



# USER INSTRUCTION MANUAL

**MODEL:** 96416, 96414SR, 96416SR, 96426SR, 96424S, 96426S, 96426SYSR, 96513, 96516, 96516PH, 96516Y, 96516YCTPH, 96516YPH, 96516YSR, 96516YSRADJ, US-96516, US-96516Y, US-96516YSR, US-96516L, US-96516LYSR, US-96516LYCA, 96516LBB, 96516BB, 96516YBB, 96516LSD, 96516SD, 96516YSR, 96516YSRH, 96516YACAH



**1-800-850-5914**

PHOENIX, AZ USA

WWW.ULTRASAFEUSA.COM

**DESCRIPTION:** LANYARD WITH SHOCK PACKS, 3600 LB GATES

**MEETS OSHA & ANSI Z359.1-07**

**MODEL:** \_\_\_\_\_

**SIZE:** \_\_\_\_\_

**DATE:** \_\_\_\_\_

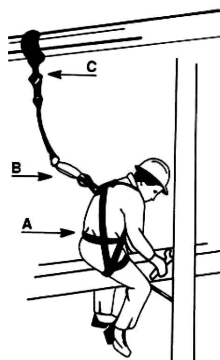
**Anchorage:** The anchorage to which this product is attached must be capable of sustaining a static load in the direction applied by the personal fall arrest system of at least 3600 lbs. with certification of a qualified person or 5000 lbs. without certification. When more than one personal fall arrest 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. Failure to do so could result in serious injury or death. Contact manufacturer if instructions are needed.

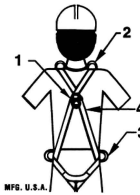
- Warnings and instructions must be read and understood before using equipment.
- Equipment must be used by trained personnel only.
- Users must understand all OSHA regulations, ANSI standards, and other relevant regulations and standards pertaining to fall protection equipment.



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.

The following is recommended as part of fall arrest system.

**A. Full Body Harness Material: Nylon**



1. Back D-ring is for fall arrest
2. Shoulder D-rings (if present) are for retrieval use only.
3. Side D-rings (if present) are for positioning only.
4. Warning tags.

**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.

**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.**

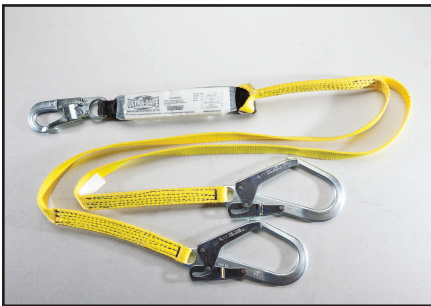
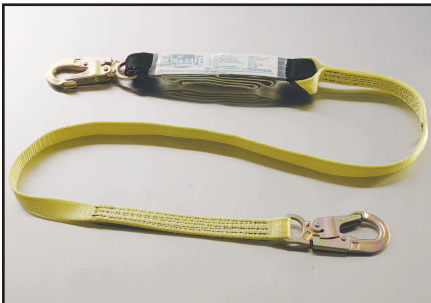
- Energy absorber resting force 900 lbs. Plus 42 inch maximum extension.
- Rig lanyard to allow a maximum free fall distance of not more than six feet.
- Connectors and anchorage points must be compatible and able to support 5,000 lbs.
- Do not allow lanyard to contact sharp or abrasive surfaces, sparks or temperature above 180 degrees.
- 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.

**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 degrees.
- Snap hooks with gate openings larger than one inch (1") must not be connected.
- Remove from service if any damage is detected.



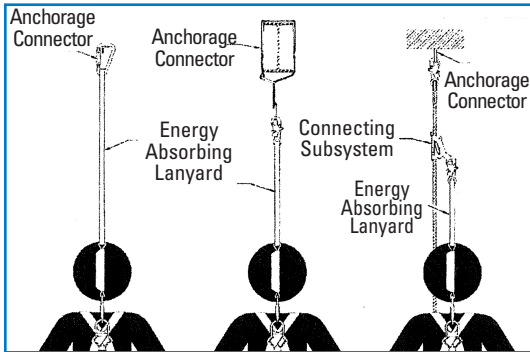
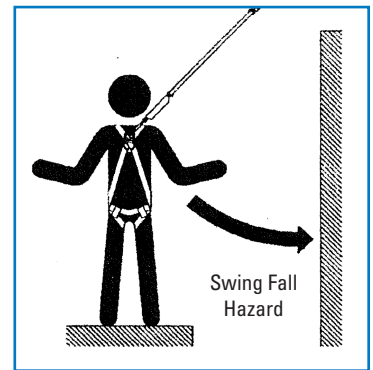
Same, but 100% Tie-Off.

## 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.

**ANCHORAGE:** Select a rigid anchorage point that is capable of supporting the required loads. The anchorage location must be carefully selected to reduce possible free fall and swing fall hazards and to avoid striking an object during a fall. The anchorage should be generally level (horizontal) to prevent the anchorage connector from sliding down an incline when in use, which could cause serious injury to the user.

**FREE FALL:** Maximum free-fall distance six feet or maximum fall arrest force of 1800 lbs. Avoid lower level contact.

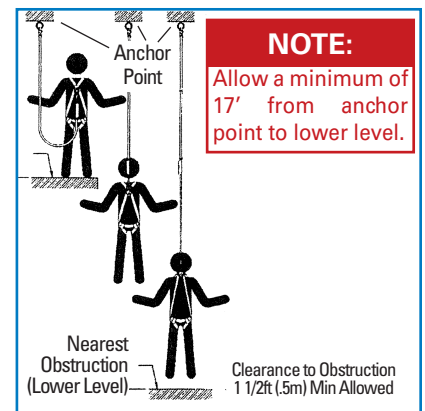


**CONNECTING TO ANCHORAGE OR ANCHORAGE CONNECTOR:**

Always connect the energy absorber end of the lanyard to the body support (harness). Connect the lanyard end to the anchorage or anchorage connector. Component style energy absorbers should be connected to the body support first, then coupled to the rest of the system. Some anchorage connector devices may be supplied with permanently attached energy absorber. Use of an additional energy absorber or energy absorbing lanyard with these types of subsystems is not recommended.

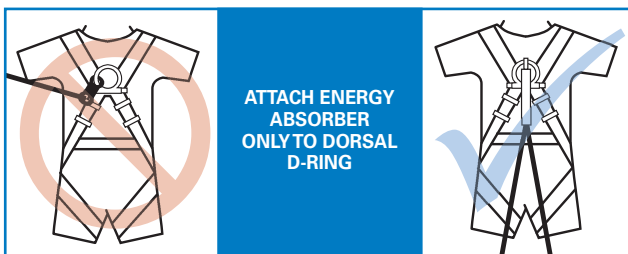
**FALL CLEARANCE:**

Should a fall occur, there must be sufficient clearance in the fall area to arrest the fall before striking the ground or other object. Energy absorbers can extend the fall arrest distance by up to 42 inches (106.7 cm). The illustration to the right shows how to estimate fall clearance distance when using an energy absorbing lanyard or energy absorber subsystem. Other factors may influence the required clearance distances. For example, using an energy absorbing lanyard or energy absorber with a rope grab (fall arrestor) may require additional clearance due to stretch in the lifeline or sliding of the rope grab on the lifeline during fall arrest. Some full body harness models incorporate a sliding (positional) D-ring in the back as the fall arrest attachment, movement of this D-ring during fall arrest can increase the fall clearance distance required. Use caution when assembling system components that could act to extend the fall arrest distance (and therefore fall clearance required). Refer to manufacturer's instructions for each part of the system for more information on fall clearance.

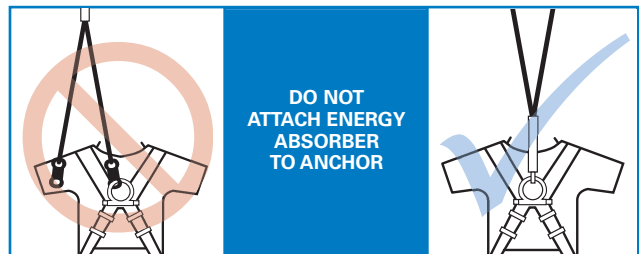


to arrest the fall before striking the ground or other object. Energy absorbers can extend the fall arrest distance by up to 42 inches (106.7 cm). The illustration to the right shows how to estimate fall clearance distance when using an energy absorbing lanyard or energy absorber subsystem. Other factors may influence the required clearance distances. For example, using an energy absorbing lanyard or energy absorber with a rope grab (fall arrestor) may require additional clearance due to stretch in the lifeline or sliding of the rope grab on the lifeline during fall arrest. Some full body harness models incorporate a sliding (positional) D-ring in the back as the fall arrest attachment, movement of this D-ring during fall arrest can increase the fall clearance distance required. Use caution when assembling system components that could act to extend the fall arrest distance (and therefore fall clearance required). Refer to manufacturer's instructions for each part of the system for more information on fall clearance.

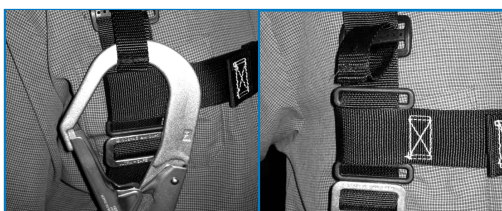
CHEST LOOPS AND Y-LANYARDS



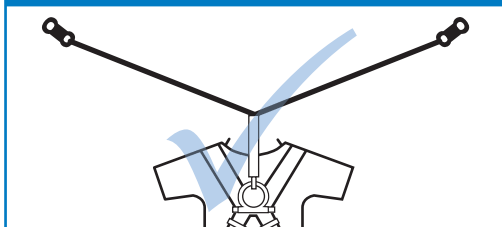
ATTACH ENERGY ABSORBER ONLY TO DORSAL D-RING



DO NOT ATTACH ENERGY ABSORBER TO ANCHOR



WITH HOOK ACCEPTABLE DESIGNED RETAINER WITHOUT HOOK



MAXIMUM ATTACHMENT DISTANCE

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.

1. 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.

## Inspection Procedures

### General -

#### 1. Check for wear deterioration.

Before each use, carefully inspect your complete Ultra-Safe system for signs of wear or deterioration, or evidence of impact loading. Visually inspect for loose threads, pulled rivets, burns, cuts, distortions, abrasions, or 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. Destroy and replace all worn or damaged equipment.

Immediately destroy and replace any component which does not pass inspection.

### Specific -

#### 1. Stitching and webbing.

Check stitching for broken, burned, cut or pulled stitches. Broken strands of webbing appear as tufts on the webbing surface. To visually check for damage caused by corrosives, heat, chemicals and other conditions, hold the connecting device

with your hands six to eight inches apart. Bend the webbing in an inverted "U" to cause surface tension and expose problem areas. Inspect entire length. For deceleration units, check the stitching for broken, burned, cut or pulled stitches, and the breakaway jacket for cuts, tears, broken stitches, stretch marks or other evidence of impact load. For aircraft-cable lanyards, check the full length for breaks, burns or cuts in the vinyl covering and the aircraft cable.

#### 2. Check for broken strands.

Inspect rope lanyards for broken strands by twisting the rope slightly to undo the braiding. Inspect the entire lanyard in this manner. Lanyards with broken strands must be discarded.

#### 3. Inspect all snap hooks, D-Rings and other metal parts.

Hardware must be checked for sharp edges and cracks. Rollers should not be distorted in shape and should roll freely. Check all parts, especially corners and attachments points, for wear and cracks.

#### 4. Destroy and replace all worn or damaged Ultra-Safe equipment.

If evidence of excessive wear, deterioration or mechanical malfunction is observed, replace the equipment immediately. **Never work with worn or damaged Ultra-Safe equipment. Using damaged or worn equipment can cause injury or death.**

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

Check all equipment thoroughly and follow all safety procedures and guidelines. Do not take any shortcuts', they could result in injury or death.

**NOTE:** Twisted rope, such as the nylon filament and polyplus rope used in Ultra-Safe lanyards, is subject to a condition known as "hockling", which is similar to the twisting we often see in a telephone handset cord. This can be caused by a repetitive twisting movement such as normal hand rotation in hooking and unhooking, a lanyard dangling freely, or by using the lanyard to suspend equipment.

#### Preventive measures include:

- 1) Never using a lanyard for towing or hoisting,
- 2) Inspection and smoothing out after each use,
- 3) Storing neatly. Some hockling is normal, and in itself is not cause to discard the lanyard.

**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.

## INSPECTION AND MAINTENANCE LOG

<b>Serial Number:</b>	
<b>Model Number:</b>	
<b>Date Purchased:</b>	<b>Date of First Use:</b>

Inspection Date	Inspection Items Noted	Corrective Action	Maintenance Performed
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			



Inspection Date	Inspection Items Noted	Corrective Action	Maintenance Performed
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			

**EXAMPLE OF TAGS**



**MANUFACTURED BY ULTRASAFE, INC. USA**

⚠ CAUTION: SIDE & SHOULDER D-RING NOT FOR FALL ARREST. FOR MORE INFORMATION CONTACT MANUFACTURER.

**Made in U.S.A.**

**⚠ WARNING!**

**A FALL COULD RESULT IN SERIOUS INJURY OR DEATH. DO NOT USE UNLESS PROPERLY TRAINED.**

**INSPECT BEFORE USING!**

**DO NOT REMOVE TAG!!!**

<b>INSPECTOR</b>	
<b>MODEL</b>	96516
<b>SIZE</b>	6'
<b>DATE</b>	01-15
<b>MEETS OSHA &amp; ANSI</b>	
	Z359.1-07
	A10.32-2004

**MAXIMUM CAPACITY 400 LBS**

**MATERIAL: NYLON ENERGY ABSORBER**  
ARRESTING FORCE 900 LBS. PLUS 42" MAXIMUM EXTENSION.

**MAXIMUM FREE-FALL DISTANCE SIX FEET**  
OR MAXIMUM FALL ARREST FORCE OF 1800 LBS. AVOID LOWER LEVEL CONTACT.

**CONNECTORS AND ANCHORAGE POINTS MUST**  
BE COMPATIBLE AND ABLE TO SUPPORT M.B.S. 5000 LBS.  
**DO NOT ALLOW LANYARD TO CONTACT SHARP**  
OR ABRASIVE SURFACES, SPARKS, OR TEMPERATURES ABOVE 180 DEGREES. SNAP

**HOOKS WITH GATE OPENINGS LARGER THAN 1"**  
MUST NOT BE CONNECTED TO D-RINGS ON HARNESSES AND BELTS.  
REMOVE FROM SERVICE IF ANY DAMAGE IS DETECTED.

**WARNING**

**MANUFACTURER'S INSTRUCTIONS SUPPLIED WITH THIS**  
PRODUCT AT TIME OF SHIPMENT MUST BE FOLLOWED.  
FAILURE TO DO SO COULD RESULT IN SERIOUS INJURY  
AND/OR DEATH.

**DO NOT EXPOSE TO CHEMICALS AND**  
CORROSIVES WHICH WOULD WEAKEN MATERIALS  
AND HARDWARE, CONSULT MANUFACTURER, IF IN  
DOUBT.  
**CONTACT MANUFACTURER IF INSTRUCTIONS ARE**  
NEEDED.

**ULTRA-SAFE, INC.**  
**MANUFACTURED IN THE U.S.A.**

**SERIAL NO.**  
**L039324**

<b>17</b>	<b>18</b>	<b>19</b>	<b>20</b>	<b>21</b>	<b>22</b>	<b>23</b>	

**INSPECTION**  
**CHART**