



## Owner's Manual For All ProPlus™ Harnesses

Thank you for selecting a ProPlus™ harness! Please read this manual carefully and retain it for future reference.

ProPlus™ fall arrest and work positioning equipment is designed by entertainment professionals for entertainment professionals and proudly made in the USA.

### Caution:

- *This product is part of a personal fall arrest, work positioning, suspension and/or retrieval system. Read, understand, and follow all instructions. Failure to do so may result in serious injury or death.*
- *Do not use unless properly trained. Users should be familiar with and comprehend the OSHA regulations, ANSI standards, and other relevant regulations and standards pertaining to fall hazards; and the selection, use and maintenance of fall protection equipment.*
- *It is the employer's responsibility to ensure that all users are properly trained in the proper use, inspection, and maintenance of Personal Protective Equipment including fall protection equipment.*

### Important:

- If you have questions on the use, care or suitability of this equipment, please call (800) 747-7271 or write [safety@sapsis-rigging.com](mailto:safety@sapsis-rigging.com).



800-727-7471 • [www.sapsis-rigging.com](http://www.sapsis-rigging.com) • [sales@sapsis-rigging.com](mailto:sales@sapsis-rigging.com)  
3883 Ridge Avenue, Philadelphia, PA 19132 • FAX: 215-228-0888

## Uses of Fall Protection Personal Protective Equipment

Fall protection Personal Protective Equipment (PPE) fits into four functional categories.

**1. Fall Arrest:** As a general rule, a fall arrest system is required if any risk exists where a worker may fall 6 feet or more. Fall Arrest PPE is designed to arrest a fall once it has occurred. It typically includes (but is not limited to) the following:

- Personal protective equipment: A full body harness.
- Connecting device: shock absorbing lanyard, lifeline, etc.
- Anchorage: I-beam clamp or bracket, wall plate, etc.

**2. Positioning:** Designed to hold a worker in place to allow for hands free work. A personal positioning system is NOT specifically designed for fall arrest purposes. It typically includes (but is not limited to):

- Personal protective equipment: A full body harness with appropriate tie off D-rings/ points.
- Connecting device: positioning strap, cable etc. to connect the positioning D-ring(s) to an anchorage.
- Anchorage: Any compatible structural member capable of supporting twice the potential impact load or 3000 lbs., whichever is greater.

**Warning:** A positioning system must be used in conjunction with a fall arrest system if the user is exposed to a fall hazard.

**3. Suspension:** Designed to support a user being raised or lowered and allows for hands-free work. Suspension system components are not designed to arrest a free fall; a backup fall arrest system must be used in conjunction with the suspension system when there is a risk of fall. It typically consists of the following:

- Suspension device: A suspended scaffold, bosun chair, saddle or harness designed for lifting or lowering a worker.
- Personal protective equipment: A full body harness.
- Connecting device (for suspension): A work line specifically designed for use with the suspension system.
- Anchorage (for suspension): I-beam clamp, bracket or other compatible object capable of supporting the intended loads.

**Warning:** A suspension system must be used in conjunction with a fall arrest system if the user is exposed to a fall hazard.

**4. Retrieval:** Designed to raise and/or lower a worker into and out of confined spaces as well as emergency rescue. It typically consists of the following, but may vary:

- Retrieval device: A block and tackle, winch, or other mechanical device designed for raising or lowering a worker.
- Personal protective equipment: A full body harness.
- Anchorage: A beam clamp, bracket or other object capable of supporting the intended loads.



## Selection of Fall Arrest Protection Personal Protective Equipment

- Selection of PPE depends on the work to be done, the location of the work and the means of access. Determine which of the four uses is needed and select equipment suitable for that use.
- The forces experienced in a fall can cause significant injury. It is important that the harness selected fits the worker's body properly.
- Consider the harness, available anchorage(s) and work to be performed when selecting connecting devices. Connecting devices consist of lanyards, self-retracting life lines (SRL), vertical lifelines, horizontal lifelines and cable grabs. The same harness may be used with different connecting device or anchorage.
- OSHA regulation 1926.501(b) requires the worker be protected 100% of the time. Select equipment that enables workers to transition from one anchor point to another while protected.

## General Requirements for Fall Arrest Equipment

- Users shall be provided with all instructions and warnings. These warnings and instructions must be read and understood prior to using the equipment.
- Never use any harness for purposes other than what it was designed and intended.
- This device must only be used by trained personnel.
- Users must be physically and mentally fit, in good health, and must not have a medical history of conditions that could be aggravated by a fall. Users should not be under the influence of alcohol or drugs that may impair their performance. Pregnant women and minors should not use this product.
- Users should reference ANSI Z359 standards, OSHA regulations, and any other applicable regulatory standards pertaining to occupational safety.
- All equipment must be inspected prior to each use.
- A Competent Person should ensure system compatibility to eliminate the potential for accidental disengagement.
- Equipment should not be altered in any way. Repairs or modifications should be performed only by the equipment manufacturer or persons authorized by the manufacturer.
- Any products exhibiting deformities, unusual wear, deterioration, or not passing inspection should be immediately removed from service.
- Any products subjected to fall arresting forces must be immediately removed from service.
- Fall arrest systems should be rigged to limit the free fall distance to 6' or less and ensure that no lower level is struck.
- Fall arrest systems, when stopping a fall, should limit the exposure of the technician to a maximum arresting force of 900 lbs. or less.
- A rescue plan and the means at hand to implement it when using this equipment is required. We recommend the ProPlus™ Rescue Kit.
- Always check for obstructions below the work area to make sure the potential fall path is clear. Remember that shock-absorbers can elongate up to 3'-6".
- Environmental hazards should be considered when selecting fall protection equipment.
- Equipment should not be exposed to chemicals that may have a damaging effect. Consult the manufacturer if there is any doubt.
- All synthetic materials should be protected from slag, hot sparks, open flames, or other heat sources. Polyester suffers permanent damage at 180°F/82°C
- This product should not be used around moving machinery, electrical hazards, sharp edges, and abrasive surfaces.
- The maximum live load is 310 lbs., unless otherwise labeled. The maximum live load includes the technician, clothing, tools, etc.



## Body Wear Warnings

- Fall arrest connecting devices should be attached to the dorsal (upper back) D-ring of a full body harness.
- Sternum (upper front) D-rings may be used for fall arrest but only under specific conditions and only when the fall distance is limited to no more than 2 ft.
- Read, understand, and follow all instructions supplied with equipment to be used with this product.
- Ensure all buckles are properly secured and all straps are connected and adjusted to provide a snug fit.
- Only use a full body harness for fall arrest. Never use a body belt or chest harness for fall arrest.

## Connecting Devices Warnings

- **Do** tie off in a manner that will limit the free fall to the shortest possible distance (6 ft max.) and ensure that a lower level will not be struck should a fall occur. Note that shock-absorbers can elongate up to 3'-6". This additional elongation must be considered when choosing a tie-off point location
- **Do not** use lanyards or lifelines with non-locking snaphooks or connectors.
- Always visually check to ensure the snaphooks freely engage the D-ring or anchorage point, and that its keepers are completely closed and locked, and are never load bearing.
- **Do not** attach multiple lanyards or lifelines together or tie them back onto themselves (choke connection) unless they are specifically designed for such a connection.
- **Do not** allow synthetic materials to come in contact with high temperature surfaces, welding, heat sources, electrical hazards, lighting equipment or moving machinery.
- **Do not** tie knots in lanyards and lifelines or wrap them around sharp, rough edges, or small diameter structural members.
- Never tie off to an object that is not compatible. Make sure that snaphook keepers are never load bearing.
- Never allow a lanyard or lifeline to pass under or around the user's arms, legs, torso or head.

## Anchorage Warnings

- Anchorages should maintain a minimum tensile strength of 5000 lbs. per worker, or be designed, installed and used as part of system which maintains a design factor of at least 2:1 under the supervision of a qualified person.
- The anchorage point should be compatible with the connecting device (snaphook or carabiner) and should not be capable of causing a load to be applied to the keepers. Never use an anchorage point that will not allow the snaphook or carabiner to close.



## Donning the Harness

- Hold the harness by the dorsal (back) D-ring and shake gently. Insure no straps are twisted.
- Step in, dive in or put on like a jacket, depending on harness style.
- Connect buckles.
- Adjust straps to fit snugly.
- Check harness fit.

## Buckles

- Grommet and Tongue buckles work like a belt for a pair of pants. Insert the belt end through the buckle and pull until snug. Insert the prong through the nearest grommet and tuck the remaining belt end through the keeper.



**Grommet and Tongue**

- A Bayonet buckle is much like a car seat belt: to fasten, slide the tang into the opening until you hear a “click.” To loosen, push in the tabs on the side and gently pull out the tang.



**Bayonet Buckle Open**



**Bayonet Buckle Closed**

- To fasten a Mating buckle, perpendicularly slide the smaller side through the larger one and then flatten.



**Mating Buckle Open**



**Mating Buckle Closed**

- After fastening a buckle, adjust the strap and tuck excess webbing into the elastic keepers.

## Harness Fit

**Important:** A fall arrest harness must fit properly. In the event of a fall, the harness will pull any slack in the straps up and over your legs and torso. You want to make certain you limit that movement as much as possible, and you direct whatever movement there is in a direction that is not harmful to you. An ill-fitting harness can cause serious injury and, in extreme cases, death. To insure a proper fit, please follow these guidelines:

- The harness should be snug around your body. It should not be so tight that you cannot perform your normal work function while wearing it.
- The dorsal D-ring should be centered, vertically and horizontally, between your shoulder blades.
- If the harness has a horizontal chest strap, the strap should be tight enough to eliminate the possibility of the harness falling off your shoulders.
- In a cross-over style harness, the sternum D-ring, or, if there is no D-ring, the point where the shoulder straps cross your chest, should be located between the bottom of your breastbone and your belly button.
- The leg straps should be pulled up into the groin area.
- The sub-pelvic strap should be at the top of your thigh, just below your gluteus maximus.
- If, after adjusting a strap (leg, chest, shoulder, etc.) you find the excess webbing is between your body and the strap, that's an indication that the strap is twisted.
- All excess webbing should be tucked into the elastic keepers.



## Inspection Criteria

**Important:** Fall Protection equipment must be inspected by the worker before each use. Any equipment failing inspection should immediately be removed from service unless deemed useable by a Competent Person.

**Important:** Any equipment involved in a fall arrest incident should be immediately tagged and removed from service. Consult your employer for approved disposal methods.

**Important:** Recommended life expectancy is 5 years from first date of use. A form for recording inspections is available from at [www.sapsis-rigging.com](http://www.sapsis-rigging.com).

- **Do not** remove the labels.
- **Do not** alter this equipment in any way without written permission from SRI.
- **Do not** use this equipment if it is damaged in any way.
- **Do not** use this equipment if there are any missing parts.
  
- **Do** record the date of first use on the label on the harness.
- **Do** inspect this equipment thoroughly prior to each use.  
See OSHA 1910.66. App C section III (e)(9)(f) for more information.
- **Do** keep a record of any change in condition on the inspection form.  
A sample inspection form is available at [www.sapsis-rigging.com](http://www.sapsis-rigging.com).
- **Do** make sure you have been properly trained in the use of this equipment before you start work.
- **Do** make sure all parts of the equipment are functioning properly and that the stitching in the webbing is complete and intact.
- **Do** make sure the equipment fits you properly.
- **Do** immediately remove this equipment from service if it is subjected to a fall.
- **Do** immediately remove from service any item not passing inspection.

## Cleaning and Storage of your ProPlus™ Harness

Basic care of your ProPlus™ harness will prolong its' life expectancy and maintain it's high performance. To clean and store:

- **Do not** use bleach or other harsh chemicals when washing.
- **Do not** use a dryer. Polyester suffers permanent damage at 180°F/82°C
- **Do** hand wash with mild detergent and plenty of water, rinse well, and hang to dry. Harness padding can be washed in the same way.
- **Do** inspect the harness after cleaning.
- **Do** store your ProPlus™ equipment in a clean, dry area out of direct sunlight and free of fumes, corrosive materials, sharp edges, or vibration.
- **Do** store in such a way that it does not warp or distort the harness. ProPlus™ harnesses come with a storage bag to help protect them from snags and abrasion while in storage.





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