



USER INSTRUCTIONS

FULL BODY HARNESS

Complies with the ANSI Z359.11 standard and OSHA 29 CFR 1910 and 1926 regulations.



(This manual applies to all harnesses with model numbers starting with H0 and H9)

⚠ WARNING!

Compliant fall protection equipment must only be used as it was designed. Users MUST read and follow all user instructions provided with the product. Before using a fall arrest system, users must be trained in the safe use of the system, as required by OSHA 29 CFR 1910.30 and 1926.503, or local safety regulations. Misuse or failure to heed these warnings and instructions may result in injury or even death.

WORK SAFE! WORK SMART!

IF YOU HAVE ANY QUESTIONS ABOUT THE PROPER USE OF THE EQUIPMENT, SEE YOUR SUPERVISOR, USER INSTRUCTIONS, OR CONTACT WERNER CO. FOR MORE INFORMATION.

USE INSTRUCTIONS AND LIMITATIONS

IMPORTANT

Before use, the user must read and understand these User Instructions. Keep these User Instructions for reference.

PURPOSE

The Full Body Harness is designed to be used as part of a complete personal fall arrest, restraint, rescue, ladder climbing, or work positioning system.

USE INSTRUCTIONS

1. Failure to follow all instructions and limitations on the use of the Full Body Harness may result in serious personal injury or death.
2. Before using a personal fall arrest system, employees must be trained in accordance with the requirements of OSHA 29 CFR 1910.30 and 1926.503 in the safe use of the system and its components.
3. Personal fall arrest systems, including the Full Body Harness, must be inspected prior to each use for wear, damage, and other deterioration. Defective components must be immediately removed from service, in accordance with the requirements of OSHA 29 CFR 1910.140 and 1926.502.
4. The complete fall protection system must be planned (including all components, calculating fall clearance, and swing fall) before using.
5. Users must have a rescue plan, and the means to implement it, that provides for the prompt rescue of employees in the event of a fall, or assures that employees are able to rescue themselves.
6. Store the Full Body Harness in a cool, dry, clean environment and out of direct sunlight when not in use.
7. After a fall occurs on the system, immediately remove from service until a "competent person" can make the determination for reuse or disposal.

USE LIMITATIONS

1. CAPACITY: The Full Body Harness is designed for users with a capacity (including clothing, tools, etc.) up to 400 pounds (181 kg) total working weight, in conjunction with compatible connecting components.



WARNING!

Not all fall protection components are rated for the same user weight capacity. Only use components rated for the same weight capacity.

2. FREE FALL: Personal fall arrest systems must be rigged in such a way to limit the free fall to 6 ft. (1.83 m) (OSHA 1910.140 and 1926.502). Work positioning systems must be rigged so that free fall is limited to 2 ft. (0.6 m) or less. Climbing systems must be rigged so that free fall is limited to 1.5 ft. (0.46 m) or less. Restraint systems must be rigged such that there is no possible vertical free fall. See associated connecting subsystem manufacturer's instructions for further information.
3. FALL CLEARANCE: Ensure that enough clearance exists in your fall path to prevent striking an object. The amount of clearance required is dependent upon the type of connecting subsystem used (energy absorbing lanyard, self retracting lifeline), the anchorage location, and the amount of stretch in the harness.



WARNING!

The Full Body Harness Stretch (FBH Stretch) and additional length of a D-ring extender must be taken into consideration during the clearance calculation process.

4. EXTENDED SUSPENSION: The Full Body Harness is not intended for use in extended suspension applications.
5. CORROSION: Do not leave the Full Body Harness in environments where corrosion of metal parts could take place as a result of vapors from organic materials. Use near seawater or other corrosive environments may require more frequent inspections to ensure corrosion damage is not affecting the performance of the product.
6. CHEMICAL HAZARDS: Solutions containing acids, alkali, or other caustic chemicals, especially at elevated temperatures, may cause damage to the Full Body Harness. When working with such chemicals, frequent inspection of this equipment must be performed. Contact Werner Co. with any questions concerning the use of the Full Body Harness around chemical hazards.
7. EXTREME TEMPERATURE: The Full Body Harness is designed to be used in temperatures ranging from -40°F to +130°F (-40°C to +54°C). Protection should be provided for Full Body Harness when used near welding, metal cutting or similar activities. Contact Werner Co. with any questions concerning high temperature environments.
8. ELECTRICAL HAZARDS: Use extreme caution when working near high voltage power lines due to the possibility of electric current flowing through the Full Body Harness or connecting components.
9. HEALTH: Minors, pregnant women and anyone with a history of either back or neck problems should not use this equipment.

1. TRAINING: Do not use the Full Body Harness without proper training from a “competent person” as defined by OSHA 29 CFR 1910.140(b) and 1926.32(f).
2. REPAIRS: Only Werner Co., or persons or entities authorized in writing by Werner Co., may make repairs or alterations to the equipment.

ANCHORAGES

All anchorage requirements depend on the application which the Full Body Harness is used. In a personal fall arrest system the anchorage must meet the requirements of OSHA 29 CFR 1910 and 1926. OSHA states:

Anchorage must be capable of supporting at least 5,000 pounds (22.2 kN) for each employee attached; or designed, installed, and used, under the supervision of qualified person, as part of a complete personal fall protection system that maintains a safety factor of at least two.

ANSI Z359.2 states that anchorages selected for fall arrest systems must have a strength capable of sustaining static loads, applied in all permitted directions by the system:

- (a) no less than 5,000 pounds (22.2 kN) for non certified anchorages; or
- (b) at least two times the maximum arresting force for certified anchorages;

When more than one fall arrest system is attached to an anchorage, the strengths set forth in (a) and (b) above shall be multiplied by the number of systems attached to the anchorage.

Anchorage used in restraint systems must be capable of supporting loads of 1,000 lbf (4.5 kN) for non-certified anchorages or at least two times the foreseeable force for certified anchorages per ANSI Z359.2.

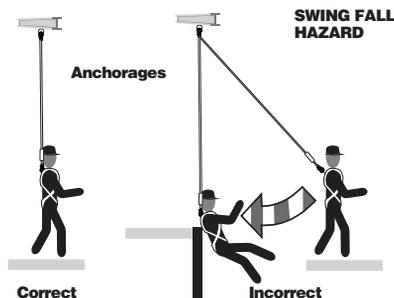
Anchorage used in work positioning systems must be capable of supporting loads of 3,000 lbf (13.3 kN) for non-certified anchorages or two times the foreseeable force for certified anchorages per ANSI Z359.2.

Anchorage used in controlled descent and rescue systems must be capable of supporting loads of 3,100 lbf (13.8 kN) for non-certified anchorages or a 5:1 safety factor for certified anchorages per ANSI Z359.4-2007.

All anchorages should be located vertically above the user’s head and be positioned as to not exceed the maximum allowable free fall for the system.

SWING FALLS

To minimize the possibility of a swing fall, anchor as directly above the work area as possible. Striking objects horizontally, due to the pendulum effect, may cause serious injury. Swing falls also increase the vertical fall distance of a worker, compared to a fall directly below the anchorage connector. Swing falls may be reduced by using overhead anchorage connectors that move with the worker.



DONNING AND USE

WARNING!

Before using a personal fall arrest system, employees must be trained in accordance with the requirements of OSHA 29 CFR 1910.30 and 1926.503 and/or applicable local, state, governmental and jurisdictional agencies, in the safe use of the system and its components.

Personal fall arrest systems, including Full Body Harnesses, must be inspected prior to each use for wear, damage, and other deterioration, and defective components must be immediately removed from service in accordance with the requirements of OSHA 29 CFR 1910.140 and 1926.502 and/or applicable local governmental and jurisdictional standards.

DONNING

1. Hold the dorsal (back) D-ring of the Full Body Harness and shake to allow all straps to fall into place. Ensure straps are not buckled or twisted.
2. Slip shoulder strap over one shoulder, then pull the other shoulder strap around the back and over the second shoulder, just like putting on a jacket. The dorsal D-ring will be located on your back, while the chest strap is located in the front. Straps must not be tangled as the harness hangs freely from shoulders.
3. Pull one leg strap between your legs and connect it to the opposite end on the same side. See Fitting for specific connecting type. Repeat with second leg strap. Ensure that the leg straps are not twisted or crossed.

WARNING!

Failure to have the leg straps of a Full Body Harness connected and properly adjusted in the event of a fall arrest may result in serious personal injury or death.

1. Fasten the chest strap across the lower chest just below the nipple line. Chest strap should be snug, with excess strap secured through the web keepers.

FITTING

Adjust shoulder straps with the two adjusters located at the lower end of the shoulder strap. Adjust the left and right sides to the same length. The chest strap, and front (sternal) D-ring if applicable, must be centered on your lower chest. Adjustment of the shoulder straps may cause the dorsal D-ring to move and may need to be repositioned to achieve the correct position between the shoulder blades. Once the D-ring is repositioned, the dual layer shoulder padding positioning can be adjusted using the black web hook and loop between the layered pads. After all straps have been tightened and Full Body Harness fits snugly, secure all excess straps through the web keepers.

Correct Full Body Harness adjustments will place the sub-pelvic strap snugly below the buttocks where the relief cord can be utilized to help with the discomfort of suspension after a fall occurs. Correct sub-pelvic position is the result of the correct combination of all the Full Body Harness adjustments.



QUICK CONNECT

Ensure that the leg straps are not twisted and the loose webbing end is on the outside. Insert male connector into the receiving end of the buckle. You will hear a click and on the ProForm see a green circle when engaged correctly. Pull webbing through adjuster to loosen or tighten until snug. Slide plastic web keepers to the strap end to secure the excess webbing.



TONGUE BUCKLE

Ensure that the leg straps are not twisted. Put the open end of the leg strap with grommets through the buckle, pulling until it is snug on the leg and engage the tongue into a grommet. Webbing ends must be tucked into the web keepers to ensure this type of buckle stays connected while in use. Failure to properly secure the leg strap ends in the keepers could result in unintentional disengagement.



MATING/PASS-THROUGH BUCKLE

Ensure that the leg straps are not twisted and the loose end is on the outside. Pass the buckle with the center bar through the open buckle. The slot will assist. Tug to ensure buckle is in place. Pull the webbing to tighten the strap so there is a snug fit. Slide plastic web keepers to the strap end to secure the excess webbing.



TORSO LENGTH ADJUSTER

The torso adjuster ensures the overall fit of the Full Body Harness. Check to see that the sub-pelvic strap is situated below the buttocks. If the sub-pelvic strap is too high, the torso adjuster should be loosened to lower it. If the sub-pelvic strap is too low, the torso adjuster can be tightened to raise it.

To shorten or lengthen the torso webbing push the top of the torso adjuster down, so it is horizontal, allowing web to flow through the torso adjuster. Release when at the right length. Slide the lower plastic web keeper down near the torso adjuster and the upper plastic keeper up to secure the excess webbing.



WEB KEEPERS

All webbing ends are equipped with plastic web keepers to secure the excess webbing and aid in the safe use of the Full Body Harness. Sliding one keeper close to the buckles helps secure the buckle in position while in use. Sliding the other close to the end of the strap secures the excess webbing and helps prevent a possible snag hazard. On the Proform, roll the excess webbing and secure to the webbing with the hook and loop keeper.

Attaching Belts to Harness

Werner Co. Full Body Harnesses made without integrated belts have loops through which accessory belts can be attached, joining the accessory to the harness. The loops are found on the inside of the harness webbing, below the impact indicators.

LANYARD PARKING ATTACHMENT

Lanyard parking attachments are located on all Full Body Harnesses where the shoulder strap meets the chest strap. Lanyard parking attachments are approved only for the connection of the unused lanyard leg to the Full Body Harness.



WARNING!

Never attach the unused leg of the lanyard back to the Full Body Harness at any location other than an approved lanyard parking attachment.

LOAD INDICATOR

Full Body Harnesses include a built-in fall arrest load indicator that activates to give a permanent, readily visible INSPECT!™ after the Full Body Harness has arrested a fall, or has been subjected to an equivalent force.

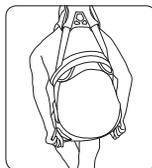
GEAR LOOPS

Gear loops are provided on Construction model harness. For use with Tool Lanyards only.

RELIEF CORD

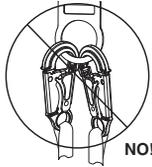
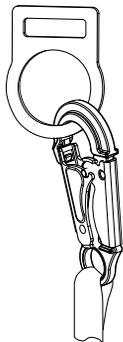
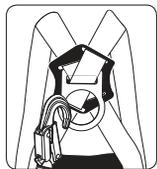
The ProForm Full Body Harness is equipped with the Relief Cord and is designed to help with the discomfort of suspension after a fall occurs. To use the Relief Cord:

1. Slide Chest strap down away from the throat, by grabbing the lanyard keeper and pulling down.
2. Grab the relief cord handles and pull out and forward, while lifting legs to a seated position.
3. Readjust chest strap down away from the throat. The outer layer shoulder pad can be pulled down for additional comfort.



CONNECTION REQUIREMENTS

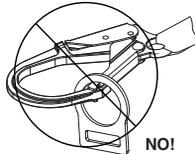
COMPATIBLE CONNECTIONS



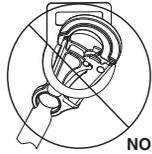
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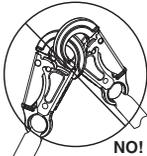
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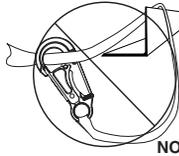
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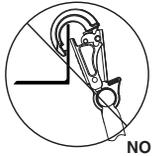
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NO!



NO!



NO!

COMPATIBILITY LIMITATIONS

All connecting subsystems must only be coupled to compatible connectors. OSHA 29 CFR 1910.140 and 1926.502 prohibit snap hooks from being engaged to certain objects unless two requirements are met: snap hook must be a locking type and must be “designed for” making such a connection. Under OSHA “designed for” means that the manufacturer of the snap hook specifically designed the snap hook to be used to connect to the equipment in question.

The following connections must be avoided, because they can result in rollout* when a non locking snap hook is used:

- Direct connection of a snap hook to horizontal lifeline.
- Two (or more) snap hooks connected to one D-ring.
- Two snap hooks connected to each other.
- A snap hook connected back on its integral lanyard.
- A snap hook connected to a webbing loop or webbing lanyard.
- Improper dimensions of the D-ring, rebar, or other connection point in relation to the snap hook dimensions that would allow the snap hook keeper to be depressed by a turning motion of the snap hook.

***Rollout:** A process by which a snap hook or carabiner unintentionally disengages from another connector or object to which it is coupled. (ANSI Z359.0)

ANNEX A

Note: This information from the Z359.11 standard is required to be included in the instruction manual for the end user:

ANSI/ASSE Z359 REQUIREMENTS FOR PROPER USE AND MAINTENANCE OF FULL BODY HARNESSES

(**Note:** These are general requirements and information provided by ANSI/ASSE Z359, the Manufacturer of this equipment may impose more stringent restrictions on the use of the products they manufacture, see the Manufacturer's instructions.)

1. It is essential that the users of this type of equipment receive proper training and instruction, including detailed procedures for the safe use of such equipment in their work application. ANSI/ASSE Z359.2, Minimum Requirements for a Comprehensive Managed Fall Protection Program, establishes guidelines and requirements for an employer's managed fall protection program, including policies, duties and training; fall protection procedures; eliminating and controlling fall hazards; rescue procedures; incident investigations; and evaluating program effectiveness.
2. Correct fit of a Full Body Harness is essential to proper performance. Users must be trained to select the size and maintain the fit of their Full Body Harness.
3. Users must follow manufacturer's instructions for proper fit and sizing, paying particular attention to ensure that buckles are connected and aligned correctly, leg straps and shoulder straps are kept snug at all times, chest straps are located in the middle chest area and leg straps are positioned and snug to avoid contact with the genitalia should a fall occur.
4. Full Body Harnesses which meet ANSI/ASSE Z359.11 are intended to be used with other components of a Personal Fall Arrest system that limit maximum arrest forces to 1800 pounds (8 kN) or less.

5. Suspension intolerance, also called suspension trauma or orthostatic intolerance, is a serious condition that can be controlled with good harness design, prompt rescue and post fall suspension relief devices. A conscious user may deploy a suspension relief device allowing the user to remove tension from around the legs, freeing blood flow, which can delay the onset of suspension intolerance. An attachment element extender is not intended to be attached directly to an anchorage or anchorage connector for fall arrest. An energy absorber must be used to limit maximum arrest forces to 1800 pounds (8 kN). The length of the attachment element extender may affect free fall distances and free fall clearance calculations.

6. Full Body Harness (FBH) Stretch, the amount the FBH component of a personal fall arrest system will stretch and deform during a fall, can contribute to the overall elongation of the system in stopping a fall. It is important to include the increase in fall distance created by FBH Stretch, as well as the FBH connector length, the settling of the user's body in the FBH and all other contributing factors when calculating total clearance required for a particular fall arrest system.

7. When not in use, unused lanyard legs that are still attached to a Full Body Harness D-ring should not be attached to a work positioning element or any other structural element on the Full Body Harness unless deemed acceptable by the competent person and manufacturer of the lanyard. This is especially important when using some types of "Y" style lanyards, as some load may be transmitted to the user through the unused lanyard leg if it is not able to release from the harness. The lanyard parking attachment is generally located in the sternal area to help reduce tripping and entanglement hazards.

8. Loose ends of straps can get caught in machinery or cause accidental disengagement of an adjuster.

All Full Body Harnesses shall include keepers or other components which serve to control the loose ends of straps.

9. Due to the nature of soft loop connections, it is recommended that soft loop attachments only be used to connect with other soft loops or carabiners. Snaphooks should not be used unless approved for the application by the manufacturer.

Sections 11-17 provide additional information concerning the location and use of various attachments that may be provided on this FBH.

10. **DORSAL** (Class A) – The dorsal attachment element shall be used as the primary fall arrest attachment, unless the application allows the use of an alternate attachment. The dorsal attachment may also be used for travel restraint or rescue. When supported by the dorsal attachment during a fall, the design of the Full Body Harness shall direct load through the shoulder straps supporting the user, and around the thighs. Supporting the user, post fall, by the dorsal attachment will result in an upright body position with a slight lean to the front with some slight pressure to the lower chest. Considerations should be made when choosing a sliding versus fixed dorsal attachment element. Sliding dorsal attachments are generally easier to adjust to different user sizes, and allow a more vertical rest position post fall, but can increase FBH Stretch.



11. **STERNAL** (Class L) – The sternal attachment may be used as an alternative fall arrest attachment in applications where the dorsal attachment is determined to be inappropriate by a competent person, and where there is no chance to fall in a direction other than feet first. Accepted practical uses for a sternal attachment include, but are not limited to, ladder climbing with a guided type fall arrester, ladder climbing with an overhead self-retracting lifeline for fall arrest, work positioning and rope access. The sternal attachment may also be used for travel restraint or rescue.



When supported by the sternal attachment during a fall, the design of the Full Body Harness shall direct load through the shoulder straps supporting the user, and around the thighs. Supporting the user, post fall, by the sternal attachment will result in roughly a sitting or cradled body position with weight concentrated on the thighs, buttocks and lower back. Supporting the user during work positioning by this sternal attachment will result in an approximate upright body position.

If the sternal attachment is used for fall arrest, the competent person evaluating the application should take measures to ensure that a fall can only occur feet first. This may include limiting the allowable free fall distance. It may be possible for a sternal attachment incorporated into an adjustable style chest strap to cause the chest strap to slide up and possibly choke the user during a fall, extraction, suspension, etc. The competent person should consider Full Body Harness models with a fixed sternal attachment for these applications.

12. **FRONTAL** – The frontal attachment serves as a ladder climbing connection for guided type fall arresters where there is no chance to fall in a direction other than feet first, or may be used for work positioning. Supporting the user, post fall or during work positioning, by the frontal attachment will result in a sitting body position, with the upper torso upright, with weight concentrated on the thighs and buttocks. When supported by the frontal attachment the design of the Full Body Harness shall direct load directly around the thighs and under the buttocks by means of the sub-pelvic strap.

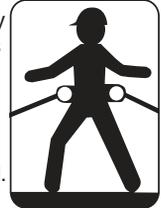
If the frontal attachment is used for fall arrest, the competent person evaluating the application should take measures to ensure that a fall can only occur feet first. This may include limiting the allowable free fall distance.

13. **SHOULDER** (Class E)– The shoulder attachment elements shall be used as a pair, and are an acceptable attachment for rescue and entry/retrieval. The shoulder attachment elements shall not be used for fall arrest. It is recommended that the shoulder attachment elements be used in conjunction with a yoke which incorporates a spreader element to keep the Full Body Harness shoulder straps separate.



14. **WAIST, REAR** – The waist, rear attachment shall be used solely for travel restraint. The waist, rear attachment element shall not be used for fall arrest. Under no circumstances is it acceptable to use the waist, rear attachment for purposes other than travel restraint. The waist, rear attachment shall only be subjected to minimal loading through the waist of the user, and shall never be used to support the full weight of the user.

15. **Hip** (Class P) – 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, or, in the case multiple leg lanyards, could cause adverse loading to the FBH and the wearer through the unused portion of the lanyard.



16. **SUSPENSION SEAT** – The suspension seat attachment elements shall be used as a pair, and shall be used solely for work positioning. The suspension seat attachment elements shall not be used for fall arrest. Suspension seat attachments are often used for prolonged work activities where the user is suspended, allowing the user to sit on the suspension seat formed between the two attachment elements. An example of this use would be window washers on large buildings.

USER INSPECTION, MAINTENANCE AND STORAGE OF EQUIPMENT

⚠ WARNING!

If inspection reveals any defect, inadequate maintenance, or unsafe condition, remove from service until a “competent” person, as defined by OSHA 29 CFR 1910.140(b) and 1926.32(f), can determine the need for authorized repair or disposal.

⚠ WARNING!

Any equipment that has been subjected to the forces of arresting a fall, or that has a deployed load indicator, must be removed from service until a “competent person” can determine the need for authorized repair or disposal.

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 returning to service.

MAINTENANCE AND STORAGE

⚠ WARNING!

Store Full Body Harnesses in a cool, dry, clean environment, out of direct sunlight to help avoid UV degradation, when not in use.

1. 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.

2. Equipment which is in need of, or scheduled for, maintenance shall be tagged as unusable and removed from service.

3. 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.

