FALL SAFE®

USER INSTRUCTIONS FOR
7000 SERIES SHOCK-ABSORBING LANYARDS

Complies with the current ANSI Z359.1-2007 and all applicable OSHA regulations and requirements.



Skyline™



BigBoy™



BlackMAX™



QuickStop™



FatPack™

SureWerx®

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USER INSTRUCTIONS
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FALL SAFE®

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USER INSTRUCTIONS - FALL SAFE SHOCK-ABSORBING LANYARDS

User Instruction Manual Shock-Absorbing Lanyards
This manual is intended to meet the Manufacturer's Instructions as required by the current ANSI Z359.1(2007) ,and should used as part of an employee training program as required by OSHA.

WARNING: This product is one part of a personal fall arrest, restraint, work positioning, personnel riding, climbing, or rescue system. Without the other necessary components in such sub-systems the lanyard itself serves no useful purpose. The user must follow the manufacturer's instructions for each component of the system. These instructions must be provided to the user before using this product and retained for ready reference by the user. The user must read, understand (or have explained), and heed all instructions, labels, markings and warnings supplied with this product and with those products intended for use in association with it before using this equipment. Manufacturer's instructions must be followed for proper use and maintenance of this equipment. National standards and state, provincial and federal laws require the user to be trained before using this product. This manual can be used as part of a such a user safety-training program that is appropriate for the user's occupation.

IMPORTANT: Alterations or misuse of this product or failure to follow instructions may result in serious injury or death. If you have questions on the use, care, or suitability of this equipment for your application, contact Fall Safe for information.

DESCRIPTION

Unless otherwise noted all Fall Safe lanyards are manufactured using certified 9600 pound (4355kg) rated TattleTale® polyester webbing for superior inspectability and chemical and acidic tolerance. The maximum arresting force (MAF) of Fall Safe energy-absorbing lanyards and components is 900 pounds (The BlackMax™ lanyard MAF will not exceed 900lbs in free falls of 6' or 1800 lbs in free falls greater than 6'. QuickStop™ lanyards will not exceed 1800 lbs MAF. BigBoy™ lanyards will not exceed 1800 lbs MAF) when dynamically tested in accordance with the ANSI Z359.1-2007 standard.

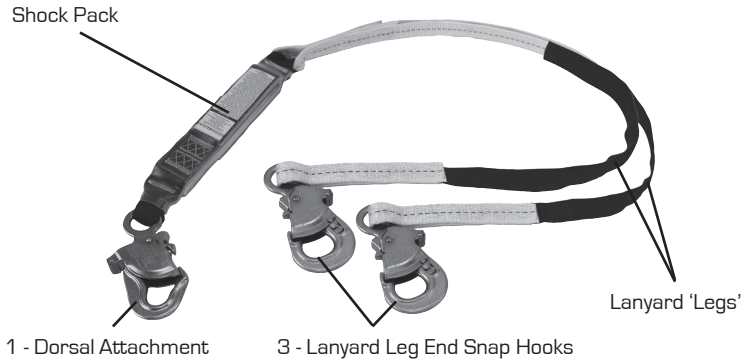


Figure 1

The intended purpose of each element in the Lanyard is given in this subsection. For references see inspection diagram Figure 1.

A. ATTACHMENT ELEMENTS (SNAPHOOKS & WEB LOOPS)

1) DORSAL ATTACHMENT (QTY 1)
Snap hook for attachment to the dorsal D-ring, also called back D-ring, present on all Harnesses. Shock-absorbing lanyards should be attached ONLY to harness dorsal D-ring (snap hook may be replaced with web loop).

2) LANYARD LEG END SNAP HOOK, SINGLE LEG LANYARD
For attachment to an anchorage element.

3) LANYARD LEG END SNAP HOOK, TWIN (TWO LEG LANYARD)
Snap hook on the end of each lanyard leg, for attachment to an anchorage element.

B. BUCKLES AND ADJUSTERS

1) LANYARD LENGTH ADJUSTERS
Buckle placed in the leg of a lanyard used to adjust the length of the lanyard.

C. LANYARD LEG MATERIALS

1) 1" TattleTale® WEB
The standard material on Fall Safe lanyards, a versatile polyester web with bright yellow jacket covering a "strength" core of bright red "tattletale" inner threads that make field inspection for cuts and abrasion easier and much more effective. Rated 9600 lb. (4355Kg) breaking strength.

2) ELASTIC WEB
A 5000 lb (2268kg) web that will stretch to the standard 6' (1.8m) lanyard length on impact, but otherwise stays contracted at a 4-1/2' (1.4m) overall lanyard length. The reduced length of the lanyard reduces the possibility of the user accidentally tripping on the slack lanyard leg when walking or climbing.

3) NOMEX®/KEVLAR® WEB
Kevlar® fiber woven into 1" (25mm) web, coated with a Nomex® cover to protect from UV exposure.

4) 1/4" (6mm) COATED GALVANIZED CABLE
Constructed of vinyl coated 7x19 galvanized aircraft cable, for welders and workers in environments with welding spatter, abrasion or sharp edges that could damage fiber webbing.

5) POLYURETHANE COATED LANYARD LEGS
Resist dirty and contaminated environments.

6) 1/2" (13mm) POLYESTER KERNMANTLE ROPE
Provide durability and resists "hockeling" as exhibited in 3-strand rope.

Nylon Rope Before the advent of shock packs for lanyards nylon rope was used because its elastic qualities provided some shock absorption. This is not a desirable material today because when nylon rope stretches it will extend the overall length of a lanyard in the case of a fall. It also has relatively poor resistance to abrasion, will "birds nest" when twisted, and absorbs water and becomes swollen and heavy in wet conditions.

D. OPTIONS

The following is a partial list of commonly used options and accessories (some options may not be available on all lanyards):

- STEELHEAD™ Tieback hooks, for leg ends, allows tieback around an anchorage back onto a lanyard leg.
- Wear sleeves for web protection in harsh environments
- Web loops between shock pack and lanyard legs, permits replacement of worn lanyard legs.
- Kevlar®/Nomex® webbing
- High visibility webbing
- S/A Lanyard attached directly to D-ring or attachment element
- Lanyard Keepers (secures snap hook of lanyard out of the way when not in use)

LANYARD APPLICATIONS & SELECTION

A. PURPOSE:
Fall SAfe lanyards are used as one component in a personal fall arrest system (PFAS). They may also be utilized in restraint, work positioning, or rescue systems when the appropriate attachments are present. Lanyards described in this manual meet, ANSI Z359.1 and OSHA requirements (except where noted). These instructions, and markings borne by the lanyards, fulfill the instruction and marking requirements of those standards and regulations. This equipment is specifically designed to dissipate fall energy and limit the fall arrest forces that are transferred to the body.

1) PERSONAL FALL ARREST:
The shock-absorbing lanyard is used as a component of a personal fall arrest system. Personal fall arrest systems typically include a full body harness, a connecting subsystem (energy-absorbing lanyard) and an anchorage connector. Maximum arresting force must not exceed 900 lbs (4kN) for ANSI Z359.1-(07) and 1,800 lbs (8kN) for OSHA.

2) WORK POSITIONING:
A lanyard is used as a component of a work positioning system to support the user at a work position (stabilize and partially support the user at an elevated work location and allow free use of both hands). Work positioning systems typically include a full body harness, positioning lanyard connected to an anchorage or anchorage connector, and a back-up personal fall arrest system, including a rope grab, S/A lanyard, or SRL.

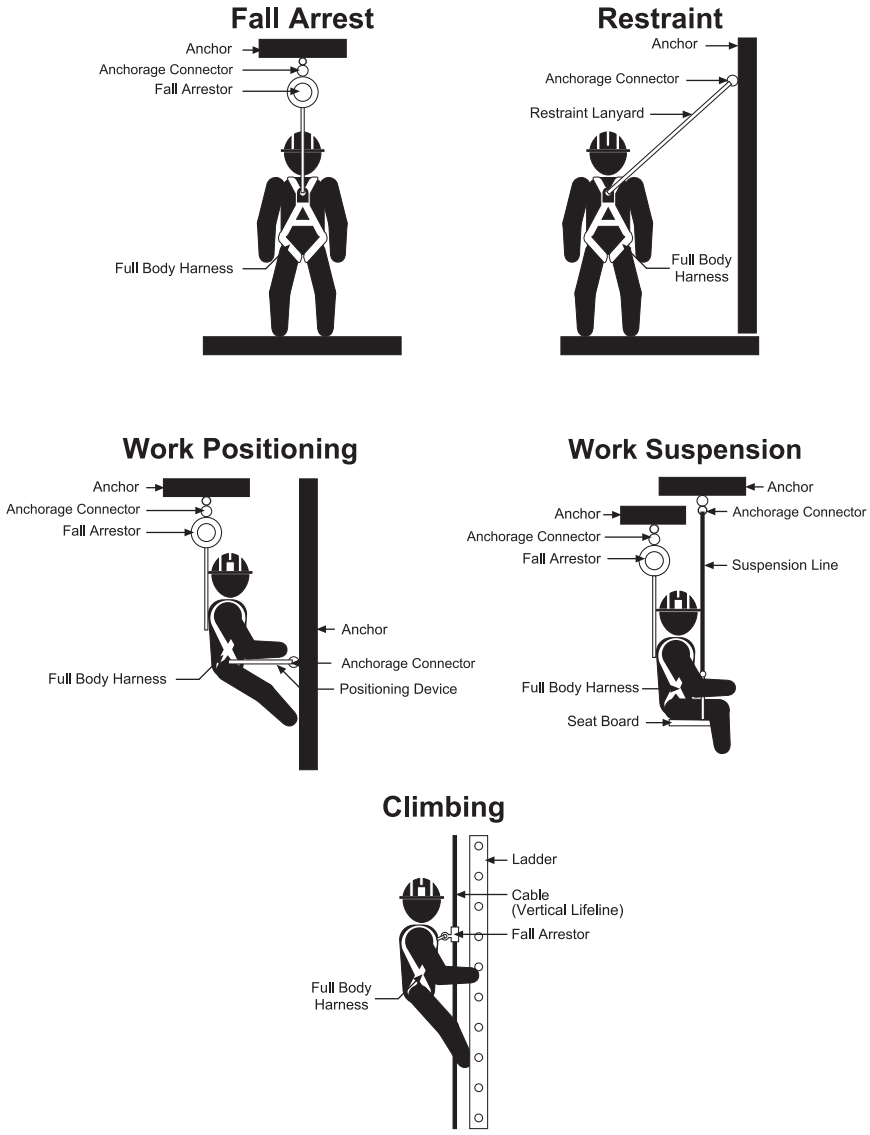


Figure 2

3) RESTRAINT:

A lanyard is used as a component of a restraint system to prevent the user from reaching a fall hazard (restricting the user's movement so as to prevent him from reaching a location where a fall hazard exists). Restraint systems typically include a full body harness, a lanyard or restraint line, and an anchorage or anchorage connection.

4) RESCUE:

The lanyard is used as a component of a rescue system. Rescue systems are configured depending on the type of rescue.

B. USE LIMITATIONS:

Consider the following application limitations before using this equipment:

1) CAPACITY:

These lanyards are designed for use by persons with a combined weight (clothing, tools, etc.) of no more than 310 lbs (140kg) BigBoy™ lanyards are designed for users up to 440 lbs (200kg) and comply with OSHA standards but are outside the scope of ANSI Z359.1- 2007. Persons with muscular, skeletal, or other physical disorders should consult a physician before using. Pregnant women and minors must never use the harness. Increasing age and diminished physical fitness may reduce a person's ability to withstand shock loads during fall arrest or prolonged suspension. Consult a physician if there is any question about a users physical ability to safely use this product to arrest a fall or remain suspended. Models are available for persons with heavier combined weights (May also affect the selection of other components of a PFAS).

2) FREE FALL:

Personal fall arrest systems used with this equipment must be rigged to limit the free fall to a maximum of 6' (1.8m) per ANSI Z359.1-2007. OSHA also requires free falls to be limited to 6' (1.8m) or less and not to contact lower levels. In certain scenarios free falls greater than 6' (1.8m) are allowed provided the shock-absorbing lanyard is designed for such applications. The BlackMax™ from Fall Safe is specifically designed for free falls up to 12' (3.6m) with persons weighing up to 310 lbs. (140kg). Restraint systems must be rigged so that no vertical free fall is possible. Work positioning systems must be rigged so that free fall is limited to 2' (.6m) or less. Rescue systems must be rigged so that no vertical free fall is possible. See subsystem manufacturer's instructions for more information.

3) FALL CLEARANCE:

There must be sufficient clearance below the user to arrest a fall before the user strikes the ground or other obstruction. The clearance required is dependent on the following factors (see Figure 3. for reference):

- Elevation of anchorage
- Connecting subsystem length
- Deceleration distance
- Free fall distance
- Worker height
- Movement of harness attachment element

CALCULATE THE FALL CLEARANCE!

1. Determine the lanyard length: Usually 6' (1.8m)

2. Add the maximum shock absorber extension: Limited to 42" (3.5' [1m]) by regulations, so [6' + 3.5' = 9.5'] (1.8m + 1m = 2.8m)

3. Add the height of the anchorage above the user's feet: If the anchorage is at shoulder height that is about 5', [6' + 3.5' + 5' = 14.5']
(1.8m + 1m + 1.5m = 4.3m)

4. A Factor of Safety should be added: Fall Safe recommends 1.5'-3' (.4-.9m) depending on system configuration. Consult with a competent person to determine the appropriate factor of safety distance.

*Note : Product Exceptions

BlackMax™ Series: The BlackMax™ series of shock-absorbing lanyards are designed for free fall's greater than 6' (1.8m). Lanyard elongation will not exceed 30" (.7m) in free falls of 6' (1.8m) or less. Lanyard elongation will not exceed 42" (1m) in free falls greater than 6' (1.8m).
QuickStop™ Series: QuickStop™ lanyards are manufactured in length's of 2.5' (.7m) or 3' (.9m). Lanyard elongation will not exceed 42" (.3m).

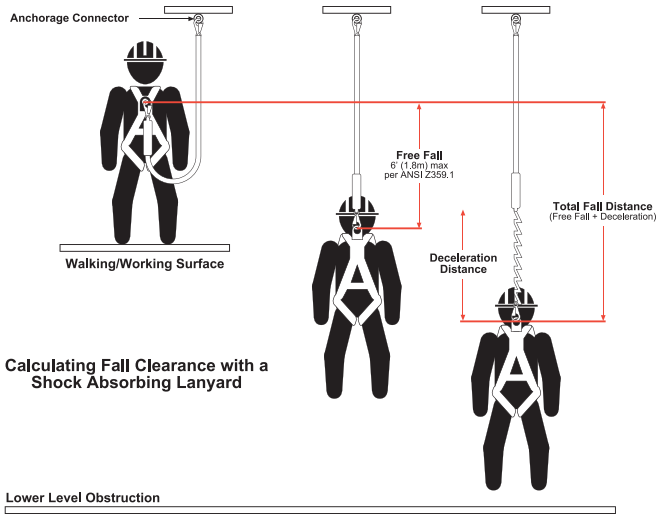


Figure 3

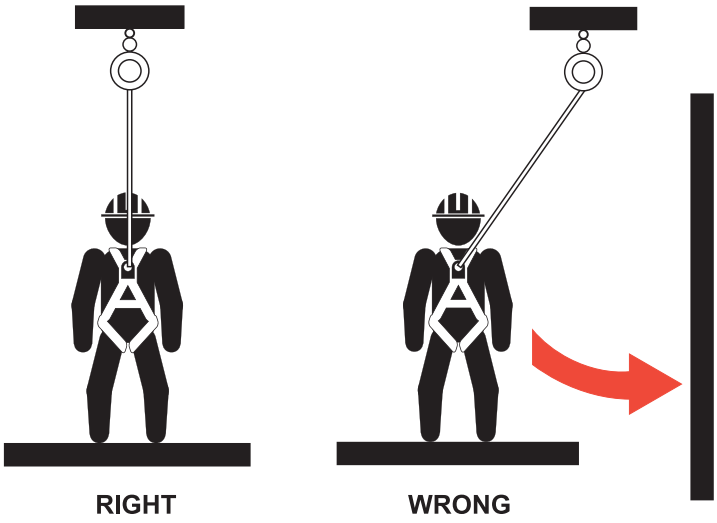


Figure 4

The 16.5' (5m) is the total clearance distance required below the anchorage point, and the distance required below the walking/working surface is 11.5' (3.5m). For anchorage points that are located below the position of the dorsal (back) D-ring consider use of an adjustablelength lanyard to limit free-fall to less than 6' (1.8m), then re-calculate the fall clearance to ensure that the lanyard can be used safely. The standard adjustable-length lanyard can be adjusted from a 4.3' (1.3m) to a 6' (1.8) length.

4) SWING PENDULUM FALLS:

Swing falls occur when the anchorage point is not directly above the point where a fall occurs. The force of striking an object in a swing fall may cause serious injury or death. Minimize swing falls by working as close to the anchorage point as possible (see Figure 4.). Do not permit a swing fall if injury could occur. Swing falls will significantly increase the clearance required when a self-retracting lifeline or other variable length connecting subsystem is used.

5) CHEMICAL HAZARDS:

Acidic, alkaline, or other environments with harsh substances may damage the webbing and hardware elements of this harness. Nylon is more resistant to degradation by alkaline or neutral pH environments. Polyester is more resistant to attack by acids. If working in a chemically aggressive environment, consult Fall Safet to determine which harness material is better for your specific conditions. When working in the presence of chemicals, more frequent inspection of the lanyard is required.

6) HEAT:
Do not use lanyard in environments with temperatures greater than 185°F (85°C). Protect the lanyard when used near welding, metal cutting, or other heat producing activities. Sparks may damage the lanyard webbing and reduce its strength. For high temperature applications (up to 800°F [426ºC]) consider use of Kevlar®/ Nomex® or polyurethane coated webbing.
IMPORTANT: When working with tools, materials, or in high temperature environments, ensure that associated fall protection equipment can withstand high temperatures, or provide protection for those items.

7) CORROSION:
Do not expose lanyard to corrosive environments for prolonged periods. Organic substances and salt water are particularly corrosive to metal parts. When working in a corrosive environment more frequent inspection, cleaning, and drying of the lanyard is required. See Care of the Lanyard and Inspection sections for cleaning and inspection details.
8) ELECTRICAL HAZARDS:
Use extreme caution when working near energized electrical sources. Metal hardware on the lanyard and on other components connected to it will conduct electric current. Maintain a safe working distance [preferably at least 10' (3m)] from electrical hazards.
9) MOVING MACHINERY:
When working near moving machinery parts (e.g. conveyors, rotating shafts, presses, etc.), make sure that the lanyard legs are secured. Maintain a safe working distance from machinery that could entangle clothing, the lanyard, the harness, or other components connected to it.
10) SHARP EDGES AND ABRASIVE SURFACES:
Do not expose lanyard leg straps to sharp edges or abrasive surfaces that could cut, tear or abrade and weaken the fibers. If working around sharp edges and abrasive surfaces is unavoidable use heavy padding or other protective barriers to prevent direct contact.
11) WEAR AND DETERIORATION:
Any lanyard which shows signs of excessive wear, deterioration or aging, must be removed from use and marked **"UNUSABLE"** until destroyed. See detailed inspection procedures.
12) IMPACT FORCES:
Any lanyard that has been subjected to the forces of arresting a fall must be immediately removed from service and marked as **"UNUSABLE"** until destroyed. Most Fall Safe lanyards have transparent shock pack covers that facilitate inspection for fall loading.
13) 100% TIE-OFF APPLICATIONS:
When using dual ("Y") lanyard configurations, care should be observed while transitioning between anchor point's. A single point anchor must be maintained at all times and dual anchor point tie off should only be maintained for the limited time needed to make the transition to the new anchor point. Anchor elevation should be as high as possible during transition. Never attach unused lanyard legs to harness below chest strap level unless lanyard stow points are specifically designed for such.
14) OTHER USES:
Shock-absorbing lanyards may be used for fall restraint as an additional factor of safety. Shock-absorbing lanyards are not designed for work positioning. Using for positioning may cause premature deployment of the energy absorber.

SYSTEMS REQUIREMENTS

A. COMPATIBILITY OF SYSTEM PARTS

1) COMPATIBILITY OF COMPONENTS AND SUBSYSTEMS:
Fall Safe lanyards are designed to be used with Fall Safe approved components and connecting subsystems. Use of the lanyard with products made by others should be evaluated by a competent person to ensure compatibility of components and hardware. Connecting subsystems must be suitable for use in the application (e.g. fall arrest or restraint). Fall Safe manufactures a line of connecting subsystems for most applications. Contact Fall Safe for further information. Refer to the manufacturer's instructions supplied with the component or connecting subsystemto determine suitability.

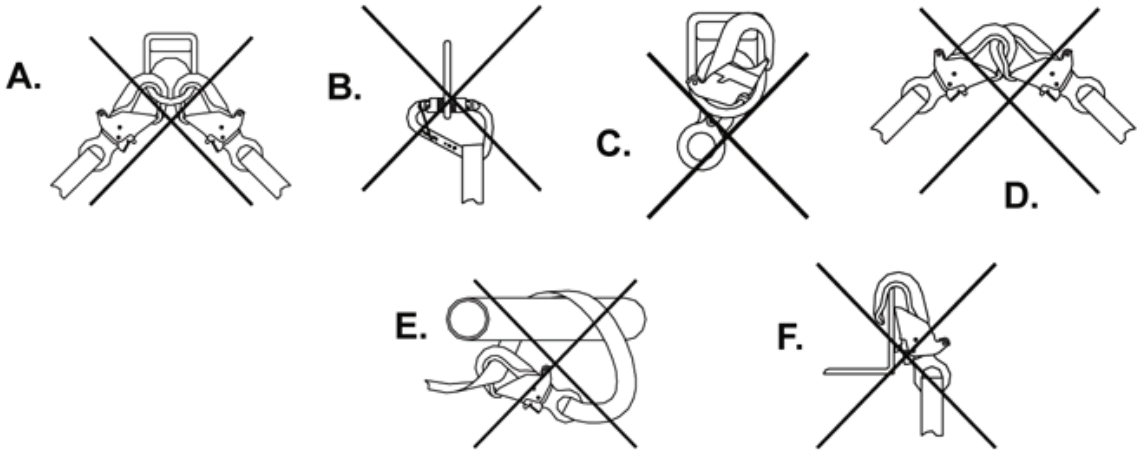


Figure 5

For most fall arrest applications, the maximum free fall distance must not exceed 6' (1.8m) unless lanyard is designed for free falls greater than 6' (1.8m). Contact Fall Safe with any questions regarding compatibility of equipment used with the lanyard.

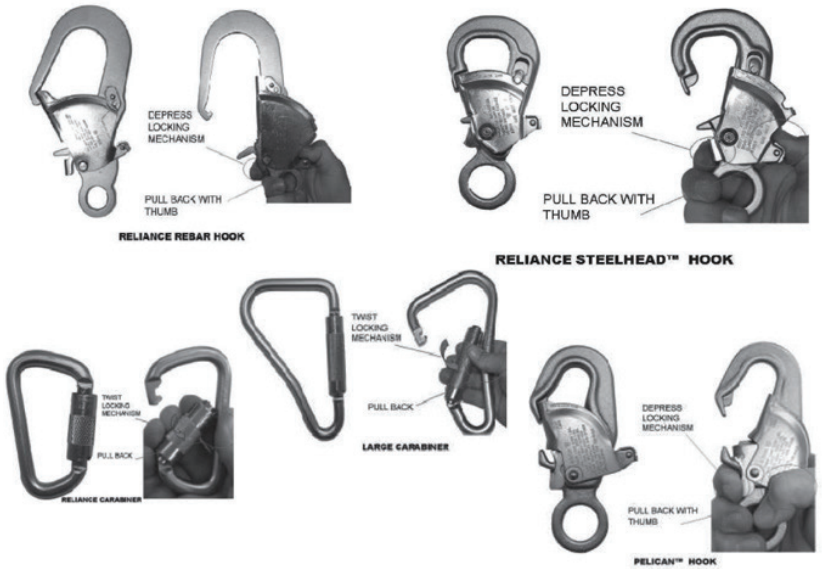
2) COMPATIBILITY OF CONNECTORS
Connectors, such as D-rings, snap hooks, and carabiners, must be rated at 5,000 lb. (22 kN) minimum breaking strength and comply with ANSI Z359.1-2007. Fall Safe connectors meet these requirements. Connecting hardware must be compatible in size, shape, and strength. Non-compatible connectors may accidentally disengage ("rollout") or false engage. Always verify that the connecting snap hook or carabiner and the D-ring on the harness or anchorage connector is compatible. Lanyards equipped with web loops should be connected directly to the harness dorsal D-ring. Use only self-closing, self-locking snap hooks and carabiners with the harness unless equipped with web loop. Some harness models have web loop connection points. Do not use snap hooks to connect to web loops unless the snap hook complies with ANSI Z359.1-2007. A self-locking carabiner may also be used to connect to a web loop. Ensure the carabiner cannot crossgate load (load against the gate rather than along the backbone of the carabiner). Some lanyards are designed to choke onto a web loop to provide a compatible connection. Connecting subsystems (self-retracting lifeline, lanyard, rope grab and lifeline, cable grab, etc.) must be suitable for your application.

EXAMPLES OF INAPPROPRIATE CONNECTIONS (FIGURE 5.)

A. To a D-ring to which another connector is attached, unless using the QuickStop™ style lanyard that is equipped with the Steelhead™ hook. Fall Safe authorizes the connection of 2 Steelhead™ hooks into a single D-ring.
B. In a manner that would result in a load on the gate.
C. In a false engagement, where features that protrude from the snap hook or carabiner catch on the anchor and seem to be fully engaged to the anchor point.(Fall Safe has designed the width of the head and gates of Fall Safe snap hooks to prevent this issue in most D-rings.)
D. To each other.
E. Directly to webbing or rope lanyard or tie-back (unless the manufacturer's instructions for both the lanyard and connector specifically allow such a connection. See Fall Safe Steelhead™ snap for this purpose). Products that allow tie back are labeled as such. Carabiners may also be used to connect directly to webbing.
F. To any object which is shaped or dimensioned so that the snap hook or carabiner will not close and lock, or that could cause rollout should a fall occur.

3) ANCHORAGES AND ANCHORAGE CONNECTORS

Anchorages for personal fall arrest systems must have a strength capable of supporting a static load, applied in directions permitted by the system, of at least: (a) 3,600 lb. (16 kN) when certification exists, or (b) 5,000 lb. (22.2 kN) in the absence of certification. When more than one personal fall arrest system is attached to an anchorage, the anchorage strengths set forth in (a) and (b) must be multiplied by the number of systems attached to the anchorage. This requirement is consistent with OSHA requirements under 29 CFR 1910 & 1926. Anchorages for work positioning or restraint must have strength capable of supporting a static load, applied in the directions permitted by the system of at least 3,000 lbs. (13.3kN), or twice the potential impact load as ascertained by a qualified person, whichever is greater. See OSHA 1926.502. When more than one work positioning system is attached to a rigid anchorage, the strengths stated above must be multiplied by the number of work positioning systems attached to the anchorage. Work positioning anchorages must be separate anchor point than the anchorage connection point used for the fall arrest system.



USING THE LANYARD

A. INSPECT PRIOR TO USE:
Before the use of this lanyard, inspect the lanyard and all components of the PFAS:
1) Inspect the lanyard to verify that it is in serviceable condition. Examine every inch of the lanyard straps for severe wear, cuts, burns, frayed edges, abrasion, or other damage. Examine stitching for any pulled, loose, or torn stitches. See Inspection section for details. **Do not use lanyard if inspection reveals an unsafe condition. Always err on the side of safety.**

B. CONNECTING THE LANYARD TO HARNESS
1) WARNING! THE SHOCK PACK END MUST BE CONNECTED TO THE DORSAL D-RING FOR PROPER FUNCTION. Connection to dorsal D-ring may be accomplished with the integral snap hook, carabiner, or web loop.
2) Verify that lanyard connection is secure and all snap hook and carabiner gates are fully closed and locked.
3) Note: QuickStop™ Lanyard- QuickStop™ lanyards come standard with Steelhead snap hooks on the shock pack. Fall Safe authorizes that 2 lanyards may be connected to a single back D-ring.

C. MAKING THE CONNECTION
Attaching a Tie-Back Lanyard. Use ONLY a lanyard equipped with Fall Safe STEELHEAD™ tie-back hooks when attaching the snap directly back to the lanyard. Place the tie-back lanyard over the anchoring structure, giving consideration to the effect that sharp edges or narrow radius could have on the anchorage strength. Ensure that the lanyard is not twisted and that the Steelhead™ snap is positioned so as not to load the gate on the structure.

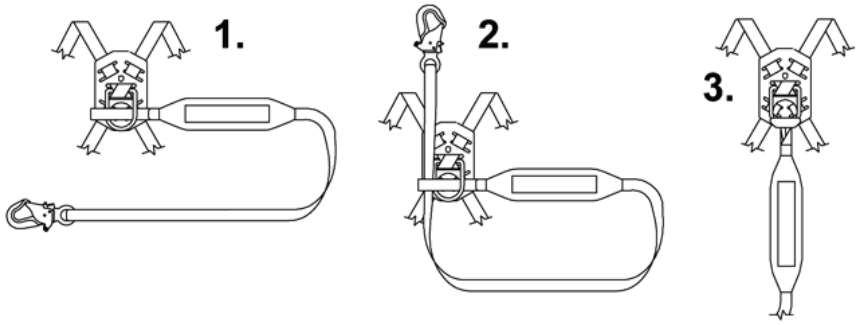


Figure 8

Attaching a Lanyard with a Web Loop Connection (Figure 8):
1) Insert the energy-absorbing lanyard web trough the harness web loop or D-ring.
2) Insert the opposite end of the energy-absorbing lanyard through the connecting web loop.
3) Pull the attached energy-absorbing lanyard through the connecting web loop to secure. As an option, the web loop may be connected to the cross bar of the dorsal d-ring to allow additional snap hook connection to the d-ring portion.

CONNECTING TO A ROPE GRAB (FALL ARRESTOR):

NEVER connect a 6' (1.8m) lanyard to a rope grab. In all cases ensure that the length of the energy absorber or energy-absorbing lanyard does not exceed the maximum connector length recommended by the rope grab manufacturer or 3' (.9m) maximum per ANSI Z359.1 It is recommended that the lanyard leg end and not the shock absorber end be connected to the rope grab. This recommendation is intended to eliminate the possibility of interference with the operation of the rope grab by the energy absorber "pack". Some rope grabs may be supplied with a permanently attached energy-absorbing lanyard.

CONNECTING TO A SRL (Self-Retracting Lifeline)

NEVER connect an energy-absorbing lanyard or other energy absorber to a self-retracting lifeline. There are some very special applications where such a combination may be possible, but such connections should be made ONLY after consultation with Fall Safe.

D. PLAN SCOPE OF WORK TO BE PERFORMED (JOB SAFETY TASK ANALYSIS)

Plan procedures to safely perform tasks when using any components of a PFAS. Some considerations are listed below (see APPLICATIONS, item B. USE LIMITATIONS section for additional details);

1) Anchorage Selection. In addition to strength considerations, the anchorage should be rigged to prevent a fall onto the structure when considering 2) and 4) below.

2) Swing pendulum fall

3) Rough surfaces or unprotected sharp edges that could cut or abrade the equipment if unprotected.

4) Workplace geometry

a) Free fall distance - Limited to 6' (1.8m) by OSHA and ANSI Z359.1 with the Skyline™, BigBoy™ and QuickStop™ series shock-absorbing lanyards. Blackmax series allows for free fall's up to 12' (3.6m).

b) Deceleration distance - Maximum 3.5 ft (1m) (See B. Use Limitations).

c) Total fall distance - The sum of the free fall distance and deceleration distance plus a safety margin.

5) Rescue and Evacuation - The user and employer must have a rescue plan in place, training in its use, and the means to implement it at hand. The employer must have the ability to perform a rescue quickly and safely. Do not plan to rely on others for rescue because prolonged suspension can cause bodily injury or death.

6) Always stow your unused lanyard leg in the provided lanyard keeper at chest level. Never stow unused lanyards at a level below your chest strap.

CARE OF THE LANYARD

A. Clean lanyard with lukewarm water and a mild laundry detergent solution. Do not use bleach or bleach solutions. Dry hardware with a clean, dry cloth, and hang to air dry. Do not force wash or dry with heat in laundry machines. Do not attempt to disassemble the unit. A buildup of dirt, solvents, paint, etc. may prevent the lanyard from working properly, and in severe cases degrade the webbing to a point where it weakens and should be removed from service. More information on cleaning is available from Fall Safe. If you have questions concerning the condition of your lanyard, or have any doubt about putting it into service contact Fall Safe.

B. Store lanyards in a cool, dry, clean environment out of direct sunlight. Avoid areas where heat, oil, chemicals or their vapors may exist. Thoroughly inspect the full body harness after extended storage. Good safety practice requires separate storage of unusable product from usable product.

INSPECTIONS

A. INSPECTION FREQUENCY

1) The lanyard must be inspected by the user prior to each use.
2) A competent person other than the user must inspect the lanyard thoroughly at least annually. **Extreme working conditions (harsh environments that might degrade the webbing or corrode the hardware, prolonged use, etc.) may require increasing the frequency of inspections.** Record the results of each formal inspection in the inspection and maintenance log as described below.

B. INSPECTION PROCEDURE

1) Inspect all webbing (straps) and stitching for cuts, fraying, pulled or broken threads, abrasion, excessive wear, altered or missing straps, burns, and heat and chemical degradation. Broken stitches or separation of webbing inside the lanyard shock pack could indicate that the lanyard has been impact loaded and must be removed from service. This should be readily observable through the clear cover of the shock-absorbing pack. Observe the "TattleTale®" carrier ply webbing for surface areas with the brightly contrasting red colored yarns (or sometimes other brightly contrasting colors, depending the color of the outside web), indicating that excessive abrasion has occurred. For more details on the TattleTale® webbing as an inspection tool, contact Fall Safe.
2) Inspect all metallic hardware (i.e. D-rings, adjuster/buckles) for deformation, fractures, cracks, corrosion, deep pitting, burrs, sharp edges, cuts, deep nicks, missing or loose parts, improper function, and evidence of excessive heat, chemical, or electrical exposures. Ensure snap hook gates work, close, and lock.
3) All labels should be present and fully legible. See figures of labels on pages 14-17. Record the inspection on the label area by punching a hole or marking. The back page of this booklet contains an independent inspection log that should be maintained in conjunction with the inspection label on the harness to ensure that 1) the inspections have been performed on a regularly scheduled basis and 2) the inspection log will not become lost or misplaced. Fall Safe will be happy to provide additional forms or suggest other methods of electronically documenting this process.
4) Verify each component or subsystem of the complete PFAS are inspected according with the associated manufacturer's instructions.
5) If inspection reveals a defective condition or improper maintenance remove unit from service immediately and destroy or label it as **"UNUSABLE"** until formal inspection by competent person. Defects, damage, excessive wear and/or aging are generally not repairable. Only Fall Safe or parties with written authorization from Fall Safe may make repairs to the lanyard.

LABELING

The illustrations on the following pages are representations of the actual labels that appear on Fall Safe lanyards.

The **Lanyard Warnings Label** contains general warnings and is intended to be an assistance to the user, but is not a substitute for user training in the use of the product and the detailed warnings, cautions and instructions that are contained in this booklet.

The **Lanyard Specifications Label** contains information that is specific to the particular lanyard. It will identify the Fall Safe part number, lanyard length and material, the date of manufacture, and the Lanyard's unique serial number in both text and UPC barcode form. The barcodes are intended to facilitate the issuance, inspection and logging procedures for those users equipped to utilize bar codes.

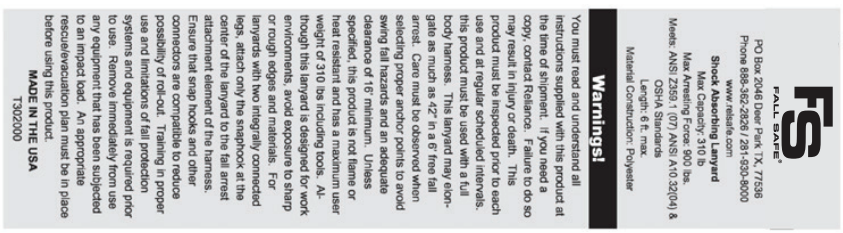
All the information on the Lanyard Specifications Label is important for the safe use of this product, so the user should ensure that the label has not been removed and that the descriptions it contains match the task and environment in which the product is intended to be used. The Lanyard inspection log is found on the Lanyard Specifications Label. The log can be marked with an indelible marker or punched on the occasion of inspections. A Competent Person will verify this label at least annually, more often in the case of heavy use.



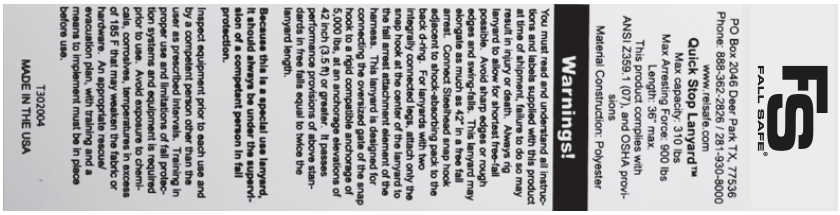
Specifications



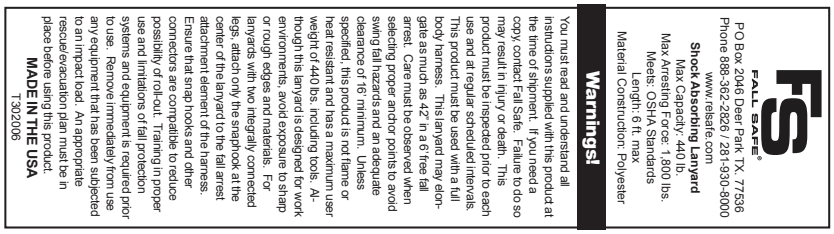
Steelhead™ Warnings Label
(Located on shock-absorbing lanyard)



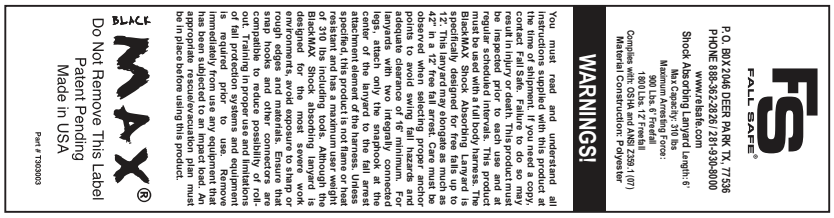
ANSI S/A Lanyard Warnings Label
(Located on shock pack, under protective PVC sleeve)



QuickStop™ Warnings Label
(Located on shock pack, under protective PVC sleeve)



BigBoy™ Lanyard Warnings Label
(Located on shock pack, under protective PVC sleeve)



BlackMAX™ Warnings Label
(Located on shock pack, under protective PVC sleeve)

PRODUCT-SPECIFIC LABELING FOR ANSI Z359.13-2009 SHOCK-ABSORBING LANYARDS

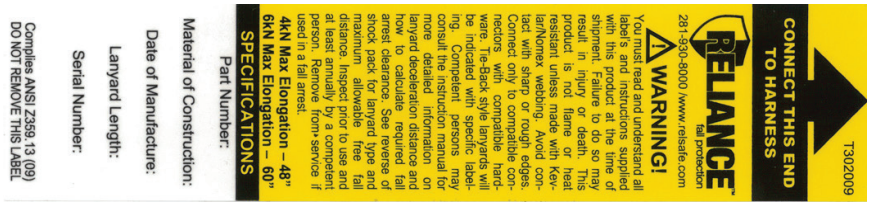
The label below must be attached to all ANSI Z359.13 6 Foot Free Fall Shock Absorbers:



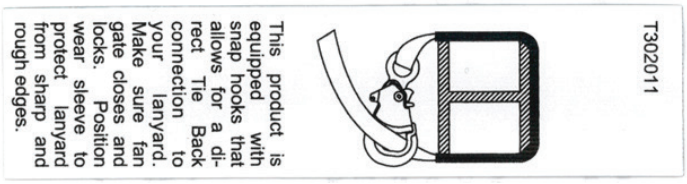
The label below must be attached to all ANSI Z359.13 12 Foot Free Fall Shock Absorbers



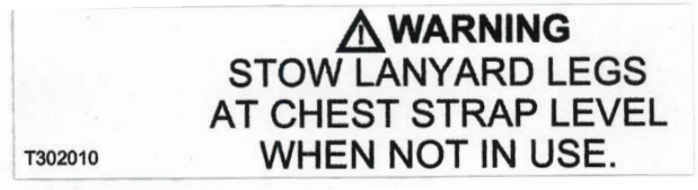
The label below must be attached to all ANSI Z359.13 Shock-Absorbing Lanyards



The label below must be attached to all ANSI Z359.13 Shock Absorbers with Tie-Back hooks



The label below must be attached to all ANSI Z359.13 Twin Leg Shock Absorbers



ANSI Z359.13-2009 SHOCK-ABSORBING LANYARDS

COMPATIBILITY OF CONNECTORS

Connectors (hooks, carabiners, and D-rings) must be capable of supporting a tensile load of at least 5,000 lbs. (22.2 kN). Per ANSI Z359.1, connector gates must be able to withstand a load of 3,600 lbs (16 kN): the face of the gate must withstand 3,600 lbs (16 kN); the side of the gate must withstand 3,600 lbs (16kN), and the minor axis of a snap hook or carabiner must withstand 3,600 lbs (16 kN), except for those with captive eyes (see Figure 5, Page 13).

PLAN

Plan your fall protection system before starting your work. Consider all factors that affect your system before, during, and after a fall. Aspects to consider include the following :

FALL CLEARANCE

When estimating the required Fall Clearance for Z359.13 Shock-Absorbing Lanyards in the manner described on Page 9, the Deployment Distances from the following tables (depending upon free-fall distance) should be used as the Shock Absorber Deceleration Distance (DD).

Deployment Distance for 6' Personal Energy Absorber (Inches)

User Weight in Pounds Including Clothing and	1'	2'	3'	4'	5'	6'
310	7	15	22	30	37	45
300	7	14	22	29	36	43
290	7	14	21	28	35	42
280	7	13	20	27	34	40
270	7	13	19	26	32	39
260	6	12	19	25	31	37
250	6	12	18	24	30	36
240	6	12	17	23	29	35
230	6	11	17	22	28	33
220	5	11	16	21	26	32
200	5	10	14	19	24	29
190	5	9	14	18	23	27
180	4	9	13	17	22	26
170	4	8	12	16	20	24
160	4	8	12	15	19	23
150	4	7	11	14	18	22
140	3	7	10	13	17	20
130	3	6	9	12	16	19

Free Fall Distance (Feet)

Deployment Distance for 12' Free Fall Personal Energy Absorber (Inches)

User Weight in Pounds Including Clothing and Tools	6'	7'	8'	9'	10'	11'	12'
310	28	33	37	42	47	52	56
300	27	32	36	41	45	50	54
290	26	31	35	39	44	48	53
280	25	30	34	38	42	47	51
270	24	29	33	37	41	45	49
260	24	28	31	35	39	43	47
250	23	26	30	34	38	42	45
240	22	25	29	33	36	40	44
230	21	24	28	31	35	38	42
220	20	23	27	30	33	37	40
200	18	21	24	27	30	33	36
190	17	20	23	26	29	32	34
180	16	19	22	24	27	30	33
170	15	18	21	23	26	28	31
160	15	17	19	22	24	27	29
150	14	16	18	20	23	25	27
140	13	15	17	19	21	23	25
130	12	14	16	18	20	22	24

Free Fall Distance (Feet)

PERFORMANCE SPECIFICATIONS

Worker Capacity 130 to 310 lbs. (59 - 141.0 Kg). Maximum elongation for 12' Free Fall Lanyard: 60 in. (152 cm). Maximum elongation for 6' Free Fall Lanyard: 48 in. (122 cm).

ANSI Z359.13 LANYARD SPECIFICATIONS

The average arresting force of Fall Safe Shock-Absorbing Lanyards and components when dynamically tested in accordance with ANSI Z359.13 is 900 lbs. (4 kN) for 6' Free Fall lanyards, and 1,350 lbs (6kN) for 12' Free Fall lanyards.

Maximum elongation of the Fall Safe Shock-Absorbing Lanyard or Shock Absorber component when dynamically tested in accordance with ANSI Z359.13 is 48 in. (1.2m) for a 6' Free Fall lanyard, and 60 in. (1.5 m) for a 12' Free Fall lanyard.

Maximum free fall distance for a capacity of 130 lbs. - 310 lbs. (60 kg - 141 kg) must be no greater than 12 ft. (3.6 m) per ANSI Z359.13. 6' lanyards may only be used where max. Free Fall distance is between 1' and 6'. 12' lanyards may only be used where max. Free Fall distance is between 6 'and 12'.

EQUIPMENT RECORD	
PART NUMBER	
SERIAL NUMBER	
DATE MANUFACTURED	
PURCHASE DATE	
ASSIGNED TO	

INSPECTION RECORD		
DATE	INSPECTOR	PASS/FAIL

SPECIFICATIONS

7000 SERIES LANYARDS

Certified to meet the current ANSI Z359.1 and OSHA regulations for the shock-absorbing component of a complete personal fall arrest system. Lanyard webbing certified minimum 9000 lb. (4082kg) breaking strength, all hardware certified to 5000 lb. (22kN) breaking strength, 100 percent proof tested to 3600 lbs. (16.5kN).

Performance Data:
SkyLine™/FatPack™- MAF 900 lbs
Max Elongation 42" (4kN/1m)

BigBoy™- MAF 1800 Lbs, Max Elongation 42" (8kN/1m)

QuickStop™- MAF 1800 Lbs, Max Elongation 42" (8kN/.3m)

BlackMax™-
6' Free fall- MAF 900 lbs, Max Elongation 30" (4kN/.76m)

6'-12' Free Falls- MAF 1800 lbs, Max Elongation 42" (8kN/1m)

See p.23 for ANSI Z359.13 Lanyard Specifications

Individually bar coded serial number and date of manufacture are on product label.

Made in Texas, USA

THESE INSTRUCTIONS APPLY TO THE FOLLOWING PART NUMBERS:

730104	731586	737406	741586	747496
730106	731593	737496	741606	747606
730206	731622	739100	741615	747706
731100	731623	739126	741616	747806
731101.2	731626	739406	741626	747906
731102	731633	739900	741636	749406
731102.6	731700	740106	741646	751106
731102.8	731790	740206	741700	751206
731103	731793	741000	741706	751406
731103.1	731900-A	74102.5	741720	751706
731103.5	731900-C	741102	741796	761106
731103.6	731956	741103	741804	761126
731104	731996	741104	741806	761206
731104.8	732100	741105	741886	761406
731105	732101	741106	741900	761426
731105.5	732102	741108	741926	761446
731105.6	732103	741116	741936	761606
731106	732106	741125	741946	761806
731106.3	732206	741126	741999	767106
731107	732501	741136	742106	767206
731107.2	732636	741204	742206	767406
731107.5	732990	741226	743406	771106
731108	734104	741276	744104	771206
731108.9	734106	741286	744105	771406
731109.2	734206	741336	744106	772100
731109.3	734406	741406	744206	772101
731110	734408	741406A	744406	772106
731111	734700	741423	744700	772206
731126	735106	741426	745106	772406
731153	735206	741436	745206	781106
731204	737103	741446	745216	781206
731206	737104	741456	745806	781406
731276	737106	741466	747106	782106
731406	737108	741476	747112	782206
731407	737110	741486	747204	782406
731456	737112	741496	747206	
731503	737206	741506	747406	

WARRANTY

Products manufactured by Fall Safe are warranted against factory defects in workmanship and materials for a period of two years from date of purchase by the owner (end user) or for a period of one year from date first used, provided that this period shall not exceed two years from date of shipment to distributor. Upon notice of product defect or fault, Fall Safe will promptly repair or replace all defective items. Fall Safe reserves the right to elect to have any defective item returned to its manufacturing plant, authorized service center or distributor for inspection before making a repair or replacement. This warranty does not cover equipment damages or defects resulting from abuse, damage in transit, or other damage beyond the control of Fall Safe. This warranty applies only to the original purchaser and is the only one applicable to our products and services, and is in lieu of all other warranties, expressed or implied. When products offered by Fall Safe are manufactured by a third party. Original equipment manufacturer (OEM) warranty shall apply and may be outside the control of Fall Safe.



FALL SAFE®
Ph. 1-800-323-7402

Canada labels
SureWerx, 49 Schooner St.
Coquitlam, BC V3K 0B3

USA labels
SureWerx USA Inc.
Elgin, IL USA 60123