# User Information Guide

**Spider™ and Patriot™ Class II Harness and Life Grip™ and Ladder/Escape Belts**

**ONLY THE END USER SHALL REMOVE THIS INFORMATION**

## DANGER

**YOU MAY DIE OR BE SERIOUSLY INJURED IF YOU DO NOT HAVE THE SPECIAL TRAINING AND HAVE THE KNOWLEDGE TO CORRECTLY USE THESE PRODUCTS AND/OR HAVE NOT READ THIS LIFE SAFETY EQUIPMENT USER GUIDE. IF YOU WERE NOT GIVEN A COMPLETE USER GUIDE OR LOSE YOUR USER GUIDE, ALERT YOUR ORGANIZATION OR CONTACT THE MANUFACTURER FOR A REPLACEMENT.**

- **DO NOT USE ANY LIFE SAFETY OR RESCUE PRODUCT IF YOU HAVE NOT RECEIVED THE NECESSARY AND PROPER TRAINING, INSTRUCTION AND/OR CERTIFICATION IN ITS CORRECT USE.**
- **YOU MUST ALSO MEET ALL QUALIFICATIONS OR CERTIFICATIONS REQUIRED BY THE AUTHORITY HAVING JURISDICTION OVER EMPLOYER / EMPLOYEE SAFETY IN YOUR STATE, PROVINCE OR COUNTRY.**
- **DO NOT USE ANY LIFE SAFETY PRODUCT THAT APPEARS DAMAGED, DISCOLORED OR IRREGULAR IN ANY WAY.**
- **DO NOT WEAR OR ATTEMPT TO USE ANY LIFE SAFETY PRODUCT IF IT DOES NOT FIT PROPERLY, OR IF YOU KNOW OR SUSPECT IT IS INSTALLED INCORRECTLY.**
- **NEVER EXCEED THE LIMITATIONS OF YOUR LIFE SAFETY SYSTEM.**
- **INSPECT YOUR LIFE SAFETY SYSTEM BEFORE AND AFTER EACH USE. IF IT IS DAMAGED OR SHOWS SIGNS OF WEAR, DO NOT USE IT.**
- **ALL CLOSURES AND COMPONENTS ON YOUR LIFE SAFETY SYSTEM MUST BE FASTENED AND IN PLACE WHEN THE SYSTEM IS IN USE. FAILURE TO DO SO MAY RESULT IN DEATH, FALLS, INJURIES, DISEASES AND ILLNESSES!**
- **DO NOT MODIFY, CHANGE OR ALTER YOUR LIFE SAFETY SYSTEM IN ANY MANNER. ANY CHANGES TO YOUR LIFE SAFETY SYSTEM MAY RESULT IN DEATH, FALLS, INJURIES, DISEASES AND ILLNESSES!**
- **NEVER USE DAMAGED LIFE SAFETY ROPE AND SYSTEM COMPONENTS. EVEN IF THE DAMAGE APPEARS TO BE MINOR, IT MAY INCREASE YOUR RISK OF DEATH, FALLS AND INJURIES!**
- **ADDITIONAL INFORMATION REGARDING BELTS AND LIFE SAFETY HARNESS CAN BE FOUND IN NFPA 1500, STANDARD ON FIRE DEPARTMENT OCCUPATIONAL SAFETY AND HEALTH PROGRAM, AND NFPA 1983, STANDARD ON LIFE SAFETY ROPE AND EQUIPMENT FOR EMERGENCY SERVICES.**

**LIFE SAFETY HARNESSES & BELTS MUST BE WORN SNUGLY AROUND THE WAIST ABOVE THE HIP BONES. FAILURE TO FOLLOW THIS REQUIREMENT WILL SIGNIFICANTLY INCREASE THE LIKELIHOOD OF SERIOUS INJURY OR DEATH SHOULD AN EMERGENCY ESCAPE OR ARRESTED-FALL SITUATION OCCUR.**
Documentation

Your organization is required to keep records for life safety products issued to its members that at a minimum must include the brand and model of the product; the date of manufacture and lot number; who it was issued to and date of issue; when, who conducted, and the results of any advanced cleanings and/or advanced inspections; who, when conducted, and the results of any type of repairs to the item; when and why the product was condemned and removed from service; how the product was permanently disabled so it could never be reused; and method used for proper disposal.

User Information

You and your organization must retain a copy of all user and/or safety information guides for every life safety product you are issued. You should use and refer to this information during training on the product and reviewed it frequently thereafter.

Inspection

At the time of issue, you and your organization must inspect, ensure the proper fit, and document the condition of all harnesses and belts you receive.

Include the condition of your life safety harness or belt in all daily and periodic routine inspections of your personal protective equipment (PPE). You should adjust for a snug fit in the waist as needed. Do Not Use the Product, report the problem, tag and remove the questionable product from service, and have it replaced immediately if any of the following conditions are observed: fraying, broken threads/stitching, any change in the physical appearance or feel of the webbing or hardware, cracks or chips in the hardware, or you suspect for any reason the effectiveness of the device may be decreased or compromised.

Every time your PPE ensemble is given an advanced cleaning and advanced inspection, this is the obvious time to have your organization conduct a thorough advanced cleaning and advanced inspection on your safety harness or belt and have the results documented. The advanced inspection must be conducted by an individual that is part of the organization’s PPE management team and qualified to do so. Advanced inspection procedures must include all the same requirements as routine cleaning, with the addition of the results being documented.

Tips for Inspecting Webbing

Examine all webbing on both sides and from end to end. Flex the webbing over your fingers, bending it to expose any signs of damage. Check webbing, straps, and reinforcing points carefully for wear and tear. Fasten, unfasten and closely examine buckles and attaching snap hooks. Look for cut, pulled or broken stitches, or frayed or damaged strands in the woven web. Discolored, fused, brittle or melted fibers may be signs of chemical, paint, solvent, burning or heat damage.

Tips for Inspecting Hardware

Inspect all buckles, D-rings and other metal components for cracks that may signal the beginning of metal fatigue. Also check for sharp or rough edges that could cut webbing, rust or other corrosion, distortion, or other signs of wear. Check the metal base of D-rings and make sure the D-rings pivot freely. Check that friction or quick-release portions of buckles or adjusters are not bent or distorted and engage correctly. Locking snap hooks should function smoothly and not be bent or wobbly.

Cleaning

Never use chlorine bleach or any chlorinated products on Kevlar® webbing or hardware. Do not machine wash or machine dry. Do not power wash. Do not use compounds with abrasives or grit on any part of the harness or belt. Do not polish or treat any of the hardware in any way.

At a minimum your harness or belt should be cleaned whenever your PPE receives scheduled advanced inspections. Always use universal precautions when handling soiled PPE. Rinse with cool or warm water not to exceed 105 degrees F (40 degrees C). Soiled areas can be cleansed using a sponge or cloth with mild detergent (7.0 – 10.0 pH) and warm water solution, applying light pressure lengthwise along each side of the webbing. Rinse thoroughly with cool or warm water and air dry away from direct sunlight or excessive heat.

Retirement

At any time a harness or belt is subjected to an arrested-fall situation, it is MANDATORY THAT IT BE RETIRED FROM SERVICE, RENDERED UNSERVICEABLE AND DISPOSED OF PROPERLY.

Any harness or belt that fails an inspection shall be removed from service, tagged, and evaluated to see if repairs are feasible. If repair is not an option the item must be rendered unserviceable before being disposed of properly.

All products have a finite life expectancy and do not last forever. It is the responsibility of your organization issuing any life safety device to follow all retirement requirements (if any) as defined by any authority having jurisdiction over employer / employee safety in its state, province or country.

If there are no statutory requirements for retirement imposed by the authority having jurisdiction in your area, and the items are not retired due to failed inspections or an arrested-fall incident, your organization must determine a prudent maximum useful life expectancy for harnesses and belts based on the products, date of manufacture, date of issue, and time in service.

Upon reaching the end of their defined useful life cycle, all harnesses and belts must be condemned, rendered completely unserviceable and disposed of properly. In all cases, the defined end of useful life shall not exceed 10 years from the date of manufacture.

Storage

Your Class II Spider™ harness or Life Grip™ ladder/escape belt should be treated with respect like all personal protective equipment when not in use. Always store PPE in a clean, dry environment that is free from corrosives, contaminants and harmful fumes, away from direct sunlight, where it is not subject to abrasion.

Heat and Flame

Even though your harness or belt is constructed of heat-resistant Kevlar® webbing using Kevlar® thread and plated alloy hardware, it may still degrade if exposed to direct flame or high levels of radiant and convective heat. If your PPE ensemble is exposed to any of these conditions, every element of your ensemble, including the harness or belt, should be given a thorough inspection following the incident and prior to being used again.

Repair

Only the manufacturer can determine if repair is possible. Under no circumstances, should you or your organization attempt or allow any repairs, alterations or additions to be made to your Kevlar® Class II harness or Kevlar® ladder/escape belt. If you have a product you think might need repair and has not been used in an arrested fall, please contact Honeywell First Responder Products directly for guidance.

Warranty

Honeywell warrants that Morning life safety harnesses and belts are free from defects in material and workmanship for the useful life of the product. This warranty specifically excludes accidental damage (acid, tears on nails, etc.), intentional or unintentional abuse, natural disasters, damage caused by disregard of care instructions, and normal wear. THESE WARRANTIES ARE EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES, WHETHER WRITTEN, EXPRESS, IMPLIED, STATUTORY OR OTHERWISE.
Life Grip™ Ladder/Escape Belt Installation Instructions

Step 1

Lay the pant face down. Lay the belt across back of pant with large snap hook to your left (as shown) if your pant closure is right-over-left. Secure the four Velcro® tabs over the belt. If your escape pant is one of the very few made by Honeywell with a left-over-right pant closure, the snap hook goes to the right at this step, and the installation on the front of pant will be a mirror image of what is shown in this user guide.

Step 2

Flip the pant over and secure the belt with the two Velcro® tabs to the left of the fly.

Step 3

At the leading edge of the fly, thread the large horizontal Velcro® tab through the large side of closure D-ring.

Step 4

Feed the large horizontal tab around the center bar of the D-ring, under the end of the belt where it is held down by both the Velcro® underneath and the D-ring.

Step 5

Close the vertical Velcro® tab over the top of the D-ring.

Step 6

To the right of the fly, feed the large horizontal Velcro® tab through the snap hook in front of the sliding bar.

Step 7

Feed the large horizontal tab around the sliding bar, under the end of the belt where it is held down by the Velcro®.

Step 8

Close the vertical Velcro® tab over the end of the belt and snap hook.

Completed Installation
**Patriot™ Harness Installation Instructions**

**Step 1**

Lay the pant face down. Lay the waist belt of the harness across back of pant with large snap hook to your left (as shown) if your pant closure is right-over-left. Secure the four Velcro® tabs over the belt. If your escape pant is one of the very few made by Honeywell with a left-over-right pant closure, the snap hook goes to the right at this step and the installation on the front of pant will be a mirror image of what is shown in this user guide.

**Step 2**

Flip the pant over and secure the belt with the two Velcro® tabs to the left of the fly.

**Step 3**

At the leading edge of the fly thread the large horizontal Velcro® tab through the large side of closure D-ring.

**Step 4**

Feed the large horizontal tab around the center bar of the D-ring, under the end of the belt where it is held down by both the Velcro® underneath and the D-ring.

**Step 5**

Close the vertical Velcro® tab over the top of the D-ring.

**Step 6**

To the right of the fly, feed the large horizontal Velcro® tab through the snap hook in front of the sliding bar.

**Step 7**

Feed the large horizontal tab around the sliding bar, under the end of the belt where it is held down by the Velcro®.

**Step 8**

Close the vertical Velcro® tab over the end of the belt and snap hook.

**Completed Installation – Waist Belt**
**Patriot™ Harness Internal Leg Loop Installation**

**Step 1**
Remove liner from pant. Make sure the loose “grab end” of each leg loop extends above harness waist belt and is secured by its Velcro® tab.

**Step 2**
Make sure the liner is removed from pant. Reach up the inside of each leg and pull the leg loops through each pass-through slot in the side of the outer shell.

**Step 3**
Before you continue, make sure the internal leg loops are not twisted and hang freely.

**Step 4**
Run your hand up the inside of a pant leg, through the center of the internal leg loop, then pull the liner cuff down to outer shell cuff. Repeat with the other leg.

**Step 5**
Before you snap the liner at the waist and cuffs, open the pant at the waist and inspect to make sure the legs of the liner are properly installed through the center of the internal leg loop. Before snapping the liner at the cuff, make sure the liner is not twisted.

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**Patriot™ Harness External Leg Loop Installation**

Pull each pant leg through the leg loop and secure on either side below the fly with snap tabs.

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**Basic Ladder/Escape (RS-LADKV)**

This product is worn like a regular trouser belt and for a proper installation it is highly recommended that your bunker pants have oversized belt loops around the waist.

**Step 1**
Thread the belt so that the large snap hook/d-ring closure is in your preferred placement on either side of the fly.

**Step 2**
The waist can be tightened/loosened using the slider bar at the flat end of the large snap hook and the three-bar slider on the Kevlar waist belt.

**Step 3**
Once you’ve adjusted the belt to fit snugly around your waist and above the hip bones, work the three-bar slider along the waist belt until it is as close to the flat end of the large snap hook as possible.

Photos shown on Life Grip™ pant adaptation. Can also use regular belt loops as long as they have 3.25” of usable space (i.e., minimum 3.5” total height).
Spider™ Harness Installation Instructions

Step 1
Lay the pant face down. Lay the waist belt of the harness across back of pant with large snap hook to your left (as shown) if your pant closure is right-over-left. Secure the four Velcro® tabs over the belt. If your escape pant is one of the very few made by Honeywell with a left-over-right pant closure, the snap hook goes to the right at this step, and the installation on the front of pant will be a mirror image of what is shown in this user guide.

Step 2
The large horizontal Velcro® tab on the leading edge of the fly is NOT used during the Spider™ harness installation. It is only there so that the same pant can also use a Patriot™ harness or Life Grip™ belt.

Step 3
The vertical Velcro® tabs on the leading edge of the fly and to the side of the fly seam close beneath the A-frame and underneath the flat end of each D-ring.

Step 4
When the A-frame is stowed across the waist, it and the D-rings help secure the Velcro® tabs on either side of the fly in place.

Step 5
On each side, fasten the vertical Velcro® tab between the A-frame and the leg loop.

Step 6
To the right of the fly, feed the large horizontal Velcro® tab through the snap hook in front of the sliding bar.

Step 7
Feed the large horizontal tab around the sliding bar, under the end of the belt where it is held down by the Velcro®.

Step 8
Close the vertical Velcro® tab over the end of the belt and snap hook.

Completed Installation – Wast Belt
**Spider™ Harness External Leg Loop Installation**

Pull each pant leg through the leg loop and secure on either side below the fly with snap tabs.

**Spider™ Harness Internal Leg Loop Installation**

Remove liner from pant. Make sure the loose “grab end” of each leg loop extends above harness waist belt and is secured by its Velcro® tab.

**Step 1**

Run your hand up the inside of a pant leg, through the center of the internal leg loop, then pull the liner cuff down to outer shell cuff. Repeat with the other leg.

**Step 2**

Before you continue, make sure the internal leg loops are not twisted and hang freely.

**How to Tighten Leg Loops**

**Step 1**

Grab exterior ends of leg loops.

**Step 2**

Pull upwards to tighten.

**How to Loosen Leg Loops**

**Step 1**

Locate adjuster hardware with your thumb.

**Step 2**

Press/work down away from waist.

Before you snap the liner at the waist and cuffs, open the pant at the waist and inspect to make sure the legs of the liner are properly installed through the center of the internal leg loop. Before snapping the liner at the cuff, make sure the liner is not twisted.
Questions and Answers

Question: Is the Life Grip™ belt, Patriot™ and Spider™ harnesses certified to meet NFPA 1971 Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting?

Answer: YES, and it is also fully certified to NFPA 1983 (2012) “Life Safety Rope and Harnesses.”

Question: Are the Life Grip™ belt, Patriot™ and Spider™ harnesses one-size-fits-all and if not how do I order the right size?

Answer: All three products are manufactured in two-inch waist increments to be installed with the waist belt worn on the exterior of the same size, even waist size bunker pants:

The Life Grip™ belt can be made to fit any waist size bunker pant.

The Spider™ and Patriot™ harnesses will fit from waist size 32-inch and above, so if your bunker pant is size 30-inch waist or below you must order a Life Grip™ belt.

Question: Can I use other brands of certified components with a Honeywell brand NFPA 1983 certified belt or harness?

Answer: The answer is yes you can if it is allowed by the authority having jurisdiction in your area, the components in question are allowed by your employer and properly certified, the components are appropriate for the job, have been maintained, inspected and are in good working condition, and you have received the proper training required by your employer and/or authority having jurisdiction. For an official letter on the subject, please contact Honeywell First Responder products.

Question: Are these belt and harness products designed as Fall Protection devices?

Answer: No. If you read the NFPA 1983 and its appendix, it clearly spells out that the products are intended as Fall Prevention devices. If you have not been properly instructed and understand the difference between Fall Prevention and Fall Protection this could lead to improper use of these products which could result in serious injury or death. Do Not Use any of these products without complete training and a full understanding of their intended use, limitations and functions.

Question: We have a firefighter that weighs “X” pounds or kilos, is it safe for him to use a Honeywell brand ladder/escape belt or Class II harness or is there a weight limit on the products?

Answer: Only the employer can determine whether the individual in question has the physical capability to operate in a risk enhanced environment. From a product point of view, the Life Grip™ belt, Spider™ harness and Patriot™ harness have all been certified by Underwriters Laboratories to all the performance requirements in NFPA 1983, which include:

- All testing is done while the products are installed on a 300 pound / 136 kilo steel torso
- The products and torso are put under an upright, static stress load of 16kN (3,597 pound feet) with a run up to maximum load for two minutes.
- The ladder / escape belt, and the Class II harnesses with the leg loops removed, are also load tested with the torso in the horizontal position at 10kN (2248 lbf). This is not an NFPA requirement for Class II Harnesses, but we do it in order to insure that all the products are tested as Ladder Belt too.
- In both the upright and inverted positions the 300 pound torso/harness is drop tested. Each drop is a free fall for one meter (39 inches) and each harness sample is dropped twice, once each in the upright position and once in the inverted position.