

Model Numbers: (See back pages.)

USER INSTRUCTION MANUAL EXOFIT NEX™ FULL BODY HARNESS

This manual is intended to meet the Manufacturer's Instructions as required by ANSI Z359 and CSA 259.10 and should be used as part of an employee training program as required by OSHA

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

IMPORTANT: If you have questions on the use, care, or suitability of this equipment for your application, contact Capital Safety.

IMPORTANT: Record the product identification information from the ID label in the inspection and maintenance log in Section 9 of this manual.

DESCRIPTIONS:

The ExoFit NEX[™] Full Body Harness is available in Vest (Figure 1) and Cross-Over (Figure 2) styles configured with a variety of features including the following:

- Tech-Lite[™] Aluminum D-Rings Varied Locations: Front, Back, Hips, Shoulders
- Duo-Lok[™] Quick Connect Buckles
- Repel Technology Webbing
- Hybrid Comfort Padding
- Revolver[™] Vertical Torso Adjusters
- Tongue Buckle Body Belt
- Suspension Trauma Straps

NOTE: Some features may not be available on all models of the ExoFit NEX[™] Full Body Harness.

EXOFIT NEX[™]



Figure 1 - ExoFit NEX[™] Vest Style Full Body Harness







A. Shoulder Strap w/Hybrid Padding B. Revolver[™] Adjustor C. Hybrid Chest Pad with i-Safe[™] RFID Tag & Labels D. Tech-Lite[™] Front D-Ring E. Duo-Lok[™] Quick Connect Buckle F. Trauma Strap G. Tech-Lite[™] Dorsal D-Ring

1.0 APPLICATION

1.1 PURPOSE: The DBI-SALA ExoFit NEX^{™™} Full Body Harness (Figure 1 and Figure 2) should be used as a component in personal fall arrest, restraint, work positioning, climbing, controlled descent, or rescue systems (see Table 1).

ExoFit NEX[™] Harnesses included in this manual are full body harnesses and meet ANSI Z359.1, OSHA, and CSA Z259.10 requirements. See Figure 3 for application illustrations.

WARNING: Working at height has inherent risks. Some risks are noted here but are not limited to: falling, suspension/prolonged suspension, striking objects, and unconsciousness. In the event of a fall arrest and/or subsequent rescue (emergency) situation, some personal medical conditions may affect your safety. Medical conditions identified as risky for this type of activity include, but are not limited to: heart disease, high blood pressure, vertigo, epilepsy, drug or alcohol dependence, psychiatric illness, impaired limb function and balance issues. We recommend that your employer/physician determine if you are fit to handle normal and emergency use of this equipment.

Table 1 - ExoFit NEX™ Full Body Harness Applications		
Application	CSA Class	Description
Personal Fall Arrest	Class A	The full body harness is used as a component of a personal fall arrest system. Personal fall arrest systems typically include a full body harness and a connecting subsystem (energy absorbing lanyard). Maximum arresting force must not exceed 1,800 lbs (8 kN). For fall arrest applications connect the fall arrest subsystem (example: lanyard, SRL, energy absorber, etc.) to the D-ring or attachment element on your back, between your shoulder blades.
Controlled Descent	Class D	For controlled descent applications, harnesses equipped with a single sternal level D-ring, one or two frontal mounted D-rings, or a pair of connectors originating below the waist (such as a seat sling) may be used for connection to a descender or evacuation system (reference in Z259.10 in Canada).
Rescue	Class E	The full body harness is used as a component of a rescue system. Rescue systems are configured depending on the type of rescue. For limited access (confined space) applications, harnesses equipped with D-rings on the shoulders may be used for entry and egress into confined spaces where worker profile is an issue.
Ladder Climbing	Class L	The full body harness is used as a component of a climbing system to prevent the user from falling when climbing a ladder or other climbing structure. Climbing systems typically include a full body harness, vertical cable or rail attached to the structure, and climbing sleeve. For ladder climbing applications, harnesses equipped with a frontal D-ring in the sternal location may be used for fall arrest on fixed ladder climbing systems. These are defined in CSA Z259.2.1 in Canada and ANSI A14.3 in the United States.
Work Positioning	Class P	The full body harness is used as a component of a work positioning system to support the user at a work position. Work positioning systems typically include a full body harness, positioning lanyard, and a back-up personal fall arrest system. For work positioning applications, connect the work positioning subsystem (example: lanyard, Y-lanyard, etc.) to the lower (hip level) side or belt mounted work positioning attachment anchorage elements (D-rings). Never use these connection points for fall arrest.
Restraint	None	The full body harness is used as a component of a restraint system to prevent the user from reaching a fall hazard. Restraint systems typically include a full body harness and a lanyard or restraint line.

1.2 STANDARDS: Refer to local, state, and federal (OSHA) requirements governing occupational safety for additional information regarding Personal Fall Arrest Systems. Refer to the following national standards on fall protection:

ANSI	Z359.0	Definitions and Nomenclature Used for Fall Protection and Fall Arrest
ANSI	Z359.1	Safety Requirements for Personal Fall Arrest Systems, Subsystems, and Components
ANSI	Z359.2	Minimum Requirements for a Comprehensive Managed Fall Protection Program
ANSI	Z359.3	Safety Requirements for Positioning and Travel Restraint Systems
ANSI	Z359.4	Safety Requirements for Assisted-Rescue and Self-Rescue Systems, Subsystems, and Components
ANSI	A10.32	Fall Protection Systems for Construction and Demolitions
CSA	Z259.10	Full Body Harnesses
ASTM	F887-2005	Standard Speciifications for Personal Climbing Equipment



1.3 TRAINING: This equipment is intended to be used by persons trained in its correct application and use. It is the responsibility of the user to assure they are familiar with these instructions and are trained in the correct care and use of this equipment. Users must also be aware of the operating characteristics, application limits, and the consequences of improper use.

2.0 SYSTEM LIMITATIONS & REQUIREMENTS

Consider the following limitations/requirements prior to installing or using this equipment:

- 2.1 CAPACITY: ExoFit NEX[™] Full Body Harnesses are designed for use by persons with a combined weight (clothing, tools, etc.) of no more than 420 lbs. (191 kg) Make sure all of the components in your system are rated to a capacity appropriate to your application.
- **2.2 FREE FALL**: Personal fall arrest systems used with this equipment must be rigged to limit the free fall to 6 feet (1.8 M) per ANSI Z359.1 (see Section 7.1). 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 no vertical free fall is possible. Climbing systems must be rigged so that no vertical free fall is possible. See subsystem manufacturer's instructions for more information.
- **2.3 FREE FALL**: Figure 4 illustrates fall clearance requirements. There must be sufficient clearance below the user to allow the system to arrest a fall before the user strikes the ground or other obstruction. Clearance required is dependent on the following factors:
 - Elevation of Anchorage
- Connecting Subsystem Lenght
- Deceleration Distance
- Free Fall Distance
- Worker Height
- Movement of Harness Attachement Element
 - 4



- 2.4 SWING FALLS: Swing falls occur when the anchorage point is not directly above the point where a fall occurs. The force of striking an object in a swing fall may cause serious injury or death. Minimize swing falls by working as close to the anchorage point as possible. Do not permit a swing fall if injury could occur. Swing falls will significantly increase the clearance required when a self- retracting lifeline or other variable length connecting subsystem is used.
- 2.5 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. DBI-SALA recommends a seat board, suspension work seat, seat sling, or a boatswain chair. Contact Capital Safety for more information on these items.



- **2.6 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.
- 2.7 COMPATIBILITY OF COMPONENTS: Unless otherwise noted, DBI-SALA equipment is designed for use with DBI-SALA approved components and subsystems only. Substitutions or replacements made with non approved components or subsystems may jeopardize compatibility of equipment and may affect safety and reliability of the complete system.
- 2.8 COMPATIBILITY OF CONNECTORS: Connectors are considered to be compatible with connecting elements when they have been designed to work together in such a way that their sizes and shapes do not cause their gate mechanisms to inadvertently open regardless of how they become oriented. Connectors (hooks, carabiners, and D-rings) must be capable of supporting at least 5,000 lbs. (22 kN). Connectors must be compatible with the anchorage or other system components. Do not use equipment that is not compatible. Non-compatible connectors may unintentionally disengage (see Figure 6). Connectors must be compatible in size, shape, and strength. Self-locking snap hooks and carabiners are required by ANSI Z359.1 and OSHA.
- **2.9 MAKING CONNECTIONS:** Use only self-locking snap hooks and carabiners with this equipment. Only use connectors that are suitable to each application. Ensure all connections are compatible in size, shape and strength. Do not use equipment that is not compatible. Ensure all connectors are fully closed and locked.

DBI-SALA connectors (snap hooks and carabiners) are designed to be used only as specified in each product's user's instructions. See Figure 7 for illustration of the inappropriate connections stated below. DBI-SALA snap hooks and carabiners should not be connected:

- A. To a D-ring to which another connector is attached.
- B. In a manner that would result in a load on the gate.
- C. In a false engagement, where features that protrude from the snap hook or carabiner catch on the anchor and without visual confirmation seems to be fully engaged to the anchor point.
- D. To each other.
- E. Directly to webbing or rope lanyard or tie-back (unless the manufacturer's instructions for both the lanyard and connector specifically allow such a connection).
- F. To any object which is shaped or dimensioned such that the snap hook or carabiner will not close and lock, or that roll-out could occur.

NOTE: Other than 3,600 lb. (16 kN) gated hooks, large throat opening snap hooks should not be connected to standard size D-rings or similar objects which will result in a load on the gate if the hook or D-ring twists or rotates. Large throat snap hooks are designed for use on fixed structural elements such as rebar or cross members that are not shaped in a way that can capture the gate of the hook.

Other Restrictions:

- Do not make connections where the hook locking mechanism can come into contact with a structural member or other equipment and potentially release the hook.
- Do not connect a snap hook into a loop or thimble of a wire rope or attach in any way to a slack wire rope.
- The snap hook must be free to align with the applied load as intended (regardless of the size or shape of the mating connector).
- A carabiner may be used to connect to a single or pair of soft loops on a body support such as a body belt or full body harness, provided the carabiner can fully close and lock. This type of connection is not allowed for snap hooks.
- A carabiner may be connected to a loop or ring connector that is already occupied by a choker style connector. This type of connection is not allowed for snap hooks.





2.10 CONNECTING SUBSYSTEMS: Connecting subsystems (self-retracting lifeline, lanyard, rope grab and lifeline, cable sleeve) must be suitable for your application (see Table 1). See subsystem manufacturer's instructions for more information. Some harness models have web loop connection points. Do not use snap hooks to connect to web loops. Use a self-locking carabiner to connect to a web loop. Ensure the carabiner cannot cross-gate load (load against the gate rather than along the backbone of the carabiner). Some lanyards are designed to choke onto a web loop to provide a compatible connection. See Figure 8. Lanyards may be sewn directly to the web loop forming a permanent connection. Do not make multiple connections onto one web loop, unless choking two lanyards onto a properly sized web loop.

Figure 8 - Web Loop Connection

- 1. Insert Lanyard Web Loop (A) through Web Loop or D-ring on harness (B).
- 2. Insert opposite end of Lanyard through the Lanyard Web Loop.
- 3. Pull the Lanyard through the connecting Web Loop to secure.



2.11 ANCHORAGE & ANCHORAGE STRENGTH: Anchorage and anchorage strength requirements are dependent on the full body harness application (see Figure 3). In accordance with ANSI Z359.1, anchorages selected for Fall Arrest Systems must meet the anchorage strength requirements defined in Table 2.

Table 2 - Anchorage Strength Requirements			
Fall Arrest ¹	Non-Certified Anchorages: 5,000 lbs (22.2 kN)		
	Certified Anchorages ² :	2 times the Maximum Arresting Force for Certified Anchorages	
Restraint ¹	Non-Certified Anchorages	1,000 (4,5 kN)	
	Certified Anchorages ² :	2 times the foreseeable force for certified anchorages.	
Work Positioning1Non-Certified Anchorages3,000 lbs (13.3 kN)		3,000 lbs (13.3 kN)	
	Certified Anchorages ² :	2 times the foreseeable force for certified anchorages.	
Rescue ¹	Non-Certified Anchorages	3,000 lbs (13.3 kN)	
	Certified Anchorages ² :	5 times the foreseeable force for certified anchorages.	
Climbing	The structure to which a climbin particular system. See the instru	g system is attached must sustain the loads required by that uctions for the climbing system for requirements.	

1 *Multiple Systems:* When more than one of the defined system is attached to an anchorage, the strength defined for Non-Certified or Certified anchorages shall be multiplied by the number of systems attached to the anchorage.

2 Certified Anchorage: An anchorage for fall arrest, positioning, restraint, or rescue systems that a qualified person certifies to be capable of supporting the potential fall forces that could be encountered during a fall or that meet the criteria for a certified anchorage prescribed in this standard.

3.0 DONNING AND USE

WARNING: Do not alter or intentionally misuse this equipment. Consult Capital Safety when using this equipment in combination with components or subsystems other than those described in this manual. Some subsystem and component combinations may interfere with the operation of this equipment. Use caution when using this equipment around moving machinery, electrical and chemical hazards, and sharp edges.

- **3.1 BEFORE EACH USE**: Before each use of this equipment inspect the ExoFit NEX[™] Full Body Harness according to Section 5 of this manual.
- **3.2 PLANNING:** Plan your system before use. Consider all factors that will affect your safety during use of this equipment. Consider the following aspects when planning your system:
 - ANCHORAGE: Select an anchorage that meets the anchorage requirements specified in Section 2.
 - **SHARP EDGES:** Avoid working where system components may be in contact with, come in contact with, or abrade against, unprotected sharp edges.
 - **AFTER A FALL**: Any equipment which has been subjected to the forces of arresting a fall, or exhibits damage consistent with the effect of fall arrest forces as described in Section 5, must be removed from service immediately and destroyed by the user, the rescuer¹, or an authorized person².
 - **RESCUE**: The employer must have a rescue plan when using this equipment. The employer must have the ability to perform a rescue quickly and safely.
- **3.3 DONNING AND FITTING THE HARNESS**: The ExoFit NEX[™] Full Body Harness is available in Vest (Figure 9) and Cross-Over (Figure 10) styles. Donning procedures will vary with the harness style.

WARNING: Do not alter or intentionally misuse this equipment. Consult Capital Safety when using this equipment in combination with components or subsystems other than those described in this manual. Some subsystem and component combinations may interfere with the operation of this equipment. Use caution when using this equipment around moving machinery, electrical and chemical hazards, and sharp edges.



- **1 Rescuer:** Person or persons other than the rescue subject acting to perform an assisted rescue by operation of a rescue system.
- **2** Authorized Person: A person assigned by the employer to perform duties at a location where the person will be exposed to a fall hazard (otherwise referred to as "user" for the purpose of these instructions).

- A. EXOFIT NEX[™] VEST STYLE FULL BODY HARNESS: The ExoFit NEX[™] Vest Style Harness incorporates loops for a removable waist belt (see Figure 9). The belt can be installed through the two loops in the harness located in the lower back shoulder straps. The belt will pass through the harness just below the padded area. The hip pad, if used, is secured to the belt by passing the belt through the hip pad loops. Don the Vest Style Full Body Harness per the following steps and corresponding images in Figure 11:
 - **Step 1**. Locate back D-ring held in position by the D-ring pad; lift up harness and hold by this D-ring. Ensure the straps are not twisted.
 - **Step 2**. Grasp the shoulder straps and slip the harness onto one arm. The D-ring will be located on your back side. Ensure that the straps are not tangled and hang freely. Slip your free arm into the harness and position the shoulder straps on top of your shoulder. Ensure that the straps are not tangled and hang freely. The chest strap, with quick connect buckle, will be positioned on the front side when worn properly.
 - **Step 3.** Reach between your legs and grasp the gray leg strap on your left side. Bring the strap up between your legs and connect it by inserting the tab of the buckle into receptor of quick connect buckle on the left side as shown in Figure 11. You will hear a click when the tab engages properly. Connect the right leg strap using the same procedure. To adjust the leg straps, unlock ¹/_D the webbing lock on the quick connect buckle and pull on the strap. A plastic end keeper on the end of the strap will stop it from pulling completely out of the buckle. When the strap is properly adjusted, lock ¹/_D the webbing lock. To release the buckle, press the silver-colored tabs on the buckle towards each other with one hand, while pulling on the tab portion of the buckle with the other hand.

NOTE: Locking \mathbb{B} and unlocking \mathbb{b} the webbing lock prevents or allows the strap to slide between the sliding bar and slot on the female end of the quick connect buckle. It does not control engagement or disengagement of the buckle ends and will not affect the buckle connection in the event of a fall.

- **Step 4**. Attach the chest strap by inserting the tab of the buckle into the receptor of the quick connect buckle. You will hear a click when the tab engages properly. The chest strap should be 6 in. (15 cm) down from the top of your shoulders. Pass excess strap through the loop keepers. To adjust the chest strap, unlock ^{Ch} the webbing lock on the quick connect buckle and pull on the strap. A plastic end keeper on the end of the strap will stop it from pulling completely out of the buckle. When the strap is properly adjusted, lock ^A the webbing lock. To release the buckle, press the silver-colored tabs on the buckle toward each other with one hand, while pulling on the tab portion of the buckle with the other hand.
- Step 5. Adjust shoulder straps to a snug fit with the Vertical Torso Adjusters (see Figure 11): Turn the ratchet knob on the adjuster clockwise to tighten the strap. Pull the ratchet knob out and turn counterclockwise while pulling the strap to loosen the strap. Left and right sides of shoulder straps should be adjusted to the same length and the chest strap should be centered on your lower chest, 6 in. (15 cm) down from shoulder. The front D-ring on the vest style harness is moved up or down by adjusting the shoulder straps and leg straps. Center the back D-ring between your shoulder blades. Note: On applicable models, the back (dorsal) D-ring can be repositioned up or down as needed for a correct fit. Adjust leg straps to a snug fit. At least 3 in. (8 cm) of webbing must extend past the buckle on the leg straps. Adjust the waist belt (if present).

Figure 11 - Donning the ExoFit NEX[™] Vest Style Full Body Harness



Step 1



Step 2

Duo-Lok[™] Quick Connect Buckles



Step 3



Step 4



Connection: Connect buckle ends by inserting the tab into the receptor until a click is heard.





Strap Adjustment: Rotate Webbing Lock to unlocked position ¹/_b. Pull strap to adjust. Rotate Webbing Lock to locked position ¹/_b. *NOTE:* The Webbing Lock does not control engagement or disengagement of the buckle ends.



To Tighten: Turn Ratchet Knob clockwise. To Loosen: Pull Ratchet Knob out and turn counterclockwise while pulling strap. *NOTE:* After adjustment, ensure that the ramped teeth on the adjuster are engaged in the ratchet slots.



Step 5

- B. EXOFIT NEX[™] CROSS-OVER STYLE FULL BODY HARNESS: The ExoFit NEX[™] Cross-Over Style Harness incorporates loops for a removable waist belt. The belt can be installed through the two loops in the harness located in the lower back shoulder straps (see Figure 10). The belt will pass through the harness just below the padded area. The hip pad, if used, is secured to the belt by passing the belt through the hip pad loops. Don the Cross-Over Style Full Body Harness per the following steps and corresponding images in Figure 12:
 - **Step 1.** Locate the back D-ring held in position by the D-ring pad; lift up the harness and hold by this D-ring. Ensure the straps are not twisted.
 - **Step 2.** Grasp the shoulder straps between the back and front D-ring and slip the harness over your head from the left side. Position the shoulder straps on top of your shoulders. Ensure that the straps are not tangled and hang freely. The D-ring will be positioned on your back when worn properly.
 - **Step 3**. Grasp the tab of the buckle located at your right hip and insert it into the receptor of the quick connect buckle (see Figure 12). You will hear a click when the tab engages properly.
 - **Step 4.** Reach between your legs and grasp the gray leg strap on your left side. Bring the strap up between your legs and insert the tab of the buckle into the receptor of the buckle on the left side as shown in Figure 12. You will hear a click when the tab engages properly. Connect the right leg strap using the same procedure. To adjust the leg straps, unlock **b** the webbing lock on the quick connect buckle and pull on the strap. A plastic end keeper on the end of the strap will stop it from pulling completely out of the buckle. When the strap is properly adjusted, lock **b** the webbing lock. To release the buckle, press the silver-colored tabs on the buckle towards each other with one hand, while pulling on the tab portion of the buckle with the other hand.

NOTE: Locking ^A and unlocking ^A the webbing lock prevents or allows the strap to slide between the sliding bar and slot on the female end of the quick connect buckle. It does not control engagement or disengagement of the buckle ends and will not affect the buckle connection in the event of a fall.

- **Step 5.** Adjust shoulder straps to a snug fit with the Vertical Torso Adjusters (see Figure 12): Turn the ratchet knob on the adjuster clockwise to tighten the strap. Pull the ratchet knob out and turn counterclockwise while pulling the strap to loosen the strap. Left and right sides of the shoulder straps should be adjusted to the same length and the front D-ring should be centered on your lower chest. The back D-ring should be centered between your shoulder blades. Note: On ExoFit XP models, the back (dorsal) D-ring can be repositioned up or down as needed for a correct fit. Adjust the leg straps to a snug fit. At least 3 in. (8 cm) of webbing must extend past the buckle on the leg straps. Adjust the waist belt (if present).
- **3.4 USE OF FALL ARREST D-RING OR ATTACHMENT ELEMENT**: For fall arrest applications connect to the D-ring or attachment element on your back, between your shoulder blades. Side D-rings, if present, are for positioning or restraint applications only. Front D-ring, if present, is for ladder climbing, positioning, or other applications with a limited free fall not exceeding 2 feet (0.6 m) with a 900 MAF requirement. For rescue, back, shoulder, or front D-rings may be used. D-rings on seat sling are for work positioning or personnel riding.
- **3.5 MAKING CONNECTIONS**: When using a hook to connect to an anchorage or when coupling components of the system together, ensure roll-out cannot occur. Roll-out occurs when interference between the hook and mating connector causes the hook gate to unintentionally open and release. Self-locking snap hooks and carabiners should be used to reduce the possibility of roll-out. Do not use hooks or connectors that will not completely close over the attachment object. See subsystem manufacturer's instructions for more information on making connections.
- **3.6 CONNECTING SYSTEM COMPONENTS**: After properly fitting the full body harness, the user may then connect to other system components. Follow the guidelines in Section 3.4 when selecting the correct attachment element.

Figure 12 - Donning the ExoFit NEX[™] Cross-Over Style Full Body Harness



Step 1



5100 2



Step 3



Step 4



Connection: Connect buckle ends by inserting the tab into the receptor until a click is heard.





Strap Adjustment: Rotate Webbing Lock to unlocked position b. Pull strap to adjust. Rotate Webbing Lock to locked position b. NOTE: The Webbing Lock does not control engagement or disengagement of the buckle ends.

Revolver[™] Vertical Torso Adjusters



To Tighten: Turn Ratchet Knob clockwise. To Loosen: Pull Ratchet Knob out and turn counterclockwise while pulling strap. *NOTE:* After adjustment, ensure that the ramped teeth on the adjuster are engaged in the ratchet slots.



Step 5

- **3.7 SUSPENSION TRAUMA STRAP**: The ExoFit NEX[™] Full Body Harness is equipped with a Suspension Trauma Strap (Figure 13) to help prolong allowable suspension time in the event of a fall from height. It should only be used in situations where a fall has occurred or for training. To use the Suspension Trauma Strap:
 - **Step 1.** Unzip the Trauma Strap Pouch on each hip of the harness and deploy the Suspension Straps (Figure 13A).
 - **Step 2.** Raise the ends of the straps to access the hook and loops. Insert the hook into the loop that provides the desired strap length.
 - **Step 3.** Lower the Suspension Strap and step onto the strap to alleviate pressure of the harness leg straps on the legs (Figure 13B). Adjust the hook/loop combination for optimal comfort.

WARNING: Maintain an upright position following suspension. Do not lay down. Seek medical attention following a suspension.

Figure 13 - Suspension Trauma Straps



4.0 TRAINING

It is the responsibility of the purchaser and the user of this equipment to assure that they understand these instructions and are trained in the correct care and use of this equipment. They must also be aware of the operating characteristics, application limits, and the consequences of improper use of this equipment.

IMPORTANT: Training must be conducted without exposing the user to a fall hazard. Training should be repeated on a periodic basis.

5.0 INSPECTION

5.1 i-Safe[™] RFID TAG: The i-Safe[™] RFID tag on the ExoFit NEX[™] Harness (see Figure 14) can be used in conjunction with the i-Safe handheld reading device and the web based portal to simplify inspection and inventory control and provide records for your fall protection equipment.



- 5.2 FREQUENCY: Before each use inspect the full body harness according to Section 5.3. The harness must be inspected by a competent person³, other than the user, at least annually. Record the results of each formal inspection in the inspection and maintenance log in section Section 9, or use the i-Safe[™] inspection web portal to maintain your inspection records. If you are a first-time user, contact a Customer Service representative in the US at 800-328-6146 or in Canada at 800-387-7484 or if you have already registered, go to: www.capitalsafety.com/isafe. Follow instructions provided with your i-Safe handheld reader or on the web portal to transfer your data to your web log.
- **3 Competent Person:** One who is capable of identifying existing and predictable hazards in the surroundings or working conditions which are unsanitary, hazardous, or dangerous to employees, and who has authorization to take prompt corrective measures to eliminate them.

IMPORTANT: If the full body harness has been subjected to fall arrest or impact forces it must be immediately removed from service and destroyed.

IMPORTANT: Extreme working conditions (harsh environments, prolonged use, etc.) may require increasing the frequency of inspections.

- **5.3 INSPECTION**: Inspect the ExoFit NEX[™] Full Body Harness as follows:
 - Step 1. Inspect harness hardware (buckles, D-rings, pads, loop keepers, vertical torso adjusters): These items must not be damaged, broken, distorted, and must be free of sharp edges, burrs, cracks, worn parts, or corrosion. PVC coated hardware must be free of cuts, rips, tears, holes, etc. in the coating to ensure non-conductivity. Ensure that release tabs on buckles work freely and that a click is heard when the buckle engages. Inspect vertical torso adjusters for proper operation. Ratchet knobs should turn with ease in a clockwise direction and should only turn counterclockwise when the knob is pulled out.
 - **Step 2. Inspect webbing:** Material must be free of frayed, cut, or broken fibers. Check for tears, abrasions, mold, burns, or discoloration. Inspect stitching; check for pulled or cut stitches. Broken stitches may be an indication that the harness has been impact loaded and must be removed from service. When performing the annual formal inspection, unsnap and open the back pad to facilitate inspection of the webbing.
 - Step 3. Inspect the labels: All labels should be present and fully legible (see Section 8).
 - **Step 4. Inspect system components and subsystems:** Inspect each system component or subsystem according to manufacturer's instructions.
 - **Step 5. Record inspection data:** Record the inspection date and results in the *Inspection and Maintenance Log* (see Section 9).
 - **Step 6. Inspect the Stitched Impact Indicator**: The stitched impact indicator is a section of webbing that is lapped back on itself and secured with a specific stitch pattern holding the lap (see Figure 15). The stitch pattern is designed to release when the harness arrests a fall or has been subjected to an equivalent force If the impact indicator has been activated the harness must be removed from service and destroyed.
 - **Step 7. Inspect Suspension Trauma Straps**: Check the trauma strap pouches for damage and secure connection to the harness. Unzip the trauma strap pouch on each hip of the harness and inspect suspension trauma straps. Webbing and pouch material must be free of frayed, cut, or broken fibers. Check for tears, abrasions, mold, burns, discoloration, or knots. Verify that one pouch is marked '*Hook'* and the other marked '*loop'*.

IMPORTANT: If inspection reveals a defective condition, remove the unit from service immediately and destroy it.

NOTE: Only DBI-SALA or parties authorized in writing may make repairs to this equipment.



6.0 MAINTENANCE, SERVICING, AND STORAGE

- 6.1 WASHING INSTRUCTIONS: Washing procedures for the ExoFit NEX[™] Full Body Harness are as follows:
 - Step 1. Spot clean the ExoFit NEX[™] full body harness with water and a mild soap solution. The harness may be laundered by using a bleach-free detergent. Water temperature for wash and rinse must not exceed 160° F (70° C).
 - **Step 2.** Place the harness in the supplied laundry bag. The bag is designed to prevent entanglement of harnesses and to protect the washing machine from damage. Use of the laundry bag to wash the pads is optional.

NOTE: Use a bleach-free detergent when washing the harness and pads.

Step 3. The harness and pads may be air dried or tumble dried on low heat not exceeding 200° F (90° C).

NOTE: More information on cleaning is available from Capital Safety. If you have questions concerning the condition of your harness, or have any doubt about putting it into service contact Capital Safety.

- **6.2 ADDITIONAL MAINTENANCE AND SERVICING:** Additional maintenance and servicing procedures must be completed by a factory authorized service center. Authorization must be in writing. Do not attempt to disassemble the unit.
- **6.3 STORAGE**: Store the ExoFit NEX[™] 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.

7.0 SPECIFICATIONS

7.1 PERFORMANCE:

• Maximum Free Fall Distance: No greater than 6 ft (1.8 m), per federal law and ANSI Z359.1.

NOTE: Harness is acceptable for use with free fall distances exceeding 6 feet (1.8 m) if used with appropriate connecting system.

- Maximum Arresting Force: 1,800 lbs. (13 kN)
- Maximum Capacity: 420 lbs. (191 kg)
 - Approximate Weight: Harness only: 3 lbs. (1.4 kg) Harness with Side D-rings: Add 1/2 lb. (.23 kg) Harness with Front D-ring: Add 1/4 lb. (.11 kg) Harness with Back Pad or Belt: Add 1 lb. (.45 kg)

7.2 MATERIALS:

 Webbing Materials: 6,000 lbs (27 kN) Polyester; 7,000 lbs (31 kN) Tensile Strength Nylon; 7,000 lbs Tensile Strength Nomex⁴ covered Kevlar⁴

Pad and Label Cover Materials:

- All outer fabric is Nomex and Kevlar blend fabric.
- Fire Resistant Hook and Loop Fasteners
- Blend of Nylon and Polyester

Optional Accessories:

- Hip Pad with side D-rings
- Nomex[®] covered Kevlar[®] webbing
- Non-sparking/ Non-conductive PVC coated hardware
- Arc-rated hip, leg, and back pads
- Polyurethane coated, arc-rated dorsal web loop
- **7.3 STANDARDS**: When installed and used per the requirements and recommendations in the manual, the ExoFit NEX[™] Full Body Harness meets local, state, and federal requirements defined in Section 1.2.

⁴ ®: Nomex[®] and Kevlar[®] are registered trademarks of DuPont.

8.0 LABELING

The following labels must be securely attached and fully legible:





9.0 INSPECTION AND MAINTENANCE LOG

SERIAL NUMBER:				
MODEL NUMBER:		1		
DATE PURCHASED:		DATE OF FIRST USE:	DATE OF FIRST USE:	
INSPECTION DATE	INSPECTION ITEMS NOTED	CORRECTIVE ACTION	MAINTENANCE PERFORMED	
Approved By:				
Approved By:		_		
Approved By:		_		
Approved By:		_		
Approved By:		_		
Approved By:		_		
Approved By:				
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Approved By:		_		
Approved By:				

9.0 INSPECTION AND MAINTENANCE LOG

SERIAL NUMBER:			
MODEL NUMBER:			
DATE PURCHASED:		DATE OF FIRST USE:	
INSPECTION DATE	INSPECTION ITEMS NOTED	CORRECTIVE ACTION	MAINTENANCE PERFORMED
Approved By:		_	
Approved By:		_	
Approved By:		_	
Approved By:		-	
Approved By:		_	
Approved By:		-	
Approved By:		_	
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Approved By:	1	_	
Approved By:		_	
Approved By:		-	
Approved By:			
Approved By:		-	

9.0 INSPECTION AND MAINTENANCE LOG

SERIAL NUMBER:				
MODEL NUMBER:		1		
DATE PURCHASED:		DATE OF FIRST USE:	DATE OF FIRST USE:	
INSPECTION DATE	INSPECTION ITEMS NOTED	CORRECTIVE ACTION	MAINTENANCE PERFORMED	
Approved By:				
Approved By:	I			

ANSI Models	CSA Models	Description
1113000	1113000C	ExoFit NEX [™] Vest Style Harness with aluminum back d-ring, locking quick connect buckles (Size X-small)
1113001	1113001C	ExoFit NEX [™] Vest Style Harness with aluminum back d-ring, locking quick connect buckles (Size Small)
1113004	1113004C	ExoFit NEX [™] Vest Style Harness with aluminum back d-ring, locking quick connect buckles (Size Medium)
1113007	1113007C	ExoFit NEX [™] Vest Style Harness with aluminum back d-ring, locking quick connect buckles (Size Large)
1113010	1113010C	ExoFit NEX [™] Vest Style Harness with aluminum back d-ring, locking quick connect buckles (Size X-Large)
1113013	1113013C	ExoFit NEX [™] Vest Style Harness with aluminum back d-ring, locking quick connect buckles (Size XX-Large)
1113015	1113015C	ExoFit NEX [™] Vest Style Harness with aluminum back d-ring, tongue buckle legs (Size X-small)
1113016	1113016C	ExoFit NEX [™] Vest Style Harness with aluminum back d-ring, tongue buckle legs (Size Small)
1113019	1113019C	ExoFit NEX [™] Vest Style Harness with aluminum back d-ring, tongue buckle legs (Size Medium)
1113022	1113022C	ExoFit NEX [™] Vest Style Harness with aluminum back d-ring, tongue buckle legs (Size Large)
1113025	1113025C	ExoFit NEX [™] Vest Style Harness with aluminum back d-ring, tongue buckle legs (Size X-Large)
1113030	1113030C	ExoFit NEX [™] Vest Style Harness with aluminum front and back D-rings, locking quick connect buckles (Size X-small)
1113031	1113031C	ExoFit NEX [™] Vest Style Harness with aluminum front and back D-rings, locking quick connect buckles (Size Small)
1113034	1113034C	ExoFit NEX [™] Vest Style Harness with aluminum front and back D-rings, locking quick connect buckles (Size Medium)
1113037	1113037C	ExoFit NEX [™] Vest Style Harness with aluminum front and back D-rings, locking quick connect buckles (Size Large)
1113040	1113040C	ExoFit NEX [™] Vest Style Harness with aluminum front and back D-rings, locking quick connect buckles (Size X-Large)
1113043	1113043C	ExoFit NEX [™] Vest Style Harness with aluminum front and back D-rings, locking quick connect buckles (Size XX-Large)
1113045	1113045C	ExoFit NEX [™] Vest Style Harness with aluminum back and side D-rings, locking quick connect buckles (Size X-small)
1113046	1113046C	ExoFit NEX [™] Vest Style Harness with aluminum back and side D-rings, locking quick connect buckles (Size Small)
1113049	1113049C	ExoFit NEX [™] Vest Style Harness with aluminum back and side D-rings, locking quick connect buckles (Size Medium)
1113052	1113052C	ExoFit NEX [™] Vest Style Harness with aluminum back and side D-rings, locking quick connect buckles (Size Large)
1113055	1113055C	ExoFit NEX [™] Vest Style Harness with aluminum back and side D-rings, locking quick connect buckles (Size X-Large)
1113058	1113058C	ExoFit NEX [™] Vest Style Harness with aluminum back and side D-rings, locking quick connect buckles (Size XX-Large)
1113060	1113060C	ExoFit NEX [™] Vest Style Harness with aluminum back and shoulder D-rings, locking quick connect buckles (Size X-small)
1113061	1113061C	ExoFit NEX [™] Vest Style Harness with aluminum back and shoulder D-rings, locking quick connect buckles (Size Small)
1113064	1113064C	ExoFit NEX [™] Vest Style Harness with aluminum back and shoulder D-rings, locking quick connect buckles (Size Medium)
1113067	1113067C	ExoFit NEX [™] Vest Style Harness with aluminum back and shoulder D-rings, locking quick connect buckles (Size Large)
1113070	1113070C	ExoFit NEX [™] Vest Style Harness with aluminum back and shoulder D-rings, locking quick connect buckles (Size X-Large)
1113073	1113073C	ExoFit NEX [™] Vest Style Harness with aluminum back and shoulder D-rings, locking quick connect buckles (Size XX-Large)

ANSI Models	CSA Models	Description
1113075	1113075C	ExoFit NEX™ Vest Style Harness with aluminum front, back and side D-rings, locking quick connect buckles (Size X-small)
1113076	1113076C	ExoFit NEX™ Vest Style Harness with aluminum front, back and side D-rings, locking quick connect buckles (Size Small)
1113079	1113079C	ExoFit NEX™ Vest Style Harness with aluminum front, back and side D-rings, locking quick connect buckles (Size Medium)
1113082	1113082C	ExoFit NEX [™] Vest Style Harness with aluminum front, back and side D-rings, locking quick connect buckles (Size Large)
1113085	1113085C	ExoFit NEX™ Vest Style Harness with aluminum front, back and side D-rings, locking quick connect buckles (Size X-Large)
1113088	1113088C	ExoFit NEX [™] Vest Style Harness with aluminum front, back and side D-rings, locking quick connect buckles (Size XX-Large)
1113090	1113090C	ExoFit NEX™ Cross Over Style Harness with aluminum front and back D-rings, locking quick connect buckles (Size X-small)
1113091	1113091C	ExoFit NEX™ Cross Over Style Harness with aluminum front and back D-rings, locking quick connect buckles (Size Small)
1113094	1113094C	ExoFit NEX™ Cross Over Style Harness with aluminum front and back D-rings, locking quick connect buckles (Size Medium)
1113097	1113097C	ExoFit NEX™ Cross Over Style Harness with aluminum front and back D-rings, locking quick connect buckles (Size Large)
1113100	1113100C	ExoFit NEX [™] Cross Over Style Harness with aluminum front and back D-rings, locking quick connect buckles (Size X-Large)
1113103	1113103C	ExoFit NEX [™] Cross Over Style Harness with aluminum front and back D-rings, locking quick connect buckles (Size XX-Large)
1113105	1113105C	ExoFit NEX [™] Cross Over Style Harness with aluminum front, back and side D-rings, locking quick connect buckles (Size X-small)
1113106	1113106C	ExoFit NEX [™] Cross Over Style Harness with aluminum front, back and side D-rings, locking quick connect buckles (Size Small)
1113109	1113109C	ExoFit NEX [™] Cross Over Style Harness with aluminum front, back and side D-rings, locking quick connect buckles (Size Medium)
1113112	1113112C	ExoFit NEX™ Cross Over Style Harness with aluminum front, back and side D-rings, locking quick connect buckles (Size Large)
1113115	1113115C	ExoFit NEX [™] Cross Over Style Harness with aluminum front, back and side D-rings, locking quick connect buckles (Size X-Large)
1113118	1113118C	ExoFit NEX™ Cross Over Style Harness with aluminum front, back and side D-rings, locking quick connect buckles (Size XX-Large)
1113120	1113120C	ExoFit NEX [™] Construction Style Harness with aluminum back and side D-rings, locking quick connect buckles and sewn-in hip pad and body belt (Size X-small)
1113121	1113121C	ExoFit NEX [™] Construction Style Harness with aluminum back and side D-rings, locking quick connect buckles and sewn-in hip pad and body belt (Size Small)
1113124	1113124C	ExoFit NEX [™] Construction Style Harness with aluminum back and side D-rings, locking quick connect buckles and sewn-in hip pad and body belt (Size Medium)
1113127	1113127C	ExoFit NEX™ Construction Style Harness with aluminum back and side D-rings, locking quick connect buckles and sewn-in hip pad and body belt (Size Large)
1113130	1113130C	ExoFit NEX [™] Construction Style Harness with aluminum back and side D-rings, locking quick connect buckles and sewn-in hip pad and body belt (Size X-Large)
1113133	1113133C	ExoFit NEX [™] Construction Style Harness with aluminum back and side D-rings, locking quick connect buckles and sewn-in hip pad and body belt (Size XX-Large)
1113135	1113135C	ExoFit NEX [™] Construction Style Harness with aluminum back and side D-rings, tongue buckle legs and sewn-in hip pad and body belt (Size X-small)
1113136	1113136C	ExoFit NEX [™] Construction Style Harness with aluminum back and side D-rings, tongue buckle legs and sewn-in hip pad and body belt (Size Small)

ANSI Models	CSA Models	Description
1113139	1113139C	ExoFit NEX [™] Construction Style Harness with aluminum back and side D-rings, tongue buckle legs and sewn-in hip pad and body belt (Size Medium)
1113142	1113142C	ExoFit NEX [™] Construction Style Harness with aluminum back and side D-rings, tongue buckle legs and sewn-in hip pad and body belt (Size Large)
1113145	1113145C	ExoFit NEX [™] Construction Style Harness with aluminum back and side D-rings, tongue buckle legs and sewn-in hip pad and body belt (Size X-Large)
1113148	1113148C	ExoFit NEX [™] Construction Style Harness with aluminum back and side D-rings, tongue buckle legs and sewn-in hip pad and body belt (Size XX-Large)
1113150	1113150C	ExoFit NEX [™] Construction Style Harness with aluminum front, back and side D-rings, locking quick connect buckles and sewn-in hip pad and body belt (Size X-small)
1113151	1113151C	ExoFit NEX [™] Construction Style Harness with aluminum front, back and side D-rings, locking quick connect buckles and sewn-in hip pad and body belt (Size Small)
1113154	1113154C	ExoFit NEX [™] Construction Style Harness with aluminum front, back and side D-rings, locking quick connect buckles and sewn-in hip pad and body belt (Size Medium)
1113157	1113157C	ExoFit NEX [™] Construction Style Harness with aluminum front, back and side D-rings, locking quick connect buckles and sewn-in hip pad and body belt (Size Large)
1113160	1113160C	ExoFit NEX [™] Construction Style Harness with aluminum front, back and side D-rings, locking quick connect buckles and sewn-in hip pad and body belt (Size X-Large)
1113163	1113163C	ExoFit NEX [™] Construction Style Harness with aluminum front, back and side D-rings, locking quick connect buckles and sewn-in hip pad and body belt (Size XX-Large)

WARRANTY

Equipment offered by DBI-SALA is warranted against factory defects in workmanship and materials for a period of two years from date of installation or use by the owner, provided that this period shall not exceed two years from date of shipment. Upon notice in writing, DBI-SALA will promptly repair or replace all defective items. DBI-SALA reserves the right to elect to have any defective item returned to its plant for inspection before making a repair or replacement. This warranty does not cover equipment damages resulting from abuse, damage in transit, or other damage beyond the control of DBI-SALA. This warranty applies only to the original purchaser and is the only one applicable to our products, and is in lieu of all other warranties, expressed or implied.



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