but are not limited to: roofing, concrete, steel, MEP, industrial maintenance, and material handling. Tables 1 and 2, show the models covered in this manual.

1.3 Standards

Safewaze Tie-Back series SRLs conform to the national standard(s) identified on their ID label. Refer to local, state, and federal (OSHA) requirements for additional information concerning the governing of occupational safety regarding Personal Fall Arrest Systems (PFAS).

TABLE 3 - ANSI STANDARDS

ANSI	Z359.0	Definitions and Nomenclature Used for Fall Protection and Fall Arrest
ANSI	Z359.2	Minimum Requirements for a Comprehensive Managed Fall Protection Program
ANSI	Z359.12	Connecting Components for Personal Fall Arrest Systems
ANSI	Z359.14	Safety Requirements for Self-Retracting Devices for Personal Fall Arrest and Rescue Systems
ANSI	A10.32	Personal Fall Protection use in Construction and Demolition

TABLE 4 - OSHA REGULATIONS

OSHA	1926.502	Fall Protection Systems Criteria and Practices
OSHA	1910.66	Fall Protection General Industry

1.4 Training

This equipment is intended to be used by persons trained in its correct application and use. It is the responsibility of the user to assure they are familiar with these instructions and are trained in the correct care and use of this equipment. Users must be aware of the operating characteristics, applications, limits, and the consequences of improper use.

2.0 Limitations & Requirements

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

2.1 Capacity

Safewaze Tie-Back series Self Retracting Lanyards (SRLs) are all designed in compliance with ANSI Z359.14 to meet the weight capacity range of (130-310 lbs), OSHA up to 420 lbs (190.51 kg).

2.2 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. (22.2 kN) 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 (1) and (2) above shall be multiplied by the number of systems attached to the anchorage.

From OSHA 1926.500 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 (22.2 kN) per user attached, or be designed, installed, and used as part of a complete personal fall arrest system which maintains a safety factor of at least two, and is under the supervision of a qualified person.

WARNING: The anchor point must be located at the same height or above the Walking / Working surface where a fall might occur. Never anchor Safewaze SRLs below user's feet.

2.3 INSPECTION FREQUENCY

Either the Authorized Person[1] (User), or the Rescuer[2] must inspect this equipment before each use. Factory authorized inspections must be completed by a Competent Person[3] other than the equipment user. The inspection table (Table 5) should be used to determine proper inspection frequency. The inspection checklist (see page 19) describes proper inspection procedures. The Competent Person should record inspection results in the "Maintenance Log" located in the back of this manual (see page 20).

1 **Authorized Person**: A person assigned by the employer to perform duties at a location where such person will be exposed to a fall hazard.

2 **Rescuer:** Person or persons other than the rescue subject acting to perform an assisted rescue by operation of a rescue system.

3 **Competent Person:** An individual designated by the employer to be responsible for the immediate supervision, implementation, and monitoring of the employer's managed fall protection program who, through training and knowledge, is capable of identifying, evaluating, and addressing existing and potential fall hazards, and who has the employer's authority to take prompt corrective action with regard to such hazards.

TABLE 5 - INSPECTION SCHEDULE PER ANSI Z359.14

Type of Use	Application Examples	Conditions of Use	Inspection Frequency 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

2.4 Rescue Plan

When using this equipment, employers must create a rescue plan, and provide the means to implement said rescue plan. This plan must be communicated to equipment users, authorized persons, and rescuers.

NOTE: Special rescue measures may be required for a fall over an edge.

2.5 Locking Speed

The nature of this equipment requires sufficient space in the working area to allow for the SRL to lock. Working in small or confined spaces may keep the user's body from reaching the speed needed to lock the SRL during a fall. Working on slowly shifting materials, such as grain or sand, may not allow the speed needed to cause the SRL to lock.

2.6 Normal Operations

During normal operation the SRL lifeline should freely extend and retract without hesitation. When moving at normal speeds the lifeline will have no slack. A fall will activate the brake system and stop the fall. Avoid sudden or fast movements during normal operation as this may cause the SRL to lock.

2.6 Free Fall

In order to ensure reduced fall distances, always attempt to anchor the SRL directly overhead. Overhead anchoring will limit free fall distance to a minimum. Be aware of workers sharing the workspace to avoid becoming tangled with another worker. Steer clear of objects that could fall and impact the lifeline. The lifeline should never pass under the user's arms or legs. The lifeline should never be knotted, clamped, or be otherwise restricted from retraction or a taut state.

2.7 Hazards

External hazards can require additional precautions to be taken when using this SRL. Hazards may include but are not limited to: Overhead operations, other equipment, other workers, external environment, weather and walking surface. Users should be trained to watch for other hazards not listed here.

2.8 Sharp Edges

Use of this equipment should be avoided in areas where the lifeline may come into contact with sharp, abrasive and/or leading edges unless otherwise noted.

2.9 Body Support

The SRL must be used with a Full Body Harness. Connection to the Full Body Harness must be made at the Dorsal D-ring. Safewaze Tie-Back series SRLs are not rated for use with a body belt. Use of Safewaze Tie-Back series SRLs with a body belt may result in injury.

2.10 Fall Clearance

It is important to make sure that adequate clearance is available. Free Fall, Maximum Arrest Distance, Height of Worker, and current clearance above the next fall hazard must all be considered in the Fall Clearance calculation.

2.11 Minimum Required Fall Clearance Latitude Tie-Back SRLs

FIGURE 3 - DETERMINING MINIMUM REQUIRED FALL CLEARANCE

*****NOTE:** This Fall Clearance example illustration assumes the Latitude Tie-Back unit is anchored directly overhead. This example does not take into account Swing Fall, anchorage at or below Dorsal D-ring, or Tie-Back Sling length. For additional information on calculating proper fall clearance for this series, please refer to pages 6 through 10 of this manual.

Latitude Tie-Back SRL Minimum Required Fall Clearance		
A	**2 ft**	SRL Deceleration Distance
B	**1 ft**	Harness Stretch / D-ring Shift
C	**1 ft**	Safety Factor
D	**4 ft**	**Sub-Total for Minimum Required Fall Clearance**
E		***Additional Fall Clearance for Swing Fall** (If swing fall hazard exists refer to Table 7, Page 13)
F		**Total Fall Clearance Required**

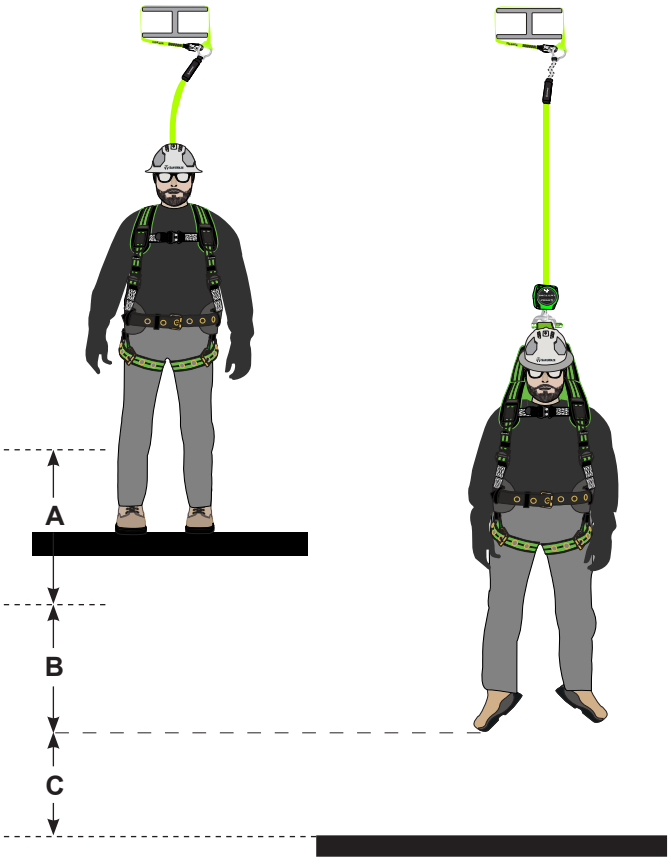


FIGURE 4 - OVERHEAD ANCHORAGE

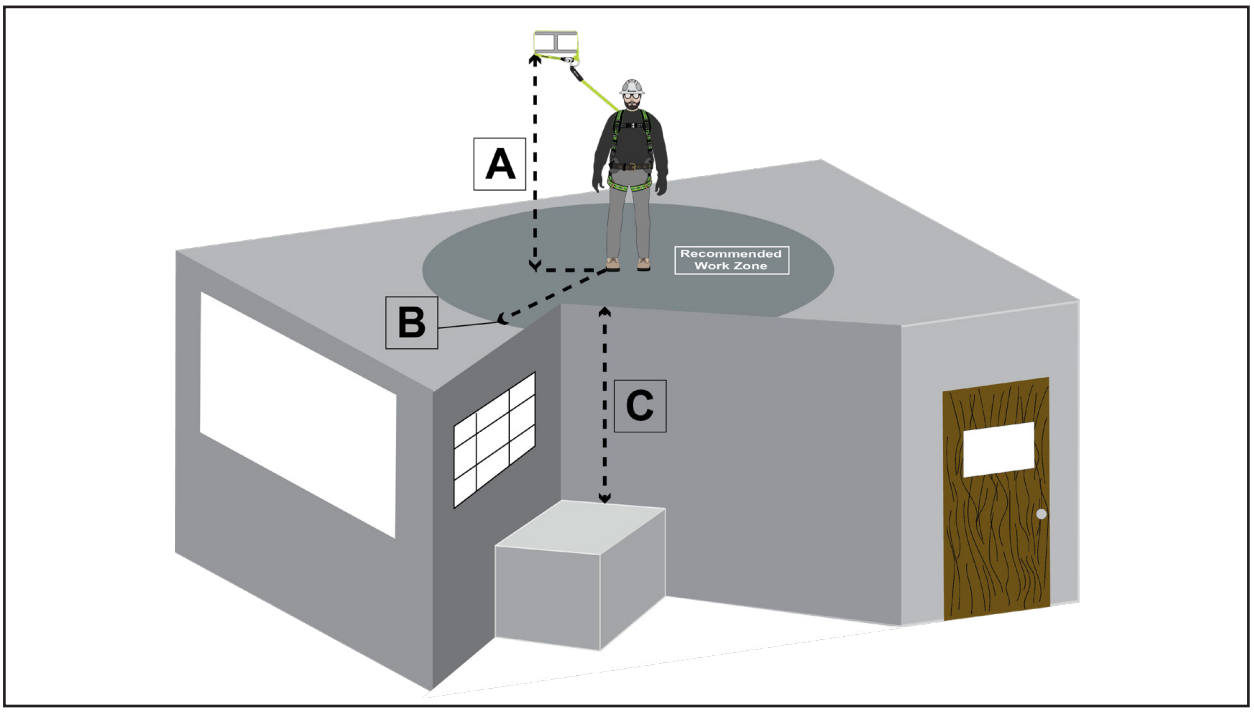


TABLE 6 - OVERHEAD ANCHORAGE FALL CLEARANCE 130 - 310 LBS

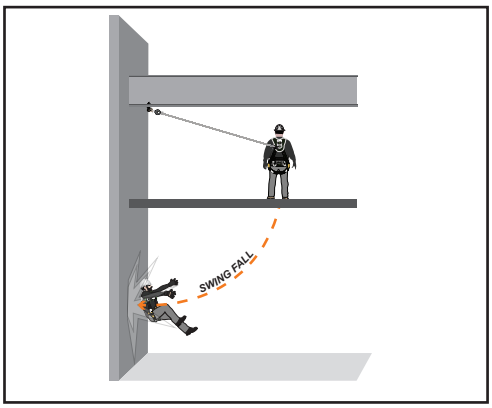
Latitude Tie-Back SRL		C						
130 - 310 lbs (59 - 140 kg)		<4 ft (1.2 m)	4 ft (1.2 m)	5 ft (1.5 m)	6 ft (1.8 m)	7 ft (2.1 m)	8 ft (2.4 m)	9 ft (2.7 m)
A	4 ft (1.22 m)	X	0 ft (0 m)	1 ft (.30)	2 ft (.61 m)	3 ft (.91 m)	4 ft (1.22 m)	5 ft (1.52 m)
	6 ft (1.83 m)	X	0 ft (0 m)	1.6 ft (.49)	2.8 ft (.85 m)	3.8 ft (1.15 m)	5 ft (1.52 m)	X
	8 ft (2.43 m)	X	0 ft (0 m)	2.5 ft (.76)	3.7 ft (1.13 m)	4.9 ft (1.5 m)	X	X
	10 ft (3.05 m)	X	0 ft (0 m)	3.1 ft (.94)	4.6 ft (1.4 m)	X	X	X
	12 ft (3.7 m)	X	0 ft (0 m)	4.3 ft (1.31 m)	X	X	X	X
	14 ft (4.26 m)	X	0 ft (0 m)	X	X	X	X	X
	B							

TABLE 7 - OVERHEAD ANCHORAGE FALL CLEARANCE 310 - 420 LBS

Latitude Tie-Back SRL		C				
310 - 420 lbs (140 - 191 kg)		<6 ft (1.8 m)	6 ft (1.8 m)	7 ft (2.1 m)	8 ft (2.4 m)	9 ft (2.7 m)
A	4 ft (1.22 m)	X	0 ft (0 m)	2.5 ft (0.76 m)	3.9 ft (1.19 m)	5 ft (1.52 m)
	6 ft (1.83 m)	X	0 ft (0 m)	3.3 ft (1 m)	4.8 ft (1.46 m)	X
	8 ft (2.43 m)	X	0 ft (0 m)	5.5 ft (1.67 m)	X	X
	10 ft (3.05 m)	X	0 ft (0 m)	X	X	X
	12 ft (3.7 m)	X	0 ft (0 m)	X	X	X
	14 ft (4.26 m)	X	0 ft (0 m)	X	X	X
	B					

3.0 Swing Falls An anchorage point located in a position that is not directly over the user's fall location results in a Swing Fall (See Figure 5). Swing falls may result in the user striking an object with enough force to cause serious injury. Greater clearance is needed to ensure safety during a swing fall as vertical fall distance will be greater than a fall originating directly below the anchorage point. For help determining additional required fall clearance due to Swing Fall, see (Table 8) on (Page 7) of this manual.

FIGURE 5 - SWING FALLS



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Swing Fall Calculation Chart

TABLE 8 - ADDITIONAL FALL CLEARANCE FOR SWING FALL HAZARDS

Allowable Work Zone	Allowable Work Zone with Enhanced Caution	Not Allowed

Using Table 8:

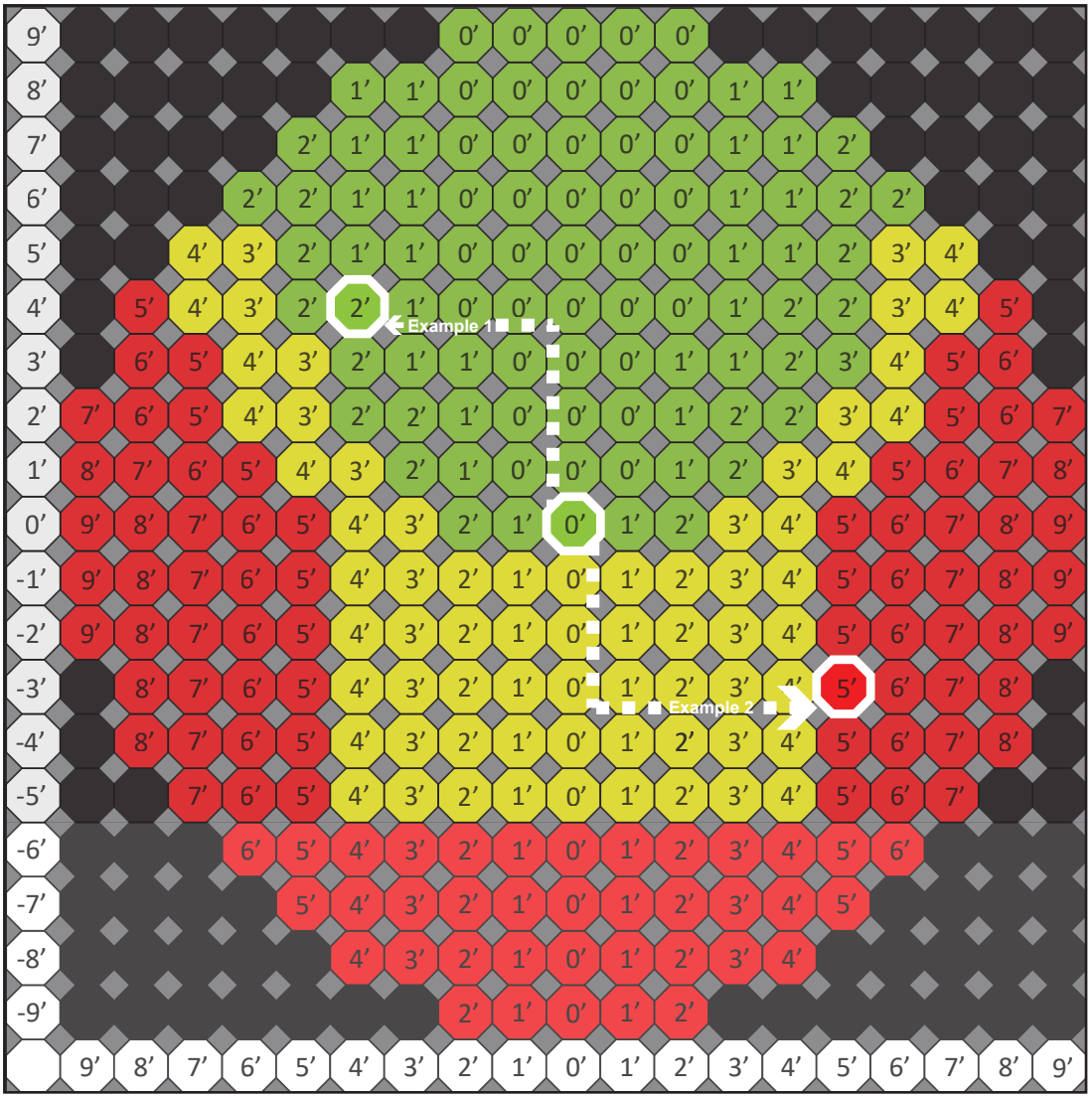
Table 8 provides the ability for the user to determine addtional fall clearance requirements if a Swing Fall Hazard is present. The Green Cell bordered in White at the center of the Table represents the Dorsal D-ring of the user's Full Body Harness (FBH). This cell is the intersection of the X and Y axes.

Example 1 - Latitude Tie-Back SRL Anchored Overhead:

Example 1 represents the user anchored 4' Overhead (Up along the Y Axis) and 4' Laterally (Along the X Axis). The intersection of these distances on the chart indicate an additional 2' of fall clearance required. This addtional required fall clearance must be added to the total fall clearance calculation in Figure 3 on Page 5.

Example 2- Latitude Tie-Back SRL Anchored Below Dorsal D-ring:

Example 2 represents the user anchoring the Latitude HD SRL to an anchor point 3' below the height of the Dorsal D-ring (Down along the Y Axis) and 5' Laterally (Along the X Axis). The intersection of these distances on the chart indicate an additional 5' of fall clearance required. It also indicates that this configuration is outside of the allowable use. In this case the Lateral Distance must be shortened in order to safely use the Latitude Tie-Back SRL.

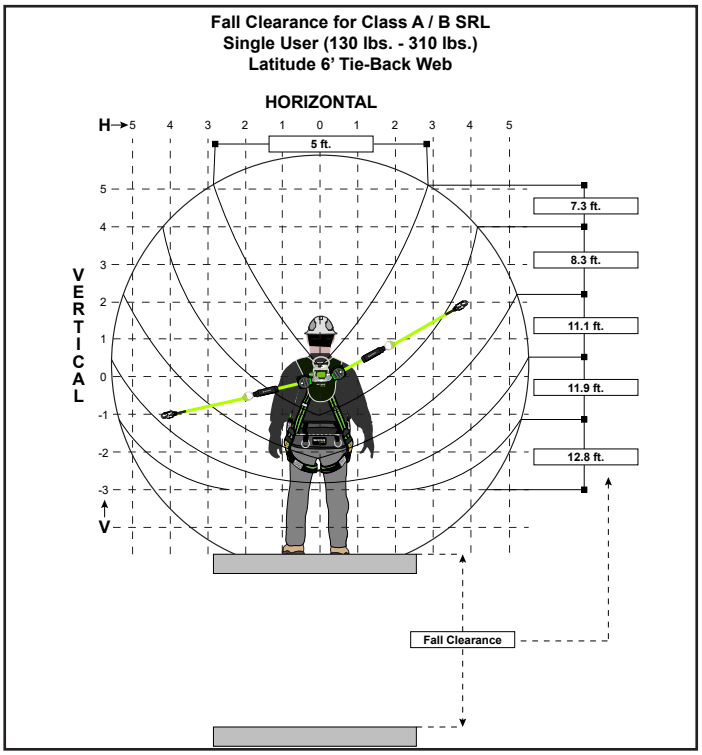


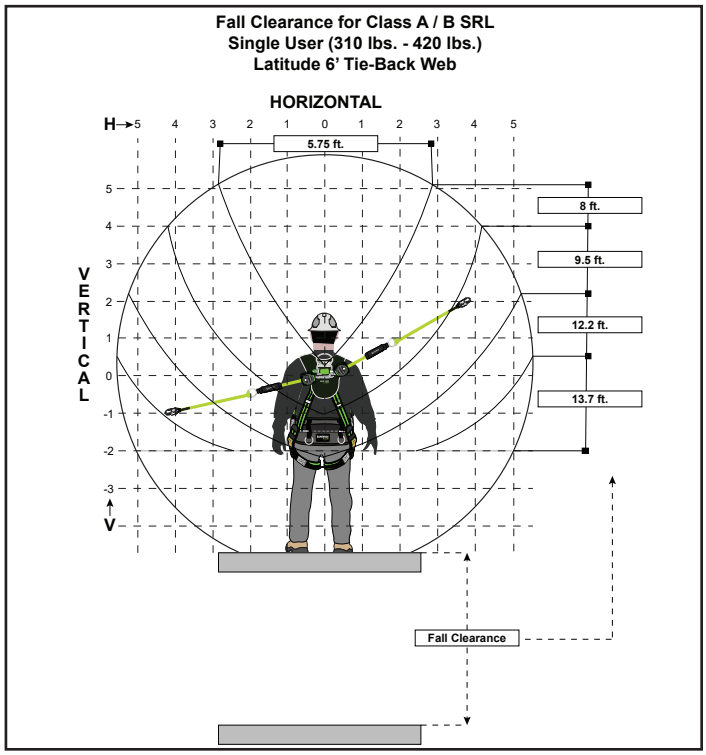
Y-AXIS

X-AXIS

Latitude Tie-Back 6’ Web: Class A/B

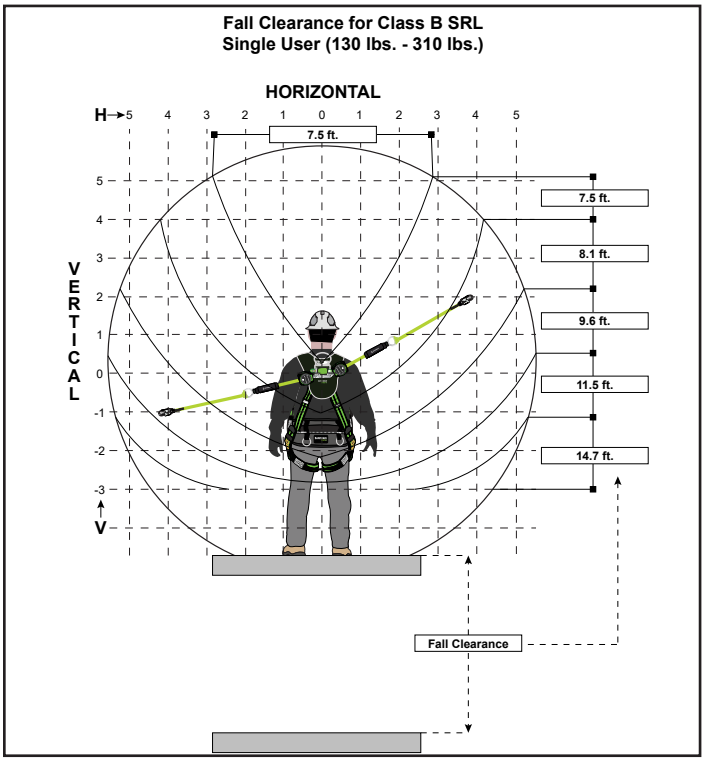
FIGURE 6

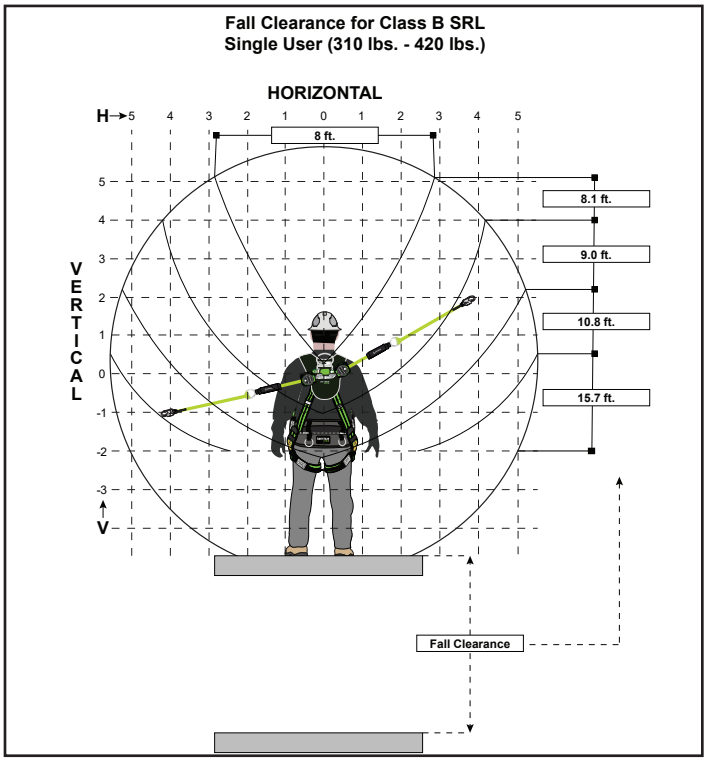




Class B SRLs

FIGURE 7





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4.0 ANCHORAGE

Figure 6A and 6B Illustrate typical Safewaze Tie-Back series SRL anchorages and connections. Select an anchorage location with minimal free fall and swing fall hazards (see Sections 2 and 3). Select a rigid anchorage point capable of sustaining static loads as defined in section 2.2. Where anchoring overhead is not feasible, Safewaze Tie-Back series SRLs may be secured to anchorage points to the level of 5 ft below the user's dorsal D-Ring, but never below the user's feet. NOTE: THIS ADJUSTMENT WILL ADJUST THE TOTAL FREE FALL AND MAXIMUM ARREST DISTANCE OF A FALL.

FIGURE 8 - SYSTEM CONNECTIONS

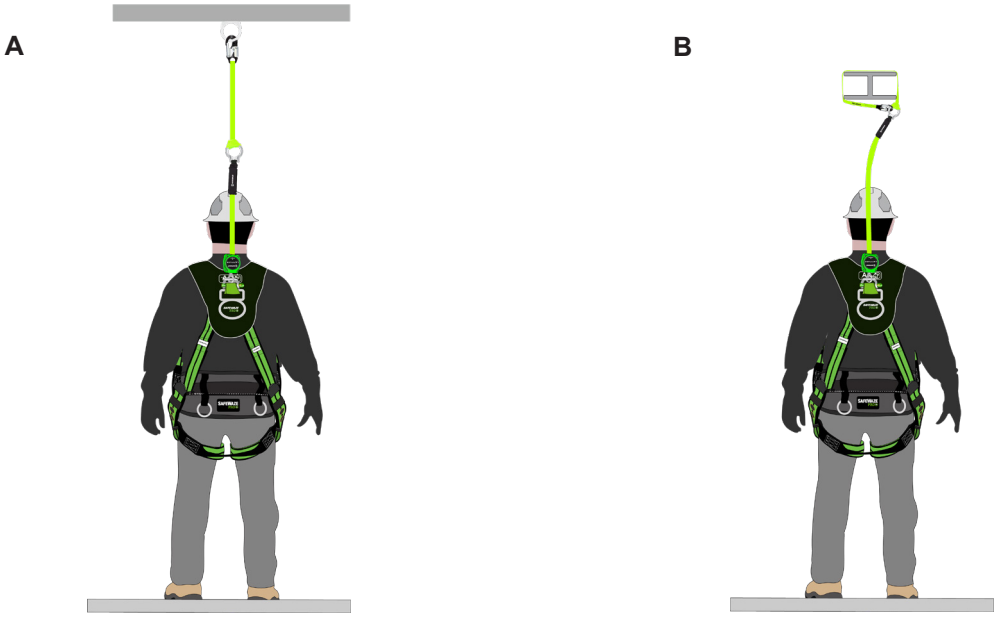


FIGURE 9 - SYSTEM CONNECTIONS

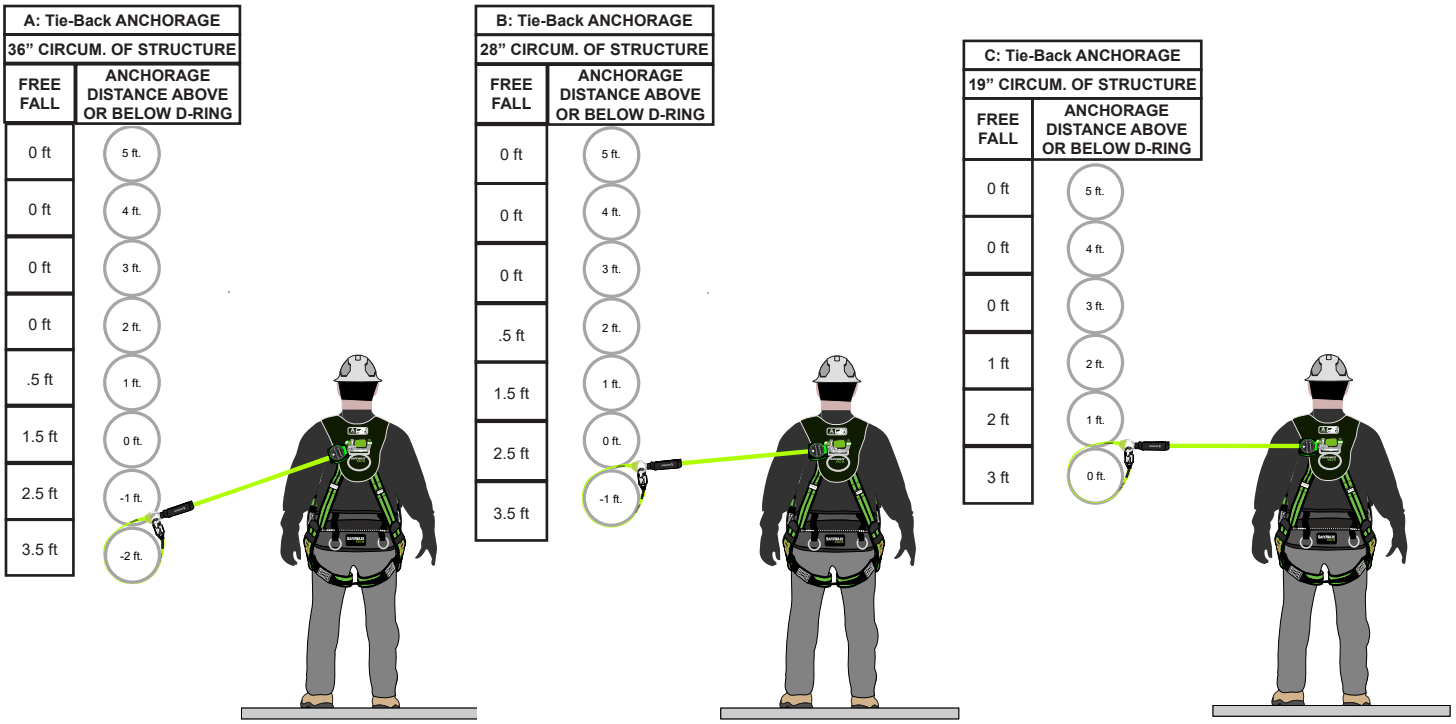
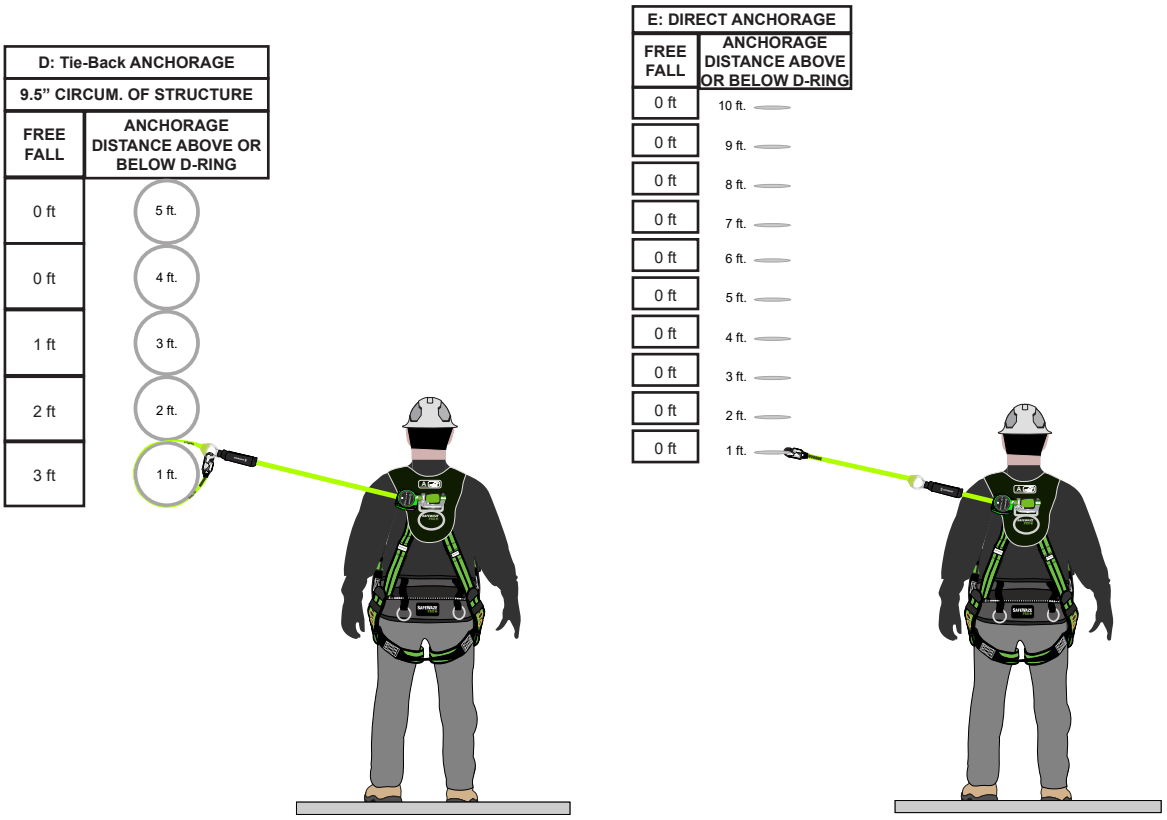


FIGURE 10 - SYSTEM CONNECTIONS



4.1 COMPATIBILITY OF COMPONENTS

Unless otherwise noted, Safewaze equipment is designed for use with Safewaze approved components and subsystems only. Substitutions or replacements made with non approved components or subsystems may jeopardize compatibility of equipment and may affect safety and reliability of the complete system.

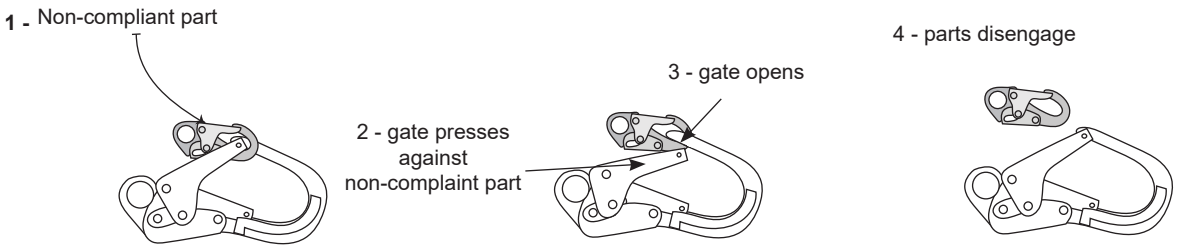
IMPORTANT: Read and follow manufacturer's instructions for associated components and subsystems in your personal fall arrest system.

4.2 COMPATIBILITY OF CONNECTORS

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). Do not use equipment that is not compatible. Non-compatible connectors may unintentionally disengage (see Figure 11). Connectors must be compatible with the anchorage or other system components. 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 SPECIALTY CONNECTORS HAVE ADDITIONAL REQUIREMENTS. CONTACT SAFEWAZE WITH QUESTIONS.

FIGURE 11 - 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.

4.3 MAKING CONNECTIONS

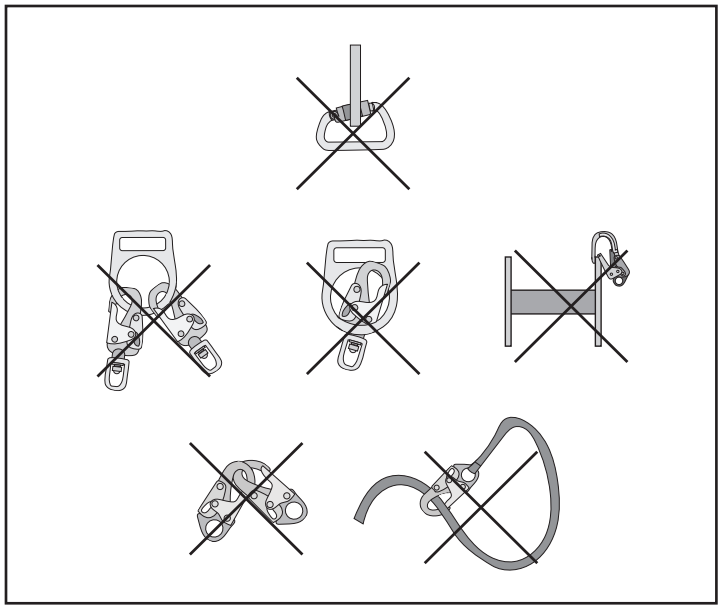
Snap hooks and carabiners used with this equipment must be double locking and/or twist lock. Carabiners supplied for use with Safewaze Tie-Back Series are available in forged steel or aluminum. Both carabiners are double locking. Ensure all connections are compatible in size, shape and strength. Do not 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 Figure 12) 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 snap hooks must not be connected to objects which will result in a load on the gate if the hook 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 its compatibility.

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.

FIGURE 12 - INAPPROPRIATE CONNECTIONS



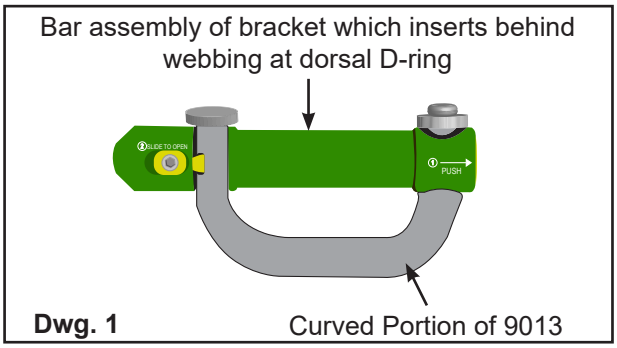
5.0 HARNESS MOUNTING WITH 9013 BEHIND THE WEB BRACKET

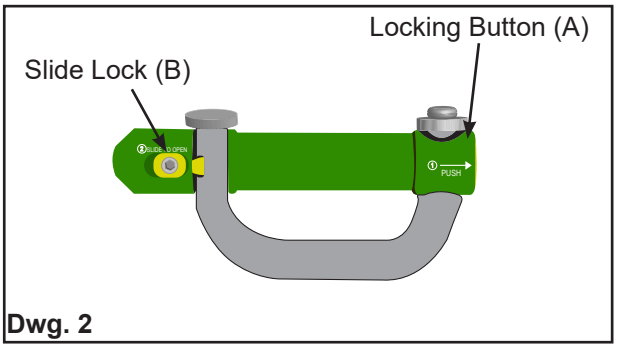
The 9013 bracket comes fully assembled and ready for installation. No tools are required for installation of the bracket onto harness. Use the following instructions and Figure 13 to install the 9013 Behind the Web Bracket.

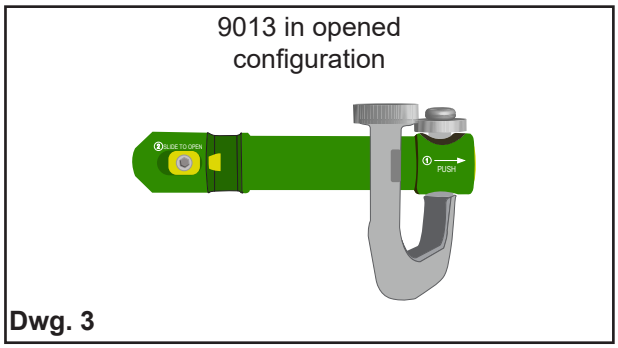
To Fasten To Harness:

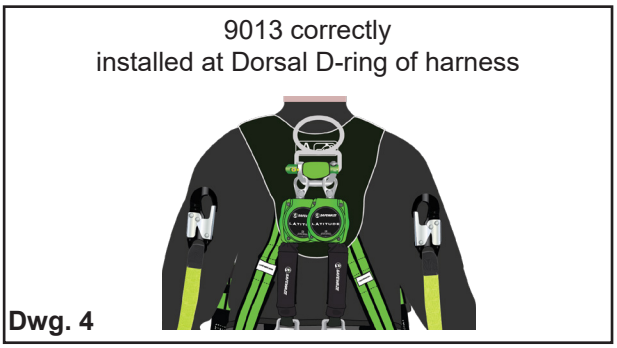
1. Ensure that the curved portion of 9013 is in a downward orientation relative to the harness (See Figure 13, Dwg. 1)).
2. Simultaneously depress both locking button (A) and slide lock (B) (See Figure 13, Dwg. 2) to swing the bracket open (See Figure 13, Dwg. 3,).
3. With the bracket open, install dual leg retractables onto the bracket via the swivel tops of each. Swivels should be hanging on the curved portion of bracket.
4. Slide the bar behind both loops of webbing at dorsal D-ring. Swing the bracket closed until it locks into place.
5. Check the locking function of the bracket by attempting to swing the bracket open WITHOUT depressing locking button (A) or slide lock (B). Bracket bar should not move and the bracket is now locked into place.
6. Dual leg Retractables can be easily installed and removed from bracket by once again depressing both locking button (A) and slide lock (B), which allows bracket to swing open without complete removal from harness.

FIGURE 13 - 9013 DUAL BRACKET INSTALLATION









6.0 USE

WARNING: 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 include chemical, electrical or gaseous characteristics. Failure to comply with this warning could result in serious injury or death.

WARNING: 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 Safewaze SRLs. Failure to heed this warning may result in serious injury or death.

6.1 OPERATION

Inspect the SRL, as described in section 10, before using the equipment. Depending on the SRL model, mount the SRL either to an approved anchor point or on the back of a Full Body Harness as described in section 2.9. Connect the snap hook or carabiner to a suitable anchorage. Ensure connections are compatible in size, shape, and strength. Ensure hooks are fully closed and locked. When the worker is fully attached, the worker is then free to move about within the recommended working area. If a fall occurs, the SRL will lock and arrest the fall. Upon rescue, remove the SRL from use. When working with an SRL, always allow the lifeline to retract back into the device in a controlled manner. Do not release the unit to “free-spin” back into itself.

WARNING: Do not tie or knot the lifeline. Avoid lifeline contact with sharp or abrasive surfaces. Inspect the lifeline frequently for cuts, fraying, burns, or signs of chemical damage. Dirt, contaminants, and water can lower performance of the lifeline. Use caution near power lines. Failure to comply with this warning may result in serious injury or death.

6.2 AFTER A FALL

Equipment exposed to the force of a fall, or that shows damage consistent with the effects of a fall, must be removed from service immediately. Equipment must then be repaired (see section 7.1) in the correct manner or disposed of (see section 10.6).

6.3 BODY SUPPORT

A full body harness must be worn when using Safewaze Tie-Back series SRLs.

IMPORTANT: Do not use a body belt for free fall applications. See OSHA 1926.502 for guidelines.

6.4 SYSTEM CONNECTIONS

Figure 8A and 8B illustrate harness and anchorage connections for Safewaze SRL Fall Arrest Systems. When using a snap hook to make a connection, ensure roll-out cannot occur (see figure 11). Do not use snap hooks or carabiners that will not completely close over the anchor point. This includes traditional overhead anchor point tie off, housing attachment to dorsal D-ring, and 100% tie off. Follow the manufacturer’s instructions supplied with each system component.

WARNING: Never connect the snap hook of one SRL to the lifeline of another SRL or lanyard. Failure to comply with this warning may result in equipment malfunction, serious injury or death.

6.5 DUAL LEG Safewaze SRL

With the dual leg version of the Safewaze Tie-Back series SRL mounted on the back of a Full Body Harness, the user can have continuous fall protection (100 % tie-off) while ascending, descending, or moving laterally. With the lifeline leg of one SRL attached to an anchorage point, the worker can move to a new location, attach the unused lifeline leg of the other SRL to another anchorage point, and then disconnect from the original anchorage point.

IMPORTANT: Never connect more than one person at a time to the dual leg system.

IMPORTANT: Do not allow the lifelines to pass under arms or between legs.

7.0 MAINTENANCE, SERVICING, AND STORAGE

7.1 SERVICE

Remove the Safewaze Tie-Back series SRL from use if the SRL has been subjected to fall arrest forces or inspection reveals an unsafe or defective condition. If unrepairable Dispose of the SRL as recommended in section 10.6 or send the unit back to an authorized Safewaze Service Center for repair.

7.2 CLEANING

Cleaning procedures for Safewaze Tie-Back series SRLs are as follows:
Periodically clean the exterior of the SRL using water and a mild soap solution.
Clean labels to maintain legibility.
An excessive buildup of debris on the web may prevent the lifeline from fully retracting back into the housing and create a potential free fall hazard. Clean webbing using water and a mild soap solution. Allow to dry fully before using or allowing web to fully retract into housing.

IMPORTANT: If the lifeline comes in contact with acids or other caustic chemicals, remove the SRL from service and wash with water and a mild soap solution. Inspect the SRL (using the Inspection Checklist on p 19) before returning to service.

7.3 STORAGE

Store Safewaze Tie-Back SRLs in a cool, dry, clean environment out of direct sunlight. Avoid areas where chemical vapors may exist. Thoroughly inspect the SRL after any period of extended storage.

8.0 SPECIFICATIONS

8.1 PERFORMANCE

Safewaze Tie-Back Series SRLs have been tested and certified to the performance requirements of the standard(s) identified on their ID labels. See Tables 9 through 12 for performance specifications.

8.2 MAXIMUM ARREST FORCE AND MAXIMUM ARREST DISTANCE

SRLs documented in this instruction meet the following Arrest Force and Arrest Distance maximums when tested in accordance with Section 4.2.1 of ANSI Z359.14.

TABLE 9 - CLASS A

Average Arresting Force	**≤ 1,350 lbs (6.0kN)**
Maximum Arresting Force	**≤ 1,800 lbs (8.0 kN)**
Maximum Arrest Distance	**24 in (0.61 m)**

TABLE 10 - CLASS B

Average Arresting Force	**≤ 900 lbs (5.0kN)**
Maximum Arresting Force	**≤ 1,800 lbs (8.0 kN)**
Maximum Arrest Distance	**54 in (1.37 m)**

TABLE 11 - PERFORMANCE CLASSIFICATION WITH TIE-BACK SLING

Item	Length	Class	Arrest Distance If Used Above Dorsal D-ring	Arrest Distance If Used Below Dorsal D-ring
021-5278	6	OSHA Only	24"	54"
021-5282	6	OSHA Only	24"	54"

TABLE 12 - PERFORMANCE CLASSIFICATION WITHOUT TIE-BACK SLING

Item	Length	Class	Arrest Distance If Used Above Dorsal D-ring	Arrest Distance If Used Below Dorsal D-ring
021-5278	6	A	24"	54"
021-5282	6	A	24"	54"

NOTE: All units indicated in Table 5c meet Maximum Arrest Distances as prescribed by ANSI Z359.14. Units indicated as OSHA Only are designated as such due to length of Tie-Back Webbing exceeding ANSI specified length.

9.0 MATERIALS

TABLE 13 - MATERIALS

Housing	Plastic with Stainless Steel Rivets	**9013 Bracket**	Forged Steel Gate, Aluminum Barrel
Drum	Aluminum Alloy	**Swivel / Motor Spring**	Carbon Steel
Fasteners	Zinc Plated Alloy Steel Screws	**Snap Hook**	Aluminum
Main Shaft	Stainless Steel	**Web Label Cover**	Polyester
Web	Ultra High Molecular Weight Webbing	**Locking Pawls**	Stainless Steel

10.0 INSPECTION

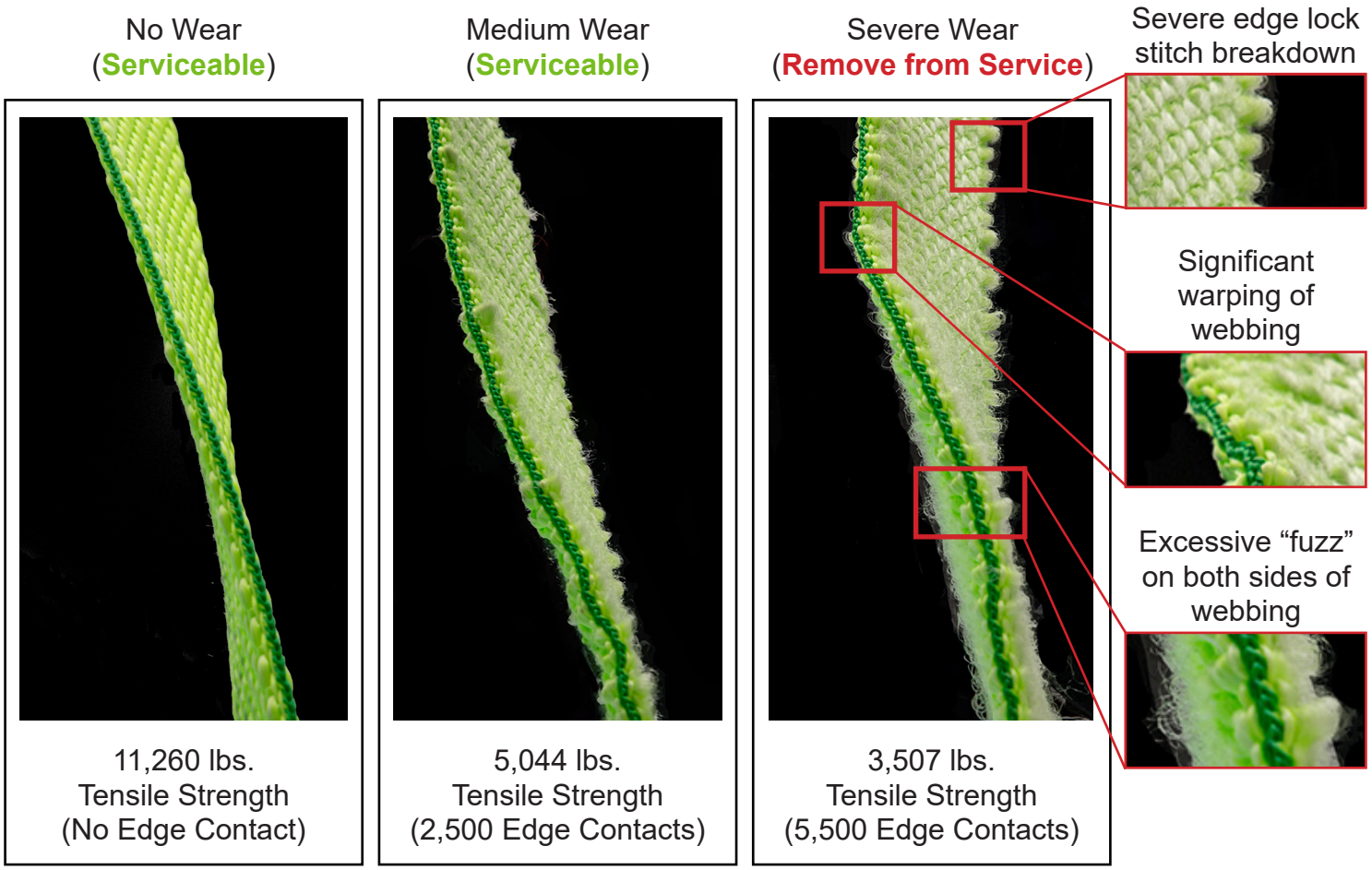
10.1 BEFORE EACH USE

Before each use ensure that the equipment is in good working condition. Inspect the unit to ensure it has not been damaged and that the unit pays out and retracts properly. Prior to each use, the braking system must be inspected. Grasp the body of the unit in one hand and the cable/web in the other. With a quick, jerking motion, pull down on the web. The brake should engage, stopping movement almost immediately. Inspect the webbing using the “Inspection Checklist” located on page 15 of this manual, and ensure that all connection hardware is working properly. Brake failure or unsatisfactory results during any portion of the inspection, require immediate removal of the SRL from service.

10.2 INSPECTION FREQUENCY

Safewaze Tie-Back series SRLs must be inspected at the intervals defined in section 2.3. Inspection procedures are described in the “Inspection Checklist” (See page 19). The replaceable Tie-Back Sling should be inspected per the criteria illustrated in Figure (14) below. If in doubt about serviceability of Tie-Back Sling, INSTALL NEW REPLACEMENT! Section 10.5 of this manual illustrates proper steps for Tie-Back Sling replacement.

FIGURE 14 - TIE-BACK SLING WEAR INSPECTION CRITERIA



WARNING:	Edge Contact for this inspection sheet was done in a laboratory environment. Contact with severe or sharp edges may require more frequent inspection of the tie-back sling.

10.3 UNSAFE OR DEFECTIVE CONDITIONS

Figures 14 and 17 show examples of equipment damage. Equipment inspectors must be trained to look for damage to components indicated in Figure 14 and Figure 17, as well as other damage that may occur. If inspection reveals an unsafe or defective condition remove the SRL from service.

10.4 PRODUCT LIFE

The working life of Safewaze SRLs is determined by work conditions, care and inspection provided. As long as the SRL passes inspection, it may remain in service.

10.5 TIE-BACK SLING REPLACEMENT

To replace the Tie-Back Sling after removal of the worn/damaged sling, pass the soft loop end of the new Tie-Back Sling through the the steel D-ring (See Step 1). Feed the aluminum snap hook through the soft loop (See Step 2). Continue to thread the remainder of the webbing through the soft loop (See Step 3). Once all remaining webbing is pulled through the soft loop, tighten and secure the soft loop to the steel D-ring (See Step 4).

FIGURE 15 - TIE-BACK SLING REPLACEMENT

10.6 DISPOSAL

Dispose of the Safewaze Tie-Back series SRL if it has been damaged by fall arrest forces or inspection reveals an unsafe or defective condition that cannot be repaired by an authorized Safewaze Service Center. Before disposing of the SRL, cut the web lifeline in half so that it is not mistakenly reused.

FIGURE 16 - INSPECTION DIAGRAMS

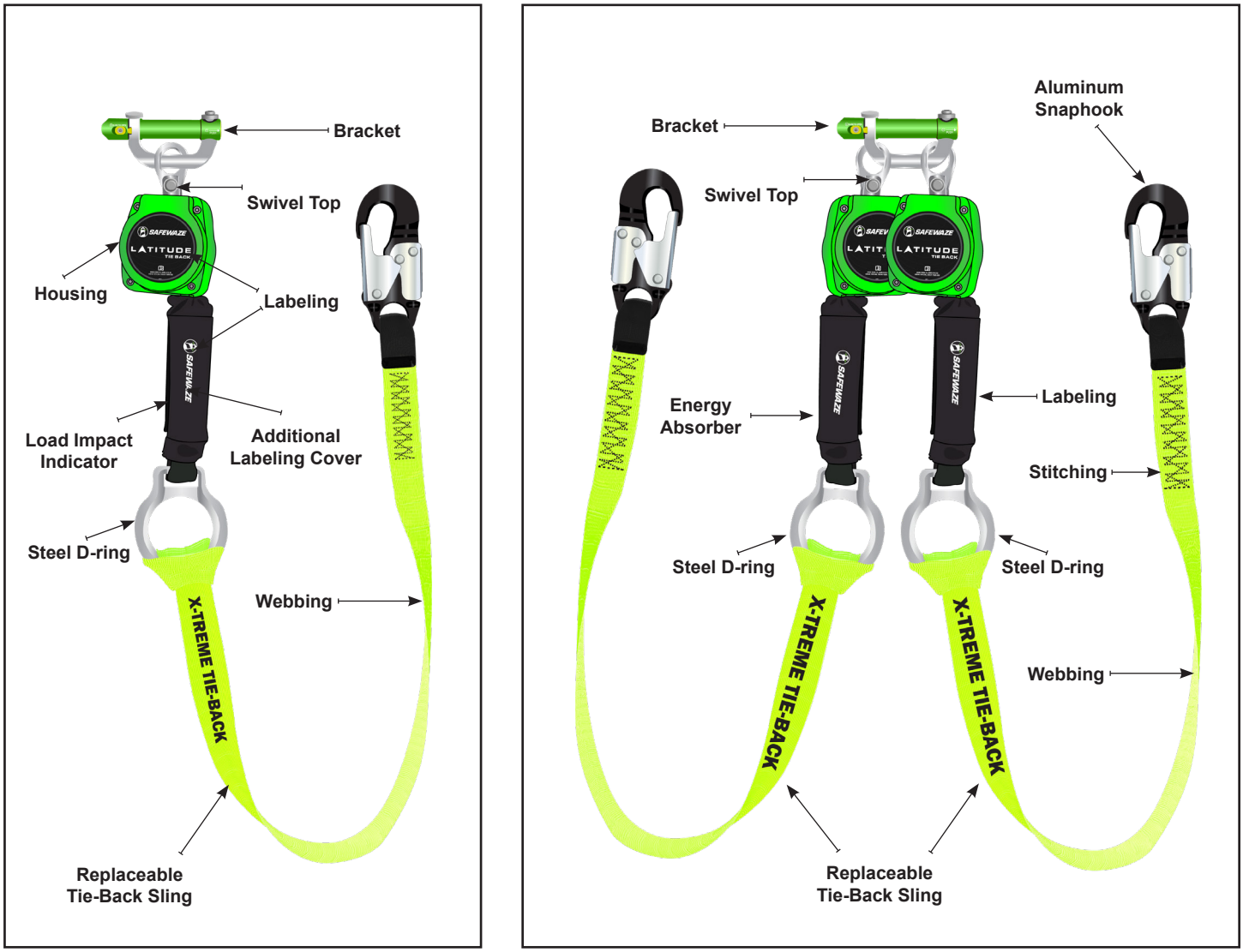
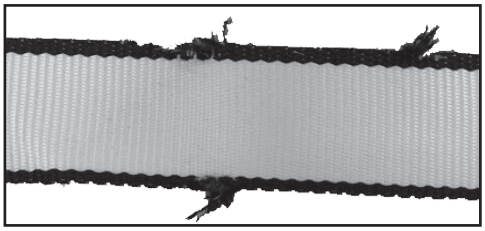


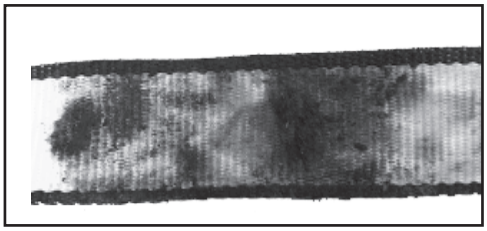
FIGURE 17 - EXAMPLES OF EQUIPMENT DAMAGE

Webbing Damage Examples

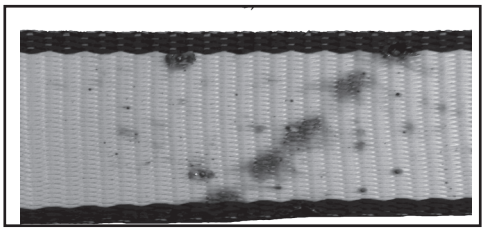
Frayed



Heavily Soiled



Welding Burns



Cut

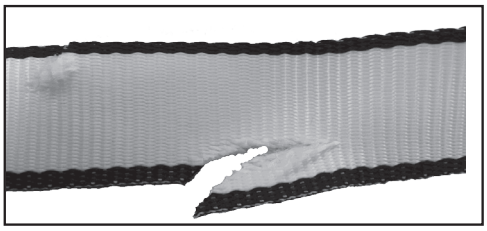


FIGURE 18 - LABEL EXAMPLES

SAFEWAZE

225 Wilshire Ave SW
Concord, NC 28025
USA
(800) 230-0319
www.safewaze.com

WARNING: User must read and understand all instructions, provided with this product at time of shipment, prior to use. **DO NOT ATTEMPT TO SERVICE OR REPAIR THIS UNIT! CONTACT SAFEWAZE™ FOR SERVICE OR REPAIR INFORMATION**. USE: This is a single person fall arrester device. 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. Avoid lifeline contact with sharp or abrasive edges. Avoid chemical, thermal and/or electrical hazards. This product is suitable for use with horizontal lifelines and horizontal positioning. Fall clearances must be calculated by a Competent Person prior to use. Avoid swing fall hazards. Fall clearance calculation for this device is based upon unit installed in an overhead vertical position in-line with the user. Not to be used for leading edge applications. INSPECTION: Device must be inspected prior to each use. Inspect device per instructions to include Locking Function Test (sharp pull test), retraction test, label legibility, any evidence of damage or defects, or missing components or parts. Inspect housing, connectors, fasteners and full length of lifeline component for any damage or defects. This product must be inspected in accordance with the manufacturer's instructions. Unit must be removed from service if exposed to fall arrest forces. Fall indicator is sewn into webbing above the snap hook; immediately remove unit from service if the fall indicator is visible.

MUST FOLLOW ALL MANUFACTURER'S INSTRUCTIONS INCLUDED WITH THIS EQUIPMENT. DO NOT REMOVE LABEL.

01285a

SAFEWAZE

322 Industrial Court
Concord, NC 28025
(800) 230-0319
www.safewaze.com

021-5278

020158

MODEL# 021-5278 I 6 FT DUAL WEB TIE BACK SELF RETRACTING LANYARD WITH ALUMINUM SNAP HOOKS

SERIAL #: XXXXXXX MFG DATE: XX/XXXX

SPECIFICATIONS: Working length: 6 ft (1.83 m)
Materials: Aluminum hardware, Plastic housing, and UHMWPE webbing
Capacity: ANSI 130-310 lbs (58.97-140.61 kg), OSHA up to 420 lbs (190.51 kg)
If used above Dorsal D-ring
Average arresting force: 1350 lbs (612.35 kg); Max arrest force: 1800 lbs (816.47 kg);
Max arresting distance: 24 in (60.96 cm)
If used below Dorsal D-ring, Max 5 ft below Dorsal D-ring
Average arresting force: 900 lbs (408.2 kg); Max arrest force: 1800 lbs (816.47 kg);
Max arresting distance: 54 in (137.16 cm)

MUST FOLLOW ALL MANUFACTURER'S INSTRUCTIONS INCLUDED WITH THIS EQUIPMENT. DO NOT REMOVE LABEL.

	J	F	M	A	M	J	J	A	S	O	N	D

INSPECTION LOG

Date	Inspection Items Noted	Corrective Action	Initials

Inspection Checklist - Fall Protection Equipment

Retractable Lifeline

Description:				**Model #:**
Serial #:				**Date of Manufacture:**
Inspector:				**Date Inspected:**
	Description	**Pass ✓**	**Fail ✕**	**Comments**
Main Unit	Webbing or Cable			
	Stitching or Crimp			
	Stop Ball (cable only)			
	Spring (cable only)			
	Housing			
	Labeling or Engraving			
	Swivel Top			
Hooks & Carabiners	Swivel on Snaphook (cable only)			
	Hook Body			
	Hook Nose			
	Load Impact Indicator			
	Gate (keeper)			
	Hinge (at gate)			
	Bracket (dual only)			
	Carabiner			
Tests	Retraction & Tension			
	Braking Test			
✓ **PASS: Initial** _____				✕ **FAIL: Initial** _____
Inspector Signature:				

SERIAL NUMBER:			
MODEL NUMBER:			
DATE OF PURCHASE:			
INSPECTION DATE	NOTES	CORRECTIVE ACTION	MAINTENANCE PERFORMED
APPROVED BY:			
APPROVED BY:			
APPROVED BY:			
APPROVED BY:			
APPROVED BY:			
APPROVED BY:			
APPROVED BY:			
APPROVED BY:			
APPROVED BY:			

Safewaze
225 Wilshire Ave SW
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PHONE: 1-800-230-0319
FAX: 1-704-262-9051

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EMAIL: info@safewaze.com