3 FT Energy Absorbing Lanyard Instruction Manual

SAFEWAZE™

Lanyard 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 page 11). This information should be recorded in the "Inspection Log" located at the back of this manual (p 10).

ANSI Z359.13 - ANSI Z359.3
This manual is intended to meet the manufacturer's instructions as required by ANSI Z359 and should be used as part of an employee training program as required by OSHA.

User Information

Date of First Use: _____

Serial#: _____

Trainer: _____

User: _____

Do not throw away these instructions!

Read and understand these instructions before using equipment!

INTRODUCTION

Thank you for purchasing an SAFEWAZE™ fall protection lanyard. 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 their full body harness, and all fall protection equipment used in conjuction with the full body harness.

APPLICABLE SAFETY STANDARDS

When used according to instructions, lanyards included in this manual meet all applicable ANSI Z359.1 standards and OSHA regulations for fall protection. Applicable standards and regulations depend on the type of work being done, and may include state-specific regulations. Refer to local, state, and federal (OSHA) requirements for additional information concerning the governing of occupational safety regarding Personal Fall Arrest Systems (PFAS).

WORKER CLASSIFICATIONS

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

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

Competent Person: "Competent person" means 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: "Authorized person" means 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 job site.

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

Purpose: The SAFEWAZE™ FSP, Extreme, and V-Line series of lanyards are designed to be used as part of a Personal Fall Arrest System (PFAS).

- A competent person shall train users on this equipment in accordance with OSHA and ANSI.
- Never exceed a free fall distance of 6 ft. A free fall of more than 6 ft could cause excessive arrest forces that could result in serious injury or death.
- All SAFEWAZE™ lanyards have a maximum capacity of 310 lbs including any tools, clothing, accessories, etc..., unless otherwise rated by SAFEWAZE™. **NOTE:** SAFEWAZE™ HW lanyards are rated to 400 lb maximum capacity.
- Anchorages for attachment of SAFEWAZE™ lanyards shall support a minimum of 5,000 lbs or be designed with a safety factor of two by a Qualified Person.
- All SAFEWAZE™ lanyards must IMMEDIATELY be removed from service if subjected to fall arrest forces.
- SAFEWAZE™ lanyards shall be inspected by the end user prior to each usage and by a Competent Person other than the user at least annually. These annual inspections shall be documented.

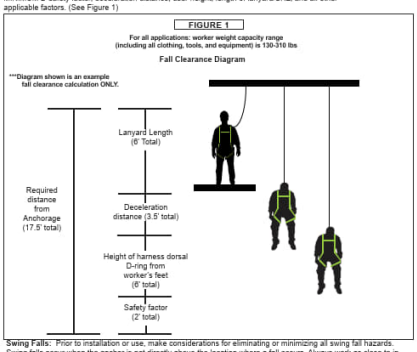
LIMITATIONS

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)

FIGURE 1

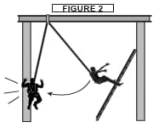
For all applications: worker weight capacity range (including all clothing, tools, and equipment) is 130-310 lbs

Fall Clearance Diagram



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)

FIGURE 2

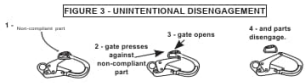


COMPATIBILITY OF CONNECTORS

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). 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.

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.

CONNECTION

Energy Absorbing Lanyards: Energy absorbing lanyards must be connected with the energy absorbing end of the lanyard connected to the Dorsal D-ring of the full body harness. The opposing end of the lanyard is to be connected to the anchorage connector.

Tie-Back Energy Absorbing Lanyards: Place the Tie-Back Energy Absorbing Lanyard over the qualified anchor, then open the gate of the Tie-Back hook and pass the lanyard through the hook. The lanyard may make more than one wrap around the anchor, but the lanyard may only be passed through the Tie-Back hook once. Pull lanyard hand tight around the anchor and attach the energy absorbing end of the lanyard to the dorsal D-ring of the harness.

Dual Leg Lanyards: Dual Leg Lanyards are designed for single person use only and must be connected with the energy absorbing end of the lanyard connected to the Dorsal D-ring of the full body harness. **Do not connect the energy absorbing end of the lanyard to any anchorage connector.** Attach one end of the Dual Leg Lanyard to the anchorage connector and the unused lanyard leg to an approved lanyard storage keeper on the full body harness. **⚠Warning: Never attach the unused leg of the back to the harness at any location other than a lanyard storage keeper.**

Soft Loop Energy Absorbing Lanyards: Place the soft loop of the Energy Absorbing Lanyard through the Dorsal D-ring of the full body harness, then pass the snap hook of the Energy Absorbing Lanyard through the soft loop an pull entire Energy Absorbing Lanyard through until tight on the D-ring.

Personal Energy Absorbers: Personal Energy Absorbers should be connected to the Dorsal D-ring of the full body harness first, then connected to the rest of the fall arrest system.

Connecting Personal Energy Absorbers and Energy Absorbing Lanyards to Fall Arresters: Personal Energy Absorbers or Energy Absorbing Lanyards less than 3 feet in length, and less than 2 feet in length for CSA, may be attached to a Fall Arrester. Energy Absorbing Lanyards must be connected with the energy absorbing end of the lanyard connected to the Dorsal D-ring of the full body harness. Personal Energy Absorbers must be connected to the Dorsal D-ring of the full body harness first, then connected to the Fall Arrester. Fall Arresters with permanently attached personal energy absorbers should be connected directly to the Dorsal D-ring of the full body harness.

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.

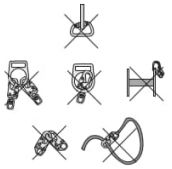
SAFEWAZE™ connectors (snap hooks and carabiners) are designed to be used only as specified in each product's user's instructions. See figure 4 for examples of inappropriate connections. Do not connect snap hooks and carabiners:

- 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). 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. Snap hooks marked with ANSI Z359.1-2007 or ANSI Z359.12 and are 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 Z359.1-2007 or 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 (see section 4.5).
- 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



PERFORMANCE

6 Foot Free Fall: Personal Energy Absorbers and Energy Absorbing Lanyards marked to ANSI Z359.13-09 and rated for a 6 foot free fall, have an average arrest force of 900 lbf (4 kN) or less, and a maximum deployment distance of 48 inches (1067 mm) when dynamically tested in accordance with the requirements of the ANSI Z359.13-09 standard.

12 Foot Free Fall: Personal Energy Absorbers and Energy Absorbing Lanyards marked to ANSI Z359.13-09 and rated for a 12 foot free fall, have an average arrest force of 1,350 lbf (6 kN) or less and a maximum deployment distance of 60 inches (1524 mm) when dynamically tested in accordance with the requirements of the ANSI Z359.13-09 standard.

ANSI Z359.1-07: Personal Energy Absorbers and Energy Absorbing Lanyards marked ANSI Z359.1-07 have a maximum arrest force of 900 lbf (4 kN) or less, and a maximum deployment distance of 42 inches (1067 mm) when dynamically tested in accordance with the requirements of the ANSI Z359.1-07 standard.

SPECIFIC LANYARD APPLICATIONS



Personal Fall Arrest: External Shock Lanyards and Internal Shock Lanyards, are the only SAFEWAZE™ lanyards approved for Personal Fall Arrest applications as part of a Personal Fall Arrest System (PFAS). The structure to which lanyard is attached must withstand loads applied in the directions permitted by the system of at least 5,000 lbs. Maximum allowable free fall is 6'. For Fall Arrest applications, the only allowable attachment point to harness for SAFEWAZE™ shock lanyards is the Dorsal D-ring.



Restraint: External Shock, Internal Shock, and Positioning Lanyards are authorized for use in Restraint applications. User must always account for fully deployed length of shock absorbing lanyards if utilized for restraint. The structure to which the lanyard is attached must withstand loads applied in the directions permitted by the system of at least 1,000 lbs. **NO** free fall is permitted. Restraint systems may only be used on surfaces with slopes up to 4 / 12 (vertical / horizontal). For Restraint applications, the allowable attachment points to harness are Dorsal D-ring, Chest D-ring, Side D-rings, and Shoulder D-rings.



Work Positioning: External Shock and Positioning Lanyards are authorized for use in Work Positioning applications. Work Positioning allows a worker to be supported during suspension while freeing both hands to conduct work operations. The structure to which lanyard is attached must withstand loads applied in the directions permitted by the system of at least 3,000 lbs. Maximum allowable free fall is 2'. For positioning applications, the allowable attachment points to harness are the Side D-rings.



Rescue/Confined Space: External Shock and Positioning Lanyards are authorized for use in Rescue/Confined Space applications. Rescue systems are utilized to safely recover a worker from a confined location or after exposure to a fall. Composition of rescue systems can vary based upon the type of rescue involved. The structure to which a lanyard is attached must withstand loads applied in the directions permitted by the system of at least 3,000 lbs. **NO** free fall is permitted. For rescue applications, the allowable attachment points to harness are Dorsal D-ring, Chest D-ring and Shoulder D-rings.

All above referenced applications have a worker weight capacity range of 310 lbs (including all clothing, tools, and equipment).

External Shock Lanyard Example	Internal Shock Lanyard Example	Positioning Lanyard Example	Personal Energy Absorber Example
			

⚠ WARNING ⚠

- 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 individuals ability to withstand fall arrest forces. Women who are pregnant, individuals considered minors must not use any SAFEWAZE™ equipment.
- Never alter any part of a lanyard or add/remove components. SAFEWAZE™ shall not be held responsible for injury or death due to tampering.
- Lanyards that are exposed to fall arrest forces MUST be IMMEDIATELY removed from service and destroyed.
- Failure to follow these instructions and warnings could result in serious injury or death in the event of a fall.
- A preplanned rescue procedure in the event of a fall is required. The rescue plan must be specific to the project. The rescue plan must allow for employees to rescue themselves, or to be promptly rescued by alternative means.
- Harnesses or connectors selected for use with any SAFEWAZE™ lanyard must compatible in size and configuration. User must ensure compatibility of snap hooks, carabiners and other connectors. Any connection which could allow disengagement must be eliminated. Snap hooks and carabiners must be self locking and self closing and must never be hooked to each other.
- 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 the existing and potential fall hazards they may be exposed to. The Competent Person must choose the fall protection equipment to be utilized.
- Do not misuse equipment.
- Equipment designated for fall protection must never be used to lift, hang, support or hoist tools or equipment unless specifically certified for such use.

INSPECTION

- SAFEWAZE™ Lanyards shall be inspected prior to each use by the user and at least annually by a Competent Person. Annual inspections shall be documented. Severity of conditions during use may necessitate increased frequency of documented inspections.
- Lanyards that fail inspection MUST be removed from service and destroyed immediately.
- All components of the Lanyards shall be inspected. Hardware inspection will include all Snap Hooks, D-rings, Web, Adjusters, and Rope or Cable (if applicable).
- Snap Hooks, D-rings, and Adjusters should have smooth surfaces with no indication of corrosion or damage that could negatively impact harness webbing.

Lanyard Webbing, Snap Hooks, D-rings, adjusters, and other components must be inspected for:

1. Excessive Wear	8. Mold or Mildew
2. Cuts	9. Broken Stitches
3. Abrasions	10. Alterations and Additions
4. Undue Stretching	11. Rust, Oxidation, or Corrosion
5. Chemical Exposure	12. Legibility of Labeling
6. Burns or Excessive Heat	13. Deformation
7. Welding Spatter	14. Discoloration or Abraded Appearance

⚠ IF ANY OF THESE CONDITIONS EXIST LANYARD MUST BE REMOVED FROM SERVICE ⚠

MAINTENANCE & STORAGE

SAFEWAZE™ Lanyards can be cleaned with water and mild soap and hung to air dry. Do not use chemical cleaners, harsh detergents, or solvents. Do not dry harness with heat.

Hardware can be wiped off with a clean, dry cloth.

SAFEWAZE™ Lanyards should be stored in a cool, dry, and clean environment. Do not store in direct sunlight or where chemical vapors could come in contact with the harness.

WARRANTY

SAFEWAZE™ warrants its products are free from defects in materials and construction under normal use and service. Liability is not accepted for abuse, modification, improper use, destructive activity and contaminated exposure.

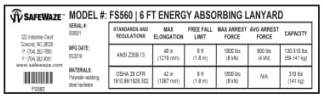
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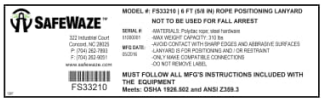
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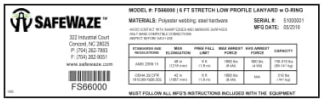
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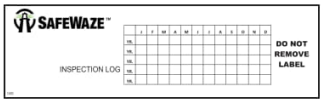












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