



MODEL:

DATE:

SIZE:

1-800-850-5914 PHOENIX, AZ USA

## **USER INSTRUCTION MANUAL**

**DESCRIPTION: TONGUE BUCKLE HARNESS** 

**MODEL**: 96305NTM, 96305T, 96305BB, 96396B, 96396BQLMX, 96094BPT, 96096BFPT, X-96305TQL, X-96396BQL, PF-96305NET, PF-96305FT, PF-96305PTQL, PFX-96305FTQL, X-96305FTQL, X-96305PTQL, X-96305FTQL, X-96396BQLTPTC

**MEETS OSHA & ANSI Z359.11-2014** 

## WATCH VIDEOS 6, 12 & 25 ON ULTRASAFEUSA.COM

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**Anchorage:** The anchorage to which this product is attached must be capable of sustaining a static load in the direction applied by the personal fall arrest system of at least 3600 lbs. with certification of a qualified person or 5000 lbs. without certification. When more than one personal fall arrest system is attached to the same structure, the strength requirements stated above must be multiplied by the number of personal arrest systems attached to the structure.

#### Plan your personal fall protection system.

Before installing and using this equipment, consider all factors affecting your safety during use of this equipment.

**Warning:** Manufacturer's instructions supplied with this product at time of shipment must be followed and provided to the end user. Failure to do so could result in serious injury or death. Contact manufacturer if instructions are needed.

- Warnings and instructions must be read and understood before using equipment.
- Equipment must be used by trained personnel only.
- Users must understand all OSHA regulations, ANSI standards, and other relevant regulations and standards pertaining to fall protection equipment.

This product is part of a personal fall arrest system; a fall arrest system is required if there is any risk that a worker may fall from an elevated position. It is a requirement that the fall arrest system be used any time a working height of six feet or more is reached. Working height is defined as the distance from the walking/working surface to a grade or lower level.

This product shall require the user to have a rescue plan and the means at hand to implement it when using the FBH for fall arrest. The following is recommended as part of fall arrest system.

# **WARNING!**

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

# 1. 2. 3. 4. 5. 6. 7.

A. Full Body Harness Material: Nylon

- Back 'D' ring is for fall arrest
  - Shoulder 'O' rings. (if present) are for retrieval use only use locking snaps.
- Side 'D' rings (if present) are for positioning only.
- Front 'D' ring (if present) are for falls
   greater than 24" with a maximum impact
   of 900 lbs. Inspection card
- 5. Hip attachment elements are for work positioning or travel restraint
- 6. Park lanyard here
- 7. Load indicator

**Note:** See additional instructions on buckle adjustment for proper fit. Maximum free-fall distance six feet or maximum fall arrest force of 1800 lbs. Avoid lower level contact.

NOTE

These instructions are good for all 98 Series Alumi-Safe & Custom designs with tongue buckles.



#### B. Shock Absorbing Lanyard Material: Nylon Warning tags located in front and back of shock absorber or located towards hook, D-ring or eye end.

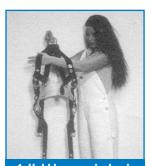
- Energy absorber resting force 900 lbs. Plus 42 inch maximum extension.
- Rig lanyard to allow a maximum free fall distance of not more than six feet.
- Connectors and anchorage points must be compatible and able to support 5,000 lbs.
- Do not allow lanyard or harness to contact sharp or abrasive surfaces, sparks or temperature above 180°.
- Snap hooks with gate openings larger than one inch (1") must not be connected to D-rings on harnesses and belts.
- Remove from service if any damage is detected and destroy.



#### C. Anchorage Connector Material: Nylon Warning tags are located towards hook, D-ring or eye end.

- Use energy absorbers or retractable lanyards when hazard of free fall can occur.
- Connectors and anchorage points must be compatible and able to support 5,000 lbs. Always work directly under anchorage to avoid a swing fall injury.
- Anchorage and tie off points must be at a height that will not allow a lower level to be struck should a fall occur. Do not allow product to contact sharp or abrasive surfaces, sparks or temperatures above 180°.
- Snap hooks with gate openings larger than one inch (1") must not be connected.
- Remove from service if any damage is detected.

Quick release buckle harnesses come in different styles, pads on back, no tool belt, etc., but proper adjustment and fit is critical. Refer to these instructions for key adjustment points.



1. Hold harness by back D-ring. Shake harness to allow all straps to fall into place.



2. Slip straps of harness over shoulders.



3. D-ring should be located at middle of back.



4. Make adjustments for torso length.



5. Buckle waist belt.



6. Pull chest strap in front of shoulder straps and fasten at mid chest. Tighten to keep shoulder straps tight.



7. Pull leg straps around to the outside of the leg and fasten.



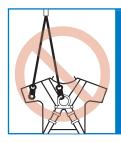
8. Properly worn harness.

## Note: For more on proper fit, refer to our website. Click on Videos and refer to video #12.



ATTACH ENERGY ABSORBER ONLY TO DORSAL D-RING





DO NOT ATTACH ENERGY ABSORBER TO ANCHOR







When using lanyards commonly referred to as "100% tie-off", "Y" type, "double" or "twin leg" shock absorbing lanyards. This supplement provides additional information on the use of these types of lanyards that are used with a personal fall arrest systems.

# Practices that must be followed in order to use a 100% tie-off lanyard safely.

- The shock absorber pack portion of the lanyard assembly MUST be connected to the back dorsal D-ring ONLY, by way of a double locking lanyard snap hook (other connectors provided, consult ULTRA-SAFE, INC.) connect shock absorber directly to the dorsal D-ring.
- 2. Do not connect shock absorber to the anchorage point at any time.
- 3. Do not connect the unused leg of the lanyard assembly to any portion of the full body harness, unless a specifically designed lanyard snap hook loop retainer is provided for this purpose.
- 4. When connecting from one anchorage point to the next (traversing a vertical or horizontal structure) do not connect to an anchorage point further apart than, the length of the lanyard.
- 5. When using a 100% tie-off lanyard assembly, do not allow any part of the lanyard to pass under arms or legs.
- 6. Connection of both lanyard legs to separate anchorage points is acceptable, as long as anchorage points are within the length of the lanyard.
- 7. The hip attachment elements shall be used as a pair, and shall be used solely for work positioning. the hip attachment elements shall not be used for fall arrest. Hip attachments are often used for work positioning by arborists, utility workers climbing poles and construction workers tying rebar and climbing on form walls. Users are cautioned against using the hip attachment elements (or any other rigid point on the Full Body Harness) to store the unused end of a fall arrest lanyard, as this may cause a tripping hazard.

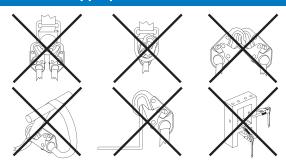
#### UNINTENTIONAL DISENGAGEMENT

If the connecting element to which a snap hook (shown) or carabiner attaches is undersized or irregular in shape, a situation could occur where the connecting element applies a force to the gate of the snap hook or carabiner. This force may cause the gate (of either a self-locking or a non-locking snap hook) to open, allowing the snap hook or carabiner to disengage from the connecting point.

# A. C. D. D.

- Small ring or other non-compatability shaped element.
- B. Force is applied to the snap hook.
- C. The gate presses against the connecting ring.
- D. The gate opens allowing the snap hook to slip off.

#### **Inappropriate Connections**



## **Harness System Inspection Procedures**

#### General -

#### 1. Check for wear and deterioration.

Before each use, the user must carefully inspect the harness for signs of wear, deterioration, or evidence of impact loading. Visually inspect for loose threads, pulled rivets, burns, cuts, distortions, abrasions, or any other evidence of chemical or physical deterioration that may have weakened the material or assembly.

# **2. Inspect hardware for malfunctions and cracks.** Check all snap hooks, buckles and D-Rings.

# 3. Remove from service and replace all worn or damaged equipment.

If any part does not pass inspection, immediately remove the harness from service and destroy.

#### 4. Working environment influences

Be aware of your surroundings and potential danger to you and your equipment.

- Exposure of the equipment to chemicals, heat, flames or other environmental conditions, which may produce a harmful effect.
   Be sure to consult the manufacturer in case of doubt.
- Use of harness around moving machinery or electricity.
- Use of harness near sharp edges or abrasive surfaces.
- Exposure to light (UV degradation).

#### 5. Annual Inspection

Harness must undergo a written inspection by competent person once a year.

#### 6. Repairs

Repairs may only be made by Ultra-Safe or by authortized distributors, who have written permission from Ultra-Safe to make repairs.

## Specific -

#### 1. Stitching and webbing.

Check stitching for broken, burned, cut or pulled stitches. Broken strands appear as tufts on the surface. To inspect, hold the webbing with your hands six to eight inches apart. Bend the webbing in an inverted U to cause surface tension, exposing problem areas. Inspect all web areas. Damage from cuts, abrasion, corrosives, heat or chemicals should be apparent.

#### 2. Buckle and belt ends.

Inspect the ends of all straps. They are subject to wear as a result of repeated opening and closing. Enlargement or distortion of holes may indicate excessive wear or possible damage through impact loading. Harnesses with unusually enlarged or distorted holes should fail inspection.

#### 3. D-Rings.

All D-Rings should be checked for distortion.
D-ring attachment points should be checked for unusual wear or damaged Fibers. Badly pitted
D-rings indicate chemical corrosion, and the equipment should fail inspection.

# 4. Stitching or rivets at hardware attachment points.

For stitched attachment points, check that stitching is not broken, burned, cut or pulled. Check all riveted attachment points for tightness. Badly pitted rivets indicate chemical corrosion, and the equipment should fail inspection.

#### 5. Tongue buckles.

All tongue buckles should be checked for distortion, sharp edges and cracks. The tongue should move freely and overlap the frame. Rollers should not be distorted and should roll freely.

#### 6. Friction slide adjusters.

Friction slide adjusters should be checked for sharp edges, distortion. Make sure that the outer bars and center bars are straight. Also check corners and attachment points for wear and cracks.

#### 7. Easy-connect buckle.

Easy-connect buckle (square rings) should be checked for distortion, sharp edges and cracks. For stitched attachment points, check that stitching is not broken, burned, cut or pulled.

#### 8. Friction style buckle.

Friction style buckles should be checked for sharp edges, cracks and distortion. Make sure outer bars and center bar are straight. Also check corners and attachment points for wear.

#### 9. Leather.

Leather should be soft and supple. Visually check leather for cracks tears, burns, brittleness or other signs of damage age or abuse. While the leather components of the system are not load bearing, damage to the leather is a sign that the entire harness MAY NOT be in acceptable condition. Re-inspect entire system. Leather should both look and feel good.

# 10. Destroy or replace worn or damaged Harnesses.

If evidence of excessive wear, deterioration or mechanical malefaction is observed; the harness should be destroyed. Never work with worn or damaged equipment. Using damaged or worn equipment can cause serious injury or death.

# 11. The inspector is the most important part of any inspection procedure.

Check all equipment thoroughly and follow all safety procedures and guidelines. Don't take any shortcuts.

#### 12. Cleaning Harness

Harnesses are machine washable, light detergent and in small mesh bag w/draw string. Let air dry, do not machine dry.

#### 13. Storage

Store full body harness in a cool, dry, clean environment out of direct sunlight. Avoid areas where chemical vapors may exist. Thoroughly inspect the full body harness after extended storage.

**IMPORTANT NOTE:** OSHA specifies that all employers covered by the Occupational Safety and Health Act are responsible for inspection and maintenance of all tools and equipment used by employees, whether owned by the employees or by the company. All Ultra-Safe equipment should be inspected before each use, and immediately removed from service if equipment does not pass inspection.

#### LIMITATIONS:

Always consider the following application limitations before using this equipment:

1. CAPACITY: The Full Body Harness is designed for use by persons with a combined weight (clothing, tools, etc.) ranging from 130 lbs (59 kg) to 310 lbs (140 kg). Make sure all of the components in your system are rated to a capacity appropriate to your application.

NOTE: 310 lbs (140 kg) is the maximum capacity allowed by ANSI/ASSE Z359.11. Ultra-Safe safety harnesses are factory tested to a maximum capacity of 400 lbs (182 kg).

- 2. FREE FALL: Personal fall arrest systems used with this equipment must be rigged to limit the free fall to 6 feet (1.8m). 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 feet (.6 m) or less. Personnel riding systems must be rigged so that no vertical free fall is possible. Climbing systems must be rigged so that free fall is limited to 18 in. (.46 cm) or less. Rescue systems must be rigged so that no vertical free fall is possible.
- 3. FALL CLEARANCE: Figure 3 illustrates the components of a Fall Arrest. There must be sufficient clearance below the user to arrest a fall before the user strikes the ground or other obstruction. Clearance is affected by a number of factors including the following parameters:
  - . Elevation of Anchorage
  - Free Fall Distance
  - Worker Height
  - . Connecting Subsystem Length
  - Deceleration Distance
  - Attachment Element Movement and Harness Stretch

NOTE: Refer to the instructions included with your Fall Arrest subsystem for specifics regarding Fall Clearance calculation.

4. SWING FALLS: Swing Falls occur when the anchorage point is not directly above the point where a fall occurs (see Figure 4). The force of striking an object in a swing fall may cause serious injury or death. Minimize swing falls by working as directly below the anchorage point as possible. Do not permit a swing fall if injury could occur. Swing falls will signifi cantly increase the clearance required when a Self-Retracting Device or other variable length connecting subsystem is used.

- 5. EXTENDED SUSPENSION: A Full Body Harness is not intended for use in extended suspension applications. If the user is going to be suspended for an extended length of time it is recommended that some form of seat support be used. Capital Safety recommends a seat board, suspension work seat, seat sling, or a boatswain chair. Contact Ultra-Safe for more information on these items.
- 6. ENVIRONMENTAL HAZARDS: Use of this equipment in areas with environmental hazards may require additional precautions to prevent injury to the user or damage to the equipment. Hazards may include, but are not limited to; heat, chemicals, corrosive environments, high voltage power lines, gases, moving machinery, and sharp edges.
- 7. HARNESSES FOR HIGH TEMPERATURE ENVIRONMENTS: Harnesses with Kevlar webbing are designed for use in high temperature environments, with limitations: Kevlar webbing begins to char at 800° to 900° Fahrenheit. Kevlar webbing can withstand limited contact exposure to temperatures up to 1,000° F. Standard webbing is limited to 180° F.

## **WARNING!**

When working with tools, materials, or in high temperature environments, ensure that associated fallprotection equipment can withstand high temperatures, or provide protection for those items.

## **WARNING!**

Although PVC coated and zinc plated hardware exhibit excellent corrosion resistance in chemical, acidic, alkaline, and atmospheric conditions, frequent inspections may be required. Consult with Ultra-Safe if you question the use of this equipment in hazardous environments.

#### **HOW TO MEASURE FOR A FULL BODY HARNESS:**

(Measurements are over clothing)

Proper fit is critical for personal safety & working comfort. The chart below specifies how to measure your body for the correct fit of fall protection equipment.

Size	Waist (Inches)	Lbs
XS	24-30	100-130
S	28-34	130-160
M-L	32-40	160-220
XL	38-48	220-250
2XL	46-54	250-280
3XL	54-58	280-310
4XL	58-62	310-350
5XL	62-66	350-400

#### USA INDUSTRY SYMBOLS



**Fall Arrest** 



**Fall Prevention** 



**Positioning** 



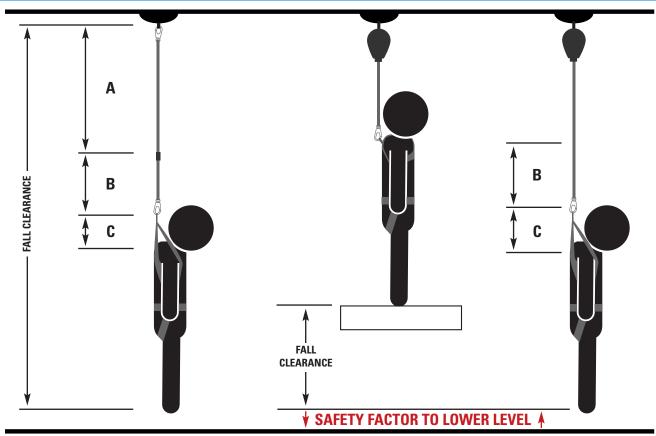
Retrieval



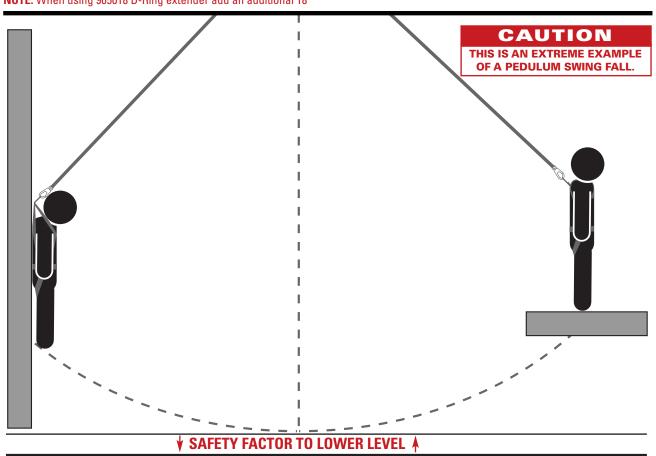
Suspension



**Ladder Climbing** 



 $A = Lanyard\ Deceleration\ Distance\ or\ SRL\ Maximum\ Arrest\ Distance$   $C = Safety\ Factor\ -\ Harness\ Stretch\ (H_S) + D-Ring/Connector\ Length\ +\ Settling\ =\ 1.5\ ft\ (0.5\ m)\ (add\ 6''\ w/\ Pillow\ Flex.$   $NOTE:\ When\ using\ 965018\ D-Ring\ extender\ add\ an\ additional\ 18''$ 



INSPECTION AND MA	INTENANCE LOG			
Serial Number:				
Model Number:				
Date Purchased:		Date of First Use:		
Inspection Date	Inspection Items Noted	Corrective Action	Maintenance Performed	
Approved By:				
	acknowledge that I have read and and	protocod this instruction manual in	oluding all warnings, policing and	
I acknowledge that I have read and understood this instruction manual including all warnings, policies and procedures in their entirety and agree to abide by them.				
INC. N	lame (Printed)		Date	
S	ignature			



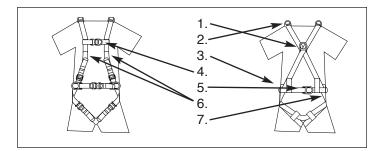
# **EXAMPLE OF TAGS**

**NSPECTION LOG** SERIAL NUMBER: HO56214

- 1. BACK 'D' RING IS FOR FALL ARREST
- 2. SHOULDER 'D' RINGS. (IF PRESENT) ARE FOR RETRIEVAL USE ONLY USE LOCKING SNAPS
- SIDE 'D' RINGS (!F PRESENT) ARE FOR POSITIONING ONLY.
- 4. FRONT 'D' RING (IF PRESENT) ARE FOR FALLS GREATER THAN 24" WITH A MAXIMUM IMPACT OF 900 LBS. INSPECTION CARD
- 5. HIP ATTACHMENT ELEMENTS ARE FOR WORK POSITIONING OR TRAVEL RESTRAINT
- 6. PARK LANYARD HERE
- 7. LOAD INDICATOR

## WARNING

Manufacturer's instructions must be read and understood prior to use. Instructions supplied with this product at time of shipment must be followed. Failure to do so could result in serious injury or death. Contact Ultra-Safe if instruction sheet is needed. Inspect before each use. Do not use if wear or damage is present. This body harness is intended to be used to arrest the most severe free falls. Items subjected to fall arrest or impact forces must be immediately removed from service and destroyed. Connecting snap and d-ring must be compatible in size, shape, and strength. This item is not flame or heat resistant. Repairs only to be performed by Ultra-Safe. Equipment modification or misuse voids warranty.



## **NOTE: LOAD INDICATOR IS PROTECTED BY ELASTIC BAND**



#### Made in U.S.A.

WARNING

LL COULD RESULT IN SERIOUS INJURY OR DEATH. SIZE: DO NOT USE UNLESS PROPERLY TRAINED. DATE DATE: INSPECT BEFORE USING! SIDE & SHOULDER D-RINGS NOT FOR FALL ARREST. MATERIAL: NYLON FOR MORE INFORMATION CONTACT MANUFACTURER.M EETS ANSI & OSHA

MAXIMUM CAPACITY 4 400 Order No: 012813-003 Z359.11-2014 A10.32-2012

INSPECTOR: OOOO MODEL: 96396B

SM-LG

01-21-17

# **User Inspection, Maintenance, and Storage of Equipment**

Users of personal fall arrest systems shall, at a minimum, comply with all manufacturer instructions regarding the inspection, maintenance and storage of the equipment, the user's organization shall retain the manufacturer's instructions and make them readily available to all users. See ANSI/ASSE Z359.2, Minimum Requirements for a Comprehensive Managed Fall Protection Program, regarding user inspection, maintenance and storage of equipment.

- 1. In addition to the inspection requirements set forth in the manufacturer's instructions, the equipment shall be inspected by the user before each use and, additionally, by a competent person, other than the user, at interval of no more than one year for:
  - · Absence or illegibility of markings.
  - Absence of any elements affecting the equipment form, fit or function.
  - · Evidence of defects in, or damage to, hardware elements including cracks, sharp edges, deformation, corrosion, chemical attack, excessive heating, alteration and excessive wear.
  - Evidence of defects in or damage to strap or ropes including fraying, unsplicing, unlaying, kinking, knotting, roping, broken or pulled stitches, excessive elongation, chemical attack, excessive soiling, abrasion, alteration, needed or excessive lubrication, excessive aging and excessive wear.

- 2. Inspection criteria for the equipment shall be set by the user's organization. Such criteria for the equipment shall equal or exceed the criteria established by this standard or the manufacturer's instructions, whichever is greater.
- 3. When inspection reveals defects in, damage to, or inadequate maintenance of equipment, the equipment shall be permanently removed from service or undergo adequate corrective maintenance, by the original equipment manufacturer or their designate, before return to service.
- 4. Maintenance and storage of equipment shall be conducted by the user's organization in accordance with the manufacturer's instructions. Unique issues, which may arise due to conditions of use, shall be addressed with the manufacturer.
- 5. Equipment which is in need of, or scheduled for, maintenance shall be tagged as unusable and removed from service.
- 6. Equipment shall be stored in a manner as to preclude damage from environmental factors such as temperature, light, UV, excessive moisture, oil, chemicals and their vapors or other degrading elements.