



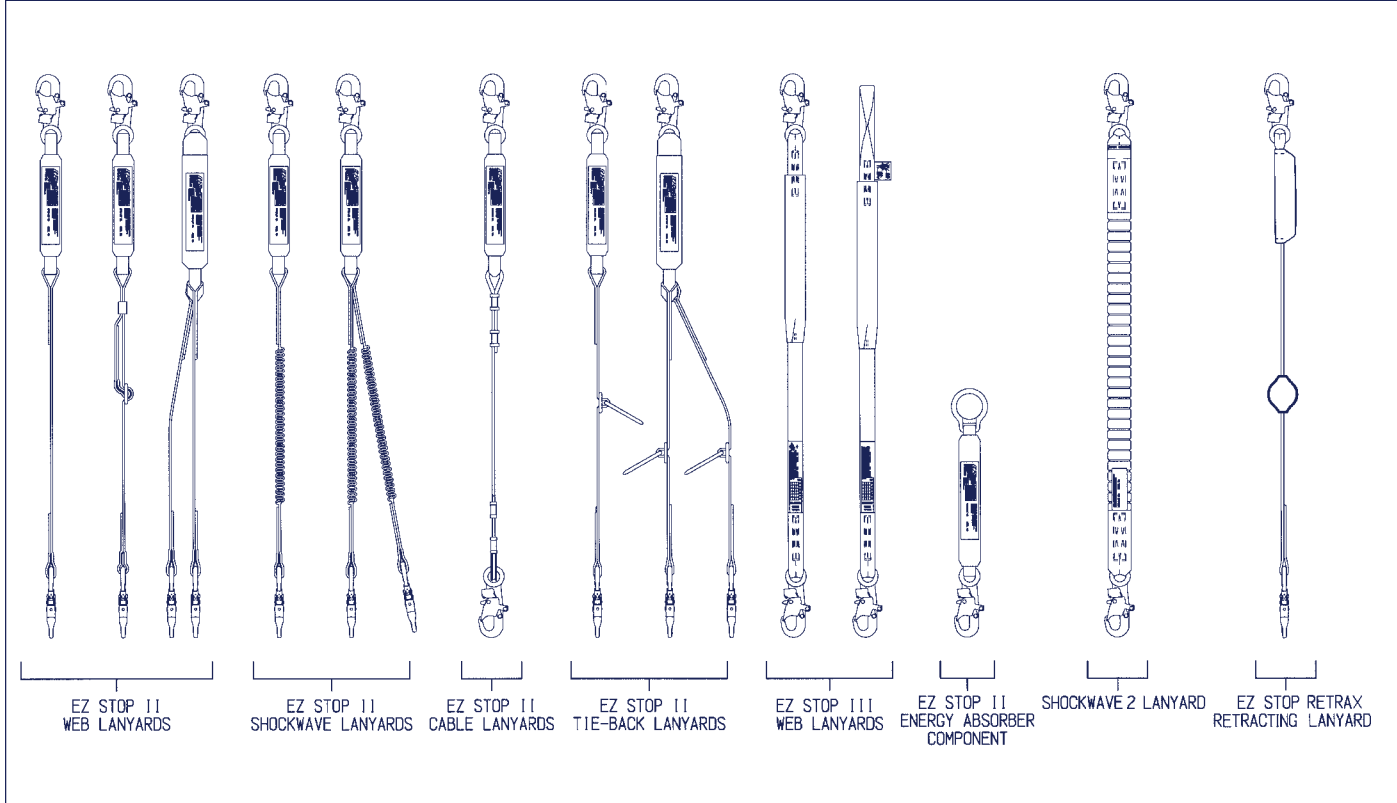
**Instructions for the following series products:**  
 EZ Stop Lanyards  
 ShockWave Lanyards  
 EZ Stop Retrax Lanyards  
 (See back pages for specific model numbers.)

**User Instruction Manual**

**Lanyards With Integral Energy Absorbers and Energy Absorber Components Used in Personal Fall Arrest Systems (ANSI Z359.1)**

*This manual is intended to meet the Manufacturer's Instructions as required by ANSI Z359.1, and should be used as part of an employee training program as required by OSHA.*

**Figure 1 - EZ STOP® Lanyards**



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

**IMPORTANT:** If you have any questions on the use, care, application, or suitability for use of this equipment, contact DBI/SALA.

**IMPORTANT:** Before using this equipment record the product identification information (found on the I.D. label) in the inspection and maintenance log in section 9.0 of this manual.

## **DESCRIPTIONS**

### **EZ STOP® II WEB LANYARDS**

- 1-in. web, 9503175 hook each end.
- 1-in. web, 9503175 hook one end, 2007153 hook other end.
- 1-in. web, 9503175 hook one end, 1200049 wire pipe clamp other end.
- 1-in. web, 9503175 hook one end, 2000108 carabiner other end.
- 1-in. web, web loop one end, 2007153 hook other end.
- 1-in. web, web loop one end, 9503175 hook other end.
- 1-in. web, adjustable, 9503175 hook each end.
- 1-in. web, 100% tie-off, 9503175 hook center, 2007153 hook leg ends.
- 1-in. web, 100% tie-off, 9503175 hook center and leg ends.
- 1-in. web, 100% tie-off, 9503175 hook center, 2000108 carabiner leg ends.
- 1-in. web, 100% tie-off, web loop center, 2007153 hook leg ends.
- 1-in. web, 100% tie-off, web loop center, 9503175 hook leg ends.

### **EZ STOP® II SHOCKWAVE™ WEB LANYARDS**

- 1-in. elastic web, 9503175 hook each end.
- 1-in. elastic web, 9503175 hook one end, 2007153 hook other end.
- 1-in. elastic web, web loop one end, 2007153 hook other end.
- 1-in. elastic web, web loop one end, 9503175 hook other end.
- 1-in. elastic web, 100% tie-off, 9503175 hook center and both ends.
- 1-in. elastic web, 100% tie-off, 9503175 hook center, 2007153 hook leg ends.
- 1-in. elastic web, 100% tie-off, web loop center, 2007153 hook leg ends.
- 1-in. elastic web, 100% tie-off, web loop center, 9503175 hook leg ends.

### **EZ STOP® II CABLE LANYARDS**

- 7/32-in. cable, 9503175 snap hook each end.
- 7/32-in. cable, 9503175 snap hook one end, 2007153 snap hook other end.
- 7/32-in. cable, 9503175 snap hook one end, 2000108 carabiner other end.

### **EZ STOP® II TIE-BACK LANYARDS**

- 1-in. web, 9503175 hook both ends, floating D-ring.
- 1-in. web, 100% tie-off, 9503175 hook center and leg ends, floating D-rings.

### **EZ STOP® III WEB LANYARDS**

- 1 3/8-in. web, 9503175 hook each end.
- 1 3/8-in. web, 9503175 hook one end, 2007153 hook one end.
- 1 3/8-in. web, 9503175 hook one end, 2000108 carabiner one end.
- 1 3/8-in. web, 9503175 hook one end, 1200049 wire pipe hook one end.
- 1 3/8-in. web, web loop one end, 2007153 hook one end.
- 1 3/8-in. web, web loop one end, 9503175 hook one end.

### **EZ STOP® II ENERGY ABSORBER COMPONENT**

- 9503175 hook one end, D-ring one end, 24-in. length.

### **SHOCKWAVE 2™ WEB LANYARD**

- 1 15/16-in. web, 9503175 hook each end.

### **EZ STOP® RETRAX™ RETRACTING WEB LANYARD**

- 1 3/8-in. web, 9503175 hook each end.
- 1 3/8-in. web, 9503175 hook one end, 9510057 hook other end.
- 1 3/8-in. web, 9503175 hook one end, 2007153 hook other end.
- 1 3/8-in. web, 100% tie-off, 9503175 hook each end.

Note: Other hook and lanyard options are available.

## 1.0 APPLICATIONS

- 1.1 PURPOSE:** DBI/SALA Energy Absorbing Lanyards and Energy Absorbers are intended to be used as part of a personal fall arrest system. Applications for these products include inspection work, construction and demolition, maintenance, oil production, confined space rescue, and similar activities where there exists the possibility of a fall. This equipment is specially designed to dissipate fall energy and limit fall arrest forces transferred to the body.
- 1.2** The following application limitations must be considered before using this product:
- A. CAPACITY:** This equipment is for use by persons with a combined weight (person, clothing, tools, etc.) of no more than 310 lbs.
  - B. PHYSICAL AND ENVIRONMENTAL HAZARDS:** Use of this equipment in areas containing physical or environmental hazards may require that additional precautions be taken to reduce the possibility of damage to this equipment or injury to the user. Hazards may include, but are not limited to: high heat, strong or caustic chemicals, corrosive environments, the possibility of electric current flowing through this equipment when working near high voltage power lines, explosive or toxic gases, moving machinery, or sharp edges. Contact DBI/SALA if you have any questions about the application of this equipment in areas where physical or environmental hazards are present.
  - C. TRAINING:** This equipment is intended to be installed and used by persons who have been properly trained in its correct application and use.
- 1.3** Refer to national consensus (including ANSI Z359.1), applicable local, state, and federal (OSHA) requirements governing this equipment for more information on Energy Absorbing Lanyards, Energy Absorbers and associated system components.

## 2.0 SYSTEM REQUIREMENTS

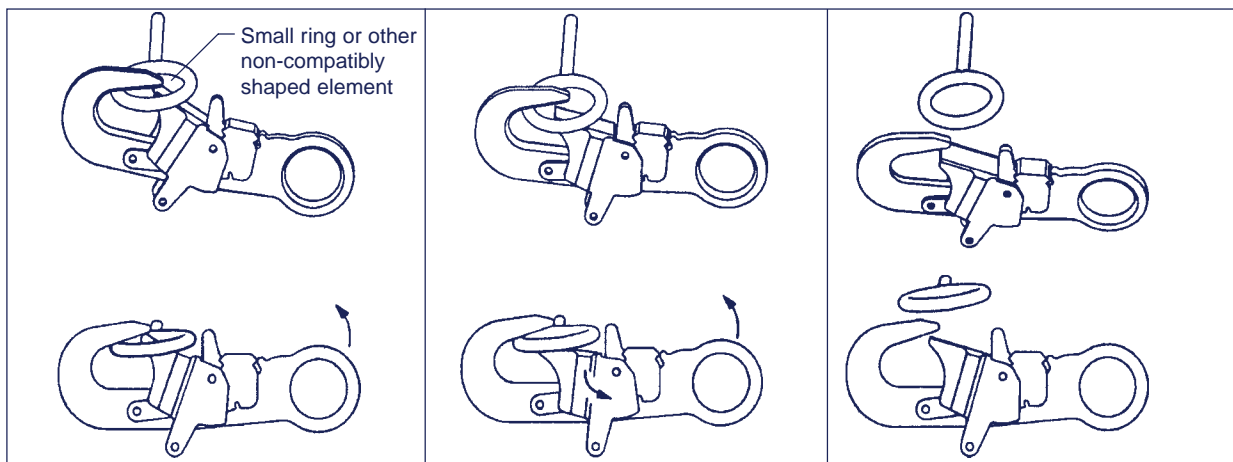
- 2.1 COMPATIBILITY OF CONNECTORS:** DBI/SALA equipment is designed for use with DBI/SALA approved components and subsystems only. Substitutions or replacements made with non-approved components or subsystems may jeopardize compatibility of equipment and may effect the safety and reliability of the complete system.

**COMPATIBILITY:** 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. Contact DBI/SALA if you have any questions about compatibility.

Connectors ( hooks, carabiners, and D-rings) must be capable of supporting at least 5,000 lbs. (22.2 kN).

**Figure 2 - Unintentional Disengagement (Roll-out)**

If the connecting element that a snap hook (shown) or carabiner attaches to is undersized or irregular in shape, a situation could occur where the connecting element applies a force to the gate of the snap hook or carabiner. This force may cause the gate (of either a self-locking or a non-locking snap hook) to open, allowing the snap hook or carabiner to disengage from the connecting point.



1. Force is applied to the snap hook.

2. The gate presses against the connecting ring.

3. The gate opens allowing the snap hook to slip off.

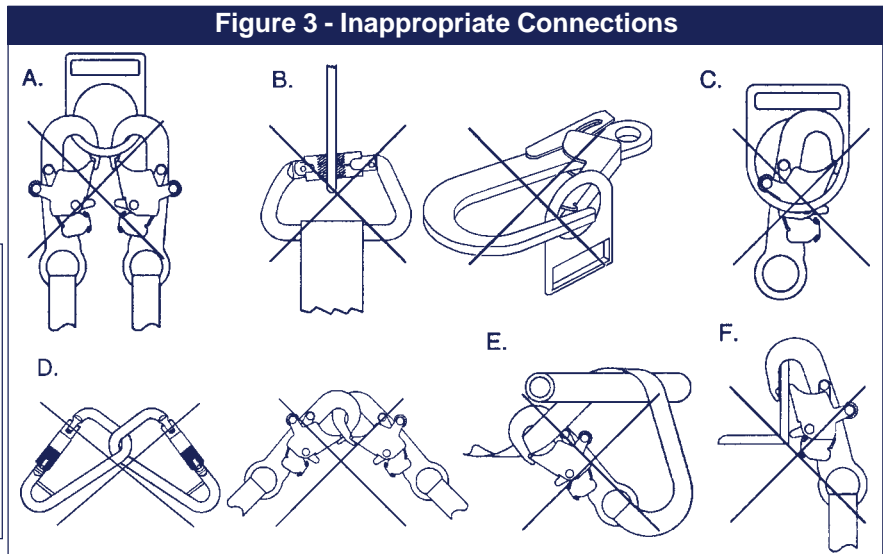
Connectors must be compatible with the anchorage or other system components. Do not use equipment that is not compatible. Non-compatible connectors may unintentionally disengage. See Figure 2. Connectors must be compatible in size, shape, and strength. Self locking snap hooks and carabiners are required by ANSI Z359.1 and OSHA.

**2.2 Making Connections:** Only use 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 3 for inappropriate connections. 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.

**NOTE:** 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.



- 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 allows such a connection).
- F. To any object which is shaped or dimensioned such that the snap hook or carabiners will not close and lock, or that roll-out could occur.

**2.3 ANCHORAGE STRENGTH:** Anchorages selected for personal fall arrest systems (PFAS) shall have a strength capable of sustaining static loads, applied in the directions permitted by the PFAS, of at least; (A) 3,600 lbs. when certification exists (reference ANSI Z359.1 for certification definition), or (B) 5,000 lbs. in the absence of certification. When more than one PFAS is attached to an anchorage, the anchorage strengths set forth in (A) and (B) above must be multiplied by the number of PFAS attached to the anchorage. Per OSHA 1926.500 and 1910.66 - Anchorages used for attachment of PFAS shall be independent of any anchorage being used to support or suspend platforms, and capable of supporting at least 5,000 lbs. per user attached, or be designed, installed, and used as part of a complete PFAS which maintains a safety factor of at least two, and is supervised by a qualified person.

### 3.0 OPERATION AND USE

**WARNING:** Do not alter or intentionally misuse this equipment. Consult DBI/SALA 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 hazards, chemical hazards, and sharp edges.

**WARNING:** Consult your doctor if there is reason to doubt your fitness to safely absorb the shock from a fall arrest. Age and fitness seriously affect a worker's ability to withstand falls. Pregnant women or minors must not use DBI/SALA energy absorbing lanyards.

**3.1 BEFORE EACH USE** of this equipment, carefully inspect it to assure that it is in good working condition. Check for worn or damaged parts. Ensure all hardware is present and secure, and is not distorted or have any sharp edges, burrs, cracks, or corrosion. Ensure self locking snap hooks or carabiners work properly. Inspect rope or webbing for wear, cuts, burns, frayed edges, breaks, or other damage. See section 5.0 for further inspection details. Do not use if inspection reveals an unsafe condition.

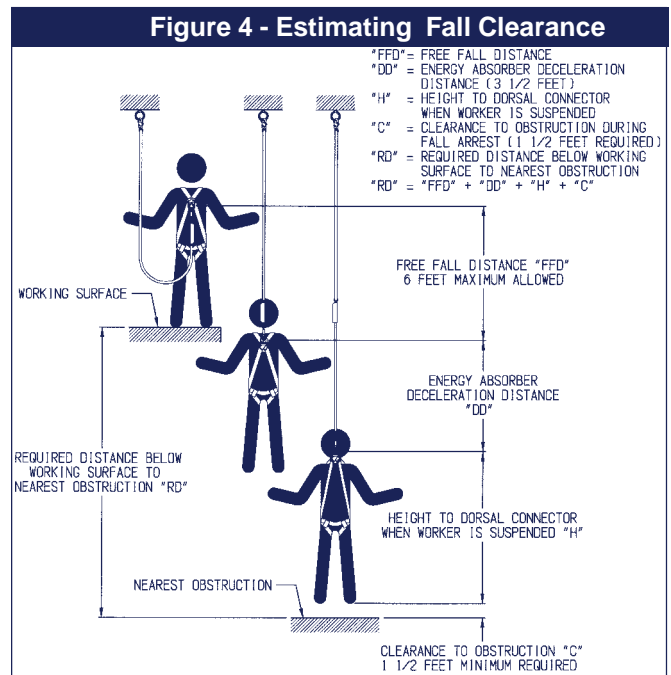
**3.2 PLAN** your fall protection system before starting your work. Take into consideration factors that affect your safety before, during, and after a fall. The following list gives some important points to consider when planning your system:

- A. ANCHORAGE:** Select a rigid anchorage point that is capable of supporting the required loads. See section 2.3. The anchorage location must be carefully selected to reduce possible free fall and swing fall hazards and to avoid striking an object during a fall. The anchorage should be generally level (horizontal) to prevent the anchorage connector from sliding down an incline when in use, which could cause serious injury to the user.
- B. FREE FALL:** Personal fall arrest systems must be rigged such that the potential free fall is never greater than 6 feet. Avoid working above your anchorage level to avoid an increased free fall distance.

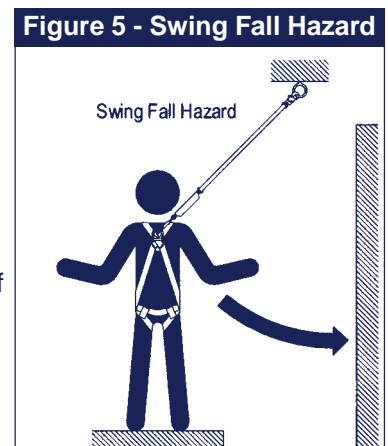
**IMPORTANT:** Some energy absorbing lanyards, such as EZ Stop® Retrax™ and the Shockwave lanyards, make use of retracting devices designed to shorten their free length. These devices do not decrease free fall distance

**C. FALL ARREST FORCES:** The assembled fall arrest system must keep fall arrest forces below 1,800 lbs. when used with a full body harness.

**D. FALL CLEARANCE:** Should a fall occur, there must be sufficient clearance in the fall area to arrest the fall before striking the ground or other object. Energy absorbers can extend the fall arrest distance by up to 42 inches. Figure 4 shows how to estimate fall clearance distance when using an energy absorbing lanyard or energy absorber subsystem. Other factors may influence the required clearance distances. For example, using an energy absorbing lanyard or energy absorber with a rope grab (fall arrestor) may require additional clearance due to stretch in the lifeline or sliding of the rope grab on the lifeline during fall arrest. Some full body harness models incorporate a sliding (positional) D-ring in the back as the fall arrest attachment, movement of this D-ring during fall arrest can increase the fall clearance distance required. Use caution when assembling system components that could act to extend the fall arrest distance (and therefore fall clearance required). Refer to manufacturer's instructions for each part of the system for more information on fall clearance.



**E. 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 while swinging (horizontal speed of the user due to the pendulum affect) can be great and may cause serious injury. In a swing fall situation, the total vertical fall distance of the user will be greater than if the user had fallen vertically directly below the anchorage point. The user must therefore account for an increase in the total free fall distance and the area needed to safely arrest the fall. Swing falls can be minimized by working as directly below the anchorage point as possible. Never permit a swing fall if injury could occur. If a swing fall situation exists in your application contact DBI/SALA before proceeding. See Figure 5.



**F. SHARP EDGES:** Avoid working where the lanyard, subsystem, or other system components will be in contact with, or abrade against, unprotected sharp edges. Do not loop lanyard around small diameter structural members. If working with this equipment near sharp edges is unavoidable, protection against cutting must be provided by using a heavy pad or other means over the exposed sharp edge.

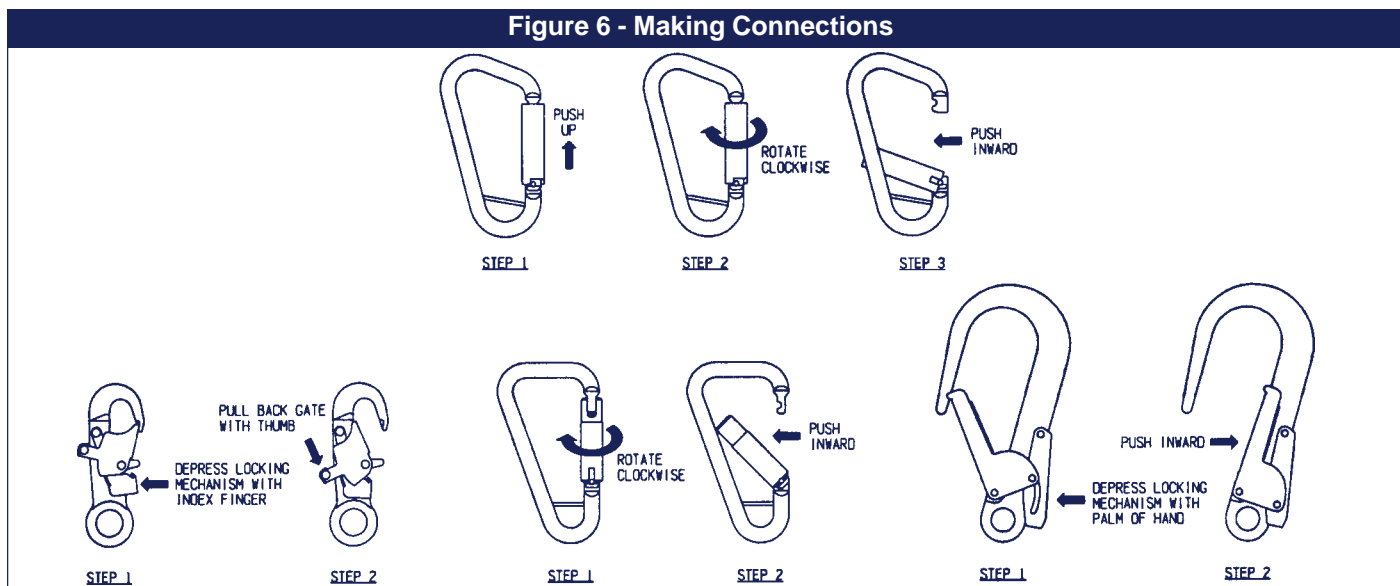
**G. RESCUE:** Should a fall occur, the user (employer) must have a rescue plan and the ability to implement it.

**H. AFTER A FALL:** Lanyards with integral energy absorbers, or energy absorber components which have been subjected to the forces of arresting a fall must be removed from service and destroyed. See Figure 18.

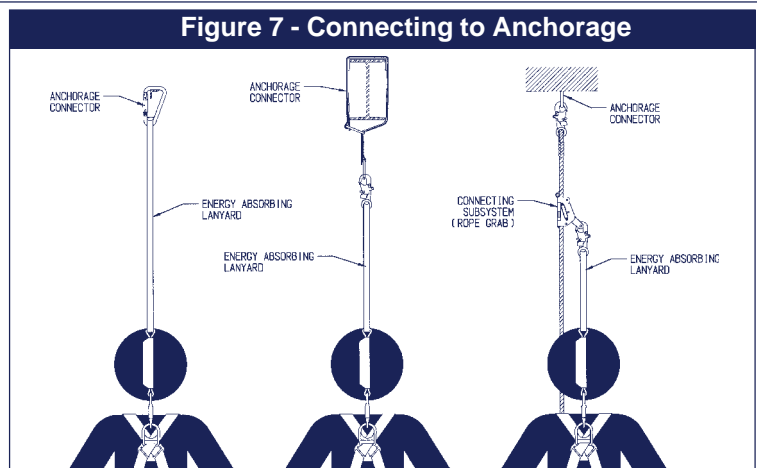
**WARNING:** Read and follow manufacturer's instructions for associated equipment (full body harness, rope grab, etc.) used in your fall protection system.

**IMPORTANT:** For special (custom) versions of this product, follow the instructions herein. If included, see supplement for additional instructions.

**3.3 MAKING CONNECTIONS:** See Figure 6 for hook operation. When using a hook to connect to an anchorage, or when coupling components of the system together, ensure accidental disengagement (roll-out) cannot occur. Roll-out occurs when interference between a hook and the mating connector causes the hook's gate or keeper to accidentally open and release. Roll-out may occur when a hook is connected to an undersized ring such as an eye bolt or other non-compatible shaped connector. Self locking snap hooks or self locking and self closing gate carabiners should be used to reduce the possibility of roll-out when making connections. Do not use hooks or connectors that will not completely close over the attachment object. For these situations, use a tie-off adaptor or other anchorage connector to allow a compatible connection. Do not knot lanyard in any manner, and do not hook lanyard back into itself (choker style). Snap hooks and carabiners must not be connected to each other. Do not attach snap hooks to web loops.



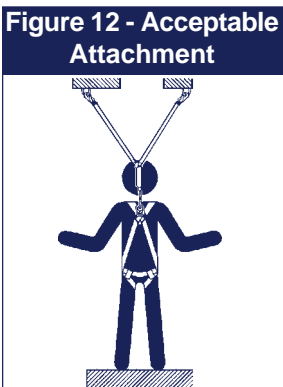
**A. CONNECTING TO ANCHORAGE OR ANCHORAGE CONNECTOR:** See Figure 7. Always connect the energy absorber end of the lanyard to the body support (harness). Connect the lanyard end to the anchorage or anchorage connector. Component style energy absorbers should be connected to the body support first, then coupled to the rest of the system. Some anchorage connector devices may be supplied with permanently attached energy absorber. Use of an additional energy absorber or energy absorbing lanyard with these types of subsystems is not recommended.



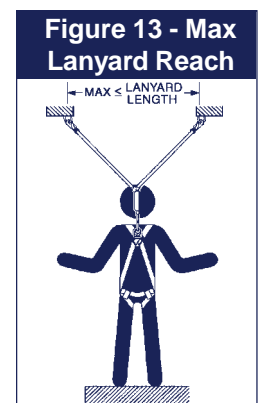
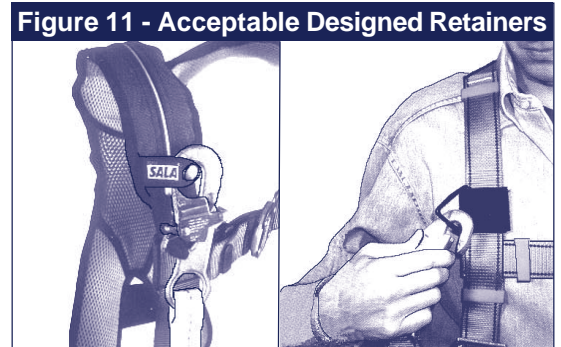
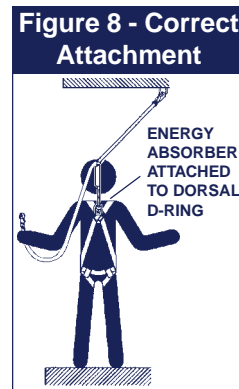
**100% Tie-off Lanyard Considerations:** Commonly known as 100% tie-off, "Y" type, twin leg, or double lanyards, these energy absorbing lanyards can be used to provide continuous fall protection while ascending, descending, or moving laterally. With one lanyard leg attached, the worker can move to a new location, attach unused lanyard leg, and disconnect attached leg. This procedure is repeated until new location is reached. With the EZ Stop® II Shockwave 100% tie-off type lanyard, only one leg of the lanyard shall be

attached to the anchorage or anchorage connector once working location is reached. Other practices that must be followed in order to use a 100% tie-off type lanyard safely include:

1. The energy absorber portion of the lanyard must be connected to the dorsal D-ring only. Use only the snap hook (or other connector provided) to attached the energy absorber portion directly to the harness dorsal D-ring. See Figures 8 and 9.



2. Do not connect the energy absorber to the anchorage. See Figure 10.
3. Do not attach the unused leg of the lanyard back to the harness at any location unless a specially designed lanyard retainer is provided for this purpose. See Figure 11.
4. Connection of both lanyard legs to separate anchorage points is acceptable See Figure 12.
5. When leapfrogging from one anchorage point to the next (such as traversing a horizontal or vertical structure) do not connect to anchorage points that are further apart than the lanyard length (as marked on the lanyard label). See Figure 13.
6. Never connect more than one person to a "Y" type lanyard at a time.
7. Do not allow any lanyard to pass under arms or legs during use.



**Attaching a Tie-Back Lanyard:** See Figure 14. Place the tie-back lanyard over the anchoring structure. Ensure the lanyard is not twisted.

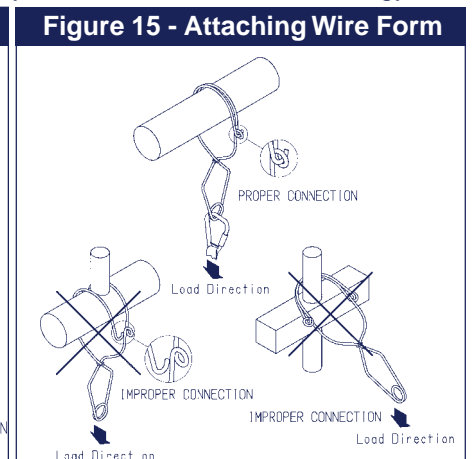
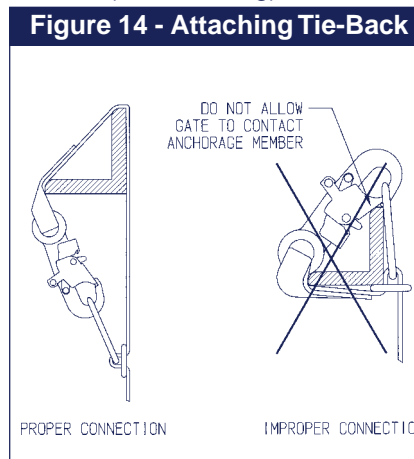
Adjust the floating D-ring so it hangs below the anchoring structure. Attach the lanyard end hook to the floating D-ring.

**Attaching a Lanyard with Wire Form Pipe Hook:** The wire form pipe hook is intended for use with pipes up to three inches in diameter. The anchorage must be geometrically compatible in size and shape. See Figure 15 for examples of proper and improper connections and intended load directions. Do not side load the pipe hook. Do not allow the pipe hook to contact electrical sources. Squeeze the handle to open the hook. Place hook around the anchorage and release handle. Only use a carabiner as the connecting element when attaching a personal fall arrest system to a pipe hook. When connecting to an anchorage, ensure the hook fully closes and closure hooks engage eye loops on hook body.

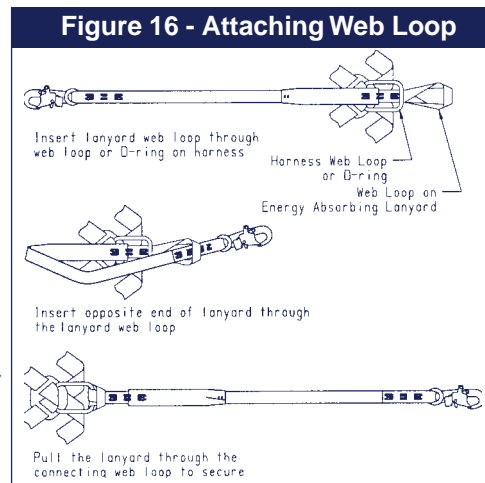
**B. CONNECTING TO THE BODY SUPPORT:** Connect the energy absorbing lanyard or energy absorber to the D-ring on the back between the shoulders (dorsal D-ring) on a full body harness. Connect so the energy absorber portion of the lanyard is on the body support side.

DBI/SALA does not recommend using a body belt for fall arrest applications. If using a body belt, connect the energy absorbing lanyard or energy absorber to the D-ring and position the belt so the D-ring is located on the back side of the body.

**Attaching a Lanyard with Web Loops:** See Figure 16.



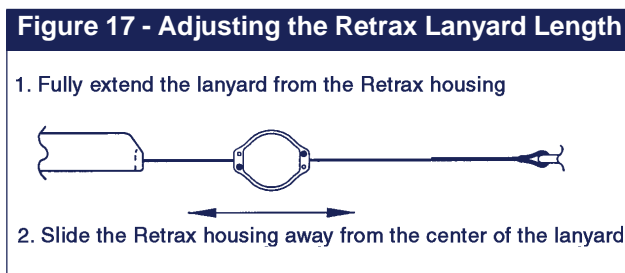
1. Insert the energy absorbing lanyard web loop through the harness web loop or D-ring.
2. Insert the opposite end of the energy absorbing lanyard through the connecting web loop.
3. Pull the attached energy absorbing lanyard through the connecting web loop to secure.



**C. CONNECTING TO A ROPE GRAB (FALL ARRESTOR):** It is recommended the lanyard end (vs. the energy absorber end) be attached to the rope grab. This recommendation is made to reduce possible interference with the operation of the rope grab by the energy absorber “pack”. Attaching a component style energy absorber to a rope grab is not recommended, with the exception of a “direct-coupling” between a rope grab and a harness. Some rope grabs may be supplied with a permanently attached energy absorbing lanyard. For these cases, use of an additional energy absorber connected between the rope grab and the body support is not recommended. In some cases it may be permissible to couple an energy absorber component between the anchorage (or anchorage connector) and the rope grab lifeline. In all cases, ensure the length of the energy absorber or energy absorbing lanyard does not exceed the rope grab manufacturer's recommended maximum connection length (3 feet maximum per ANSI Z359.1).

**D. CONNECTING TO SELF RETRACTING LIFELINE:** DBI/SALA does not recommend connecting an energy absorbing lanyard or energy absorber component to a self retracting lifeline. Special applications do exist where it may be permissible. Contact DBI/SALA if considering connecting an energy absorbing lanyard to a self retracting lifeline.

**3.4 ADJUSTING THE RETRAX™ LANYARD:** The amount of the lanyard that is retracted into the Retrax housing can be adjusted by completely extending the lanyard from the housing, then sliding the housing up or down the lanyard. See Figure 17. Adjusting the length of lanyard that is retracted into the housing will not reduce the amount of fall clearance needed to arrest a fall. See section 3.2.



**WARNING:** The Retrax lanyard is designed to retract and store the lanyard strap. It is not designed to “lock” or limit the lanyard length in a fall.

**3.5** After use return the lanyard for cleaning or storage as described in section 6.0

## 4.0 TRAINING

**4.1** It is the responsibility of all users of this equipment to understand these instructions, and to be trained in the correct installation, use, and maintenance of this equipment. These individuals must be aware of the consequences of improper installation or use of this equipment. This user manual is not a substitute for a comprehensive training program. Training must be provided on a periodic basis to ensure proficiency of the users.

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

## 5.0 INSPECTION

### 5.1 FREQUENCY

- Before each use visually inspect per steps listed in sections 5.2 and 5.3.
- The lanyard must be inspected by a competent person other than the user at least annually. See sections 5.2 and 5.3 for guidelines. Record the results of each formal inspection in the inspection log found in section 9.0.

**IMPORTANT:** If the energy absorbing lanyard or energy absorber component has been subjected to fall arrest or impact forces, it must be immediately removed from service and destroyed.

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

## 5.2 INSPECTION STEPS

**Step 1.** Inspect energy absorbing lanyard or energy absorber component hardware (snap hooks, adjusters, swages, thimbles, etc.). These items must not be damaged, broken, distorted, or have any sharp edges, burrs, cracks, worn parts, or corrosion. Ensure the connecting hooks work properly. Hook gates must move freely and lock upon closing. Ensure adjusters (if present) work properly.

**Step 2.** Inspect the energy absorbing lanyard or energy absorber component per the following as applicable:

**WEBBING AND STITCHING:** The webbing material must be free of frayed, cut, or broken fibers. Check for tears, abrasions, mold, burns, or discoloration, etc. The webbing must be free of knots, excessive soiling, heavy paint buildup, and rust staining. Check for chemical or heat damage indicated by brown, discolored, or brittle areas. Check for ultraviolet damage indicated by discoloration and the presence of splinters or splinters on the webbing surface. All of the above factors are known to reduce webbing strength. Damaged or questionable webbing should be replaced. Inspect stitching for pulled or cut stitches. Broken stitches may be an indication the energy absorbing lanyard or energy absorber component has been impact loaded and must be removed from service.

**WIRE ROPE:** Inspect entire length of the wire rope. Always wear protective gloves when inspecting wire rope. Inspect for broken wires by passing cable through gloved hands, flexing it every few inches to expose breaks. Broken wires can be removed by bending the wire back and forth parallel to the rope length. Do not attempt to pull wires out of rope. Remove the energy absorbing lanyard from service immediately and destroy if there are six or more randomly distributed broken wires in one lay, or three or more broken wires in one strand in one lay. A "lay" of wire rope is the length of wire rope that it takes for a strand (the larger groups of wires) to complete one revolution or twist along the rope. Remove the energy absorbing lanyard from service immediately and destroy if there are any broken wires within 1 inch of the metal compression sleeves (swages) at either end of the assembly. The wire rope should be free of corrosion.

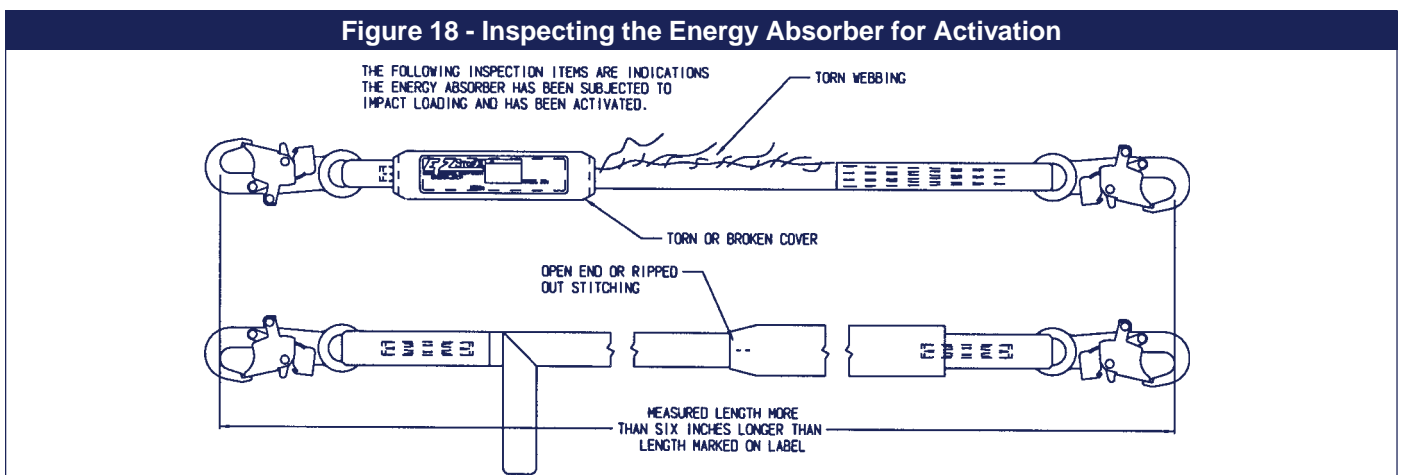
**Step 3. ENERGY ABSORBING COMPONENT:** Inspect energy absorber to determine if it has been activated. There should be no evidence of elongation. See Figure 18. Ensure energy absorber cover is secure and not torn or damaged. On the Shockwave 2™ Lanyard models, the lanyard webbing will tear out to reveal the warning on the impact indicator label. See section 8.2 for label illustration.

**Step 4.** All labels should be present and fully legible. See section 8.0.

**Step 5.** Inspect each system component or subsystem per associated manufacturer's instructions.

**Step 6.** Record the inspection date and results in the inspection log. See section 9.0.

**Figure 18 - Inspecting the Energy Absorber for Activation**



- 5.3 If inspection reveals an unsafe condition, remove unit from service immediately and destroy, or contact an authorized service center for repair.

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

## 6.0 MAINTENANCE, SERVICING, STORAGE

- 6.1 Clean lanyard with water and a mild detergent solution. Wipe off hardware with a clean, dry cloth, and hang to air dry. Do not force dry with heat. If you have any questions regarding cleaning of this equipment, or require more information, contact DBI/SALA. An excessive buildup of dirt, paint, etc., may prevent the lanyard from working properly, and in severe cases degrade the webbing or rope to a point where it has become weakened and should be removed from service. If you have any questions concerning the condition of your lanyard, or have any doubt about putting it into service, contact DBI/SALA.
- 6.2 Additional maintenance and servicing procedures (replacement parts) must be completed by a factory authorized service center. Authorization must be in writing. Do not disassemble the unit. See section 5.1 for inspection frequency.
- 6.3 Store the lanyard in a cool, dry, clean environment out of direct sunlight. Avoid areas where chemical vapors may exist. Thoroughly inspect the lanyard or energy absorber component after extended storage.

## 7.0 SPECIFICATIONS


- The maximum arresting force of DBI/SALA Energy Absorbing Lanyards and components when dynamically tested accordance with ANSI Z359.1 is 900 lbs. (EZ STOP® III and ShockWave II models less than 6 ft. in length, maximum arresting force is 1800 lbs.)
- The maximum elongation of the Energy Absorbing Lanyard or Energy Absorber component when dynamically tested in accordance with ANSI Z359.1 is 42 inches.
- Maximum free fall distance must be no greater than 6 feet per federal law and ANSI Z359.1
- EZ STOP® II U.S. Patent Number 5,174,410
- 9503175 self closing and self locking snap hook U.S. Patent Number 4,977,647, Can. 2,027,784.

Lanyard Model	Energy Absorber Specifications	Adjustable/Fixed Length	Lanyard Specifications
Fixed Length EZ Stop II Web Lanyards	1 3/4 in. polyester web strength member, tubular nylon web wear pads both ends, nylon outer cover, polyester thread, 8,800 lb tensile strength	Fixed	1 in. polyester web, 8,800 lb tensile strength
Adjustable Length EZ Stop II Web Lanyards	1 3/4 in. polyester web strength member, tubular nylon web wear pads both ends, nylon outer cover, polyester thread, 8,800 lb tensile strength <sup>1</sup>	Adjustable	1 in. polyester web, 8,800 lb tensile strength
100% Tie-off EZ Stop II Web Lanyards	1 3/4 in. polyester web strength member, tubular nylon web wear pads both ends, nylon outer cover, polyester thread, 8,800 lb tensile strength	Fixed	1 in. polyester web, 100% tie-off, 8,800 lb tensile strength
EZ Stop II Energy Absorber Component	1 3/4 in. polyester web strength member, tubular nylon web wear pads both ends, nylon outer cover, polyester thread, 8,800 lb tensile strength	Fixed	Not Applicable
EZ Stop II Cable Lanyards	1 3/4 in. polyester web strength member, nylon web wear pads both ends, nylon outer cover, polyester thread, 8,800 lb tensile strength	Fixed	7/32 in. 7x9 galvanized cable, vinyl covered, 5,600 lb. tensile strength
EZ Stop III Web Lanyards	1 3/8 in. tubular polyester web strength member, nylon web wear pads both ends, polyester thread, 8,800 lb tensile strength	Fixed	1 3/8 in. tubular polyester web strength member, 6,000 lb tensile strength
EZ Stop II Tie-back Web Lanyard	1 3/4 in. polyester web strength member, tubular nylon web wear pads both ends, nylon outer cover, polyester thread, 8,800 lb tensile strength	Fixed	1 polyester web strength member, 8,800 lb tensile strength, with 1 3/8 in. tubular polyester web cover
EZ Stop II Tie-back 100% Tie-off Web Lanyard	1 3/4 in. polyester web strength member, tubular nylon web wear pads both ends, nylon outer cover, polyester thread, 8,800 lb tensile strength	Fixed	1 polyester web strength member, 8,800 lb tensile strength, with 1 3/8 in. tubular polyester web cover
EZ Stop II Shockwave	1 3/4 in. polyester web strength member, tubular nylon web wear pads both ends, nylon outer cover, polyester thread, 8,800 lb tensile strength	Fixed	1 15/16 in. tubular polyester web strength member, 6,000 lb. tensile strength
Shockwave 2	1 15/16 in. tubular polyester web strength member, nylon web wear pads both ends, polyester thread, 8,800 lb tensile strength	Fixed	Lanyard and energy absorber are the same material.
EZ Stop II Retrax Web Lanyard	1 3/4 in. polyester web strength member, nylon web wear pads both ends, nylon outer cover, polyester thread, 6,000 lb tensile strength	Fixed	1 3/8 polyester web, 6,000 lb. tensile strength

## 8.0 LABELING

8.1 These labels must be securely attached to the Shock Wave 2™ Lanyard and fully legible.

<p>INSPECT IMPACT INDICATOR FOR RUPTURED OR TORN RED STITCHING. IF STITCHING IS RUPTURED OR TORN, REMOVE FROM SERVICE. JACKET MATERIAL: NYLON</p> <p>MAX. ELONGATION: 42 IN. MAX. ARRESTING FORCE: MODELS AT LEAST 6 FT.: 900 LBS. MODELS LESS THAN 6 FT.: 1800 LBS. MAX. FREE FALL: 6 FT. CAPACITY: 310 LBS. CORE MATERIAL: POLYESTER</p>	<p><b>WARNING</b> MANUFACTURER'S INSTRUCTIONS MUST BE READ AND UNDERSTOOD PRIOR TO USE. INSTRUCTIONS SUPPLIED WITH THIS PRODUCT AT TIME OF SHIPMENT MUST BE FOLLOWED. AVOID CONTACT WITH SHARP AND ABRASIVE EDGES. MAKE ONLY COMPATIBLE CONNECTIONS. NOT FLAME OR HEAT RESISTANT. DO NOT REMOVE THIS LABEL. FAILURE TO HEED WARNINGS AND INSTRUCTIONS COULD RESULT IN SERIOUS INJURY OR DEATH. ANY UNIT WHICH HAS BEEN FALL ARRESTING SERVICE SHOULD NOT BE USED AFTER SUCH SERVICE.</p>	<p><b>PRODUCT COMPLIANCE</b> THIS PRODUCT COMPLIES WITH THE FOLLOWING STANDARDS ONLY IF MARKED WITH THE CORRESPONDING LETTER CODE UNDER "STDS" SECTION BELOW A = ANSI Z359.1      B = OSHA      C = ANSI A10.32-2004 D = ASTM F887-2004      E =</p> <p><b>MFRD(YR/MO):    LOT:    MODEL NO:    LENGTH(FT):    STDS:</b></p>
--	--	--

		<p>3965 Pepin Avenue, Red Wing, MN 55066 (800) 328-6146</p>
9510001 REV K		

ID Label - EZ Stop® III Shock Wave™ Lanyards only

**IMPACT INDICATOR**


**WARNING**

**THIS UNIT HAS SEEN  
IMPACT LOADING AND  
MUST BE REMOVED  
FROM SERVICE.**



9510349 REV C

Impact Indicator Label EZ Stop® Shock Wave III Lanyards only

8.2 These labels must be securely attached to CSA approved lanyards and fully legible.

<p><b>WARNING/MISE EN GARDE</b></p> <p>ANY UNIT WHICH HAS SEEN FALL ARRESTING SERVICE SHOULD NOT BE USED AFTER SUCH SERVICE. CERTIFICATION IS APPLICABLE TO THE DEVICE ONLY. CSA HAS NOT INVESTIGATED THE ANCHORAGE SYSTEM. UNE UNITÉ QUI A DÉJÀ ÉTÉ UTILISÉE POUR PRÉVENIR UNE CHUTE NE DOIT PAS ÊTRE EMPLOYÉE À NOUVEAU. L'HOMOLOGATION EST APPLICABLE UNIQUEMENT AU DISPOSITIF. LA CSA N'A PAS EXAMINÉ LE SYSTÈME D'ANCRAGE. MANUFACTURER'S INSTRUCTIONS SUPPLIED WITH THIS PRODUCT AT TIME OF SHIPMENT MUST BE FOLLOWED. AVOID CONTACT WITH SHARP AND ABRASIVE EDGES. MAKE ONLY COMPATIBLE CONNECTIONS. FAILURE TO DO SO COULD RESULT IN SERIOUS INJURY OR DEATH.</p>	<p>CAN/CSA-2259.11-M92 NYLON/POLYESTER WEB ALLOY STEEL HARDWARE MAX. ELONGATION 47 IN. MAX. FREE FALL 6 FT. CAPACITY 310 LBS. MAX. MAX. ARRESTING FORCE 900 LBS. U.S. PAT. 5,174,410</p>	 <p><b>MFRD(YR/MO)/LOT:    MODEL NO:    LENGTH(FT):</b></p>
9503666 REV M		<p>280 EXPORT BLVD. M188188AURGA, ONTARIO, CANADA L5B 1Y9 (800) 387-7484</p> <p>ATTACH PACK END OF SHOCK ABSORBER TO BODY SUPPORT.</p>

ID Label - CSA Approved EZ Stop® II Web Lanyards

 <p>DBI/SALA; 3965 PEPIN AVENUE RED WING, MN 55066, (800) 328-6146</p> 	<p>MEETS ANSI A10.14-1991 AND OSHA REQUIREMENTS. USE ONLY WITH ANSI A10.14-1991 TYPE I EQUIPMENT. MAX. ELONGATION: 42 IN. MAX. ARRESTING FORCE: 1800 LBS. MAX. FREE FALL: 6 FT. MAXIMUM CAPACITY: 310 LBS. MATERIAL: POLYESTER LANYARD WIDTH 1 3/8" MADE IN USA</p> <p>CSA STANDARD 2259.1</p>	<p><b>WARNING/MISE EN GARDE</b></p> <p>MANUFACTURER'S INSTRUCTIONS SUPPLIED WITH THIS PRODUCT AT TIME OF SHIPMENT MUST BE FOLLOWED. AVOID CONTACT WITH SHARP AND ABRASIVE EDGES. MAKE ONLY COMPATIBLE CONNECTIONS. REMOVE FROM SERVICE IF COVER SEWING IS RUPTURED OR IF LENGTH IS 6 INCHES OR GREATER THAN INITIAL LENGTH. NOT FLAME OR HEAT RESISTANT. DO NOT REMOVE LABEL. FAILURE TO HEED WARNINGS AND INSTRUCTIONS COULD RESULT IN SERIOUS INJURY OR DEATH. ANY UNIT WHICH HAS SEEN FALL ARRESTING SERVICE SHOULD NOT BE USED AFTER SUCH SERVICE. UNE UNITÉ QUI A DÉJÀ ÉTÉ UTILISÉE POUR PRÉVENIR UNE CHUTE NE DOIT PAS ÊTRE EMPLOYÉE À NOUVEAU.</p> <p><b>MFRD(YR/MO)/LOT:    MODEL NO:    LENGTH(FT):</b></p>	<p>→ ATTACH OPPOSITE END OF SHOCK ABSORBER TO HARNESS</p> <p>→</p>
9509610 REV F			

ID Label - CSA Approved EZ Stop® III Web Lanyards

<p><b>WARNING/MISE EN GARDE</b></p> <p>ANY UNIT WHICH HAS SEEN FALL ARRESTING SERVICE SHOULD NOT BE USED AFTER SUCH SERVICE. UNE UNITÉ QUI A DÉJÀ ÉTÉ UTILISÉE POUR PRÉVENIR UNE CHUTE NE DOIT PAS ÊTRE EMPLOYÉE À NOUVEAU.</p>	<p>THE LENGTH OF LANYARD IN FT IS LISTED AT THE END OF THE MODEL NO. PROVIDED ON I.D. LABEL.</p> <p>LANYARD MAT'L: ONE INCH WIDE POLYESTER WEB</p> <p>CSA STANDARD 2259.1 9503549 REV C</p>
---	---

Warning Label - CSA Approved Lanyards

**8.3** These labels must be attached to all Energy Absorbing Lanyards or Energy Absorber components (except EZ Stop® III Shock Wave Lanyards), and fully legible.

DBI **SALA** **EZ Stop II** SHOCK ABSORBER MADE IN U.S.A.

3965 PEPIN AVE.  
RED WING, MN 55066  
PH: (800) 328-6146

U.S. PAT. 5,174,410

ATTACH THIS END OF SHOCK ABSORBER TO BODY SUPPORT

**WARNING** MANUFACTURER'S INSTRUCTIONS MUST BE READ AND UNDERSTOOD PRIOR TO USE. INSTRUCTIONS SUPPLIED WITH THIS PRODUCT AT TIME OF SHIPMENT MUST BE FOLLOWED. AVOID CONTACT WITH SHARP AND ABRASIVE EDGES. MAKE ONLY COMPATIBLE CONNECTIONS. NOT FLAME OR HEAT RESISTANT. DO NOT REMOVE THIS LABEL. FAILURE TO HEED WARNINGS AND INSTRUCTIONS COULD RESULT IN SERIOUS INJURY OR DEATH. ANY UNIT WHICH HAS SEEN FALL ARRESTING SERVICE SHOULD NOT BE USED AFTER SUCH SERVICE.

MAXIMUM ELONGATION: 42" MAXIMUM ARRESTING FORCE: 900 LBS.  
MAXIMUM FREE FALL: 6 FT CAPACITY: 310 LBS MAX. NYLON/POLYESTER WEB CONSTRUCTION

**PRODUCT COMPLIANCE**  
THIS PRODUCT COMPLIES WITH THE FOLLOWING STANDARDS ONLY IF MARKED WITH THE CORRESPONDING LETTER CODE UNDER "STDS" SECTION BELOW. A = ANSI Z359.1 B = OSHA C = ANSI A10.32-2004 D = ASTM F887-2004 E =

MFRD(YR/MO): LOT: MODEL NO: LENGTH(FT): STDS:

9503280 REV U

ID Label - EZ Stop® II Web Lanyards

DBI **SALA** **EZ Stop III** SHOCK ABSORBER

DBI/SALA: 3965 PEPIN AVE.  
RED WING, MN 55066  
PHONE: (800) 328-6146

MADE IN U.S.A.  
9509617 REV H

ATTACH OPPOSITE END OF SHOCK ABSORBER TO HARNESS

**WARNING** MANUFACTURER'S INSTRUCTIONS MUST BE READ AND UNDERSTOOD PRIOR TO USE. INSTRUCTIONS SUPPLIED WITH THIS PRODUCT AT TIME OF SHIPMENT MUST BE FOLLOWED. AVOID CONTACT WITH SHARP AND ABRASIVE EDGES. MAKE ONLY COMPATIBLE CONNECTIONS. NOT FLAME OR HEAT RESISTANT. DO NOT REMOVE THIS LABEL. FAILURE TO HEED WARNINGS AND INSTRUCTIONS COULD RESULT IN SERIOUS INJURY OR DEATH. ANY UNIT WHICH HAS SEEN FALL ARRESTING SERVICE SHOULD NOT BE USED AFTER SUCH SERVICE.

MAXIMUM ELONGATION: 42" MAXIMUM ARRESTING FORCE: 1800LBS.  
MAXIMUM FREE FALL: 6 FT CAPACITY: 310 LBS MAX. POLYESTER WEB CONSTRUCTION

**PRODUCT COMPLIANCE**  
THIS PRODUCT COMPLIES WITH THE FOLLOWING STANDARDS ONLY IF MARKED WITH THE CORRESPONDING LETTER CODE UNDER "STDS" SECTION BELOW. A = ANSI Z359.1 B = OSHA C = ANSI A10.32-2004 D = ASTM F887-2004 E =

MFRD(YR/MO): LOT: MODEL NO: LENGTH(FT): STDS:

ID Label - EZ Stop® III Web Lanyards

**WARNING**  
WHEN MAKING CHOKER CONNECTIONS, DO NOT ALLOW SNAP-HOOK TO CONTACT ANCHORAGE MEMBER. SNAP-HOOK GATE MAY BE FORCED OPEN UNDER LOADING CAUSING RELEASE OF LOAD. FAILURE TO HEED THIS WARNING MAY RESULT IN SERIOUS INJURY OR DEATH. DO NOT REMOVE THIS LABEL.

CORRECT USAGE: GATE IN CONTACT WITH MEMBER

INCORRECT USAGE: GATE NOT IN CONTACT WITH MEMBER

9507013 REV C

Warning Label EZ Stop® II Tie-Back Lanyards

**WARNING**  
ENSURE CONNECTIONS MADE TO LOOP OR EYE TERMINATIONS OR ATTACHMENT POINTS ARE COMPATIBLE. SNAP HOOKS (BOTH SELF LOCKING AND NON-LOCKING TYPES) CONNECTED INTO LOOPS OR EYES MAY RESULT IN INADVERTENT DISENGAGEMENT. DO NOT MAKE MORE THAN ONE CONNECTION INTO A LOOP OR EYE TERMINATION. REFER TO SEPARATE INSTRUCTIONS FOR FURTHER DETAILS. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR DEATH. DO NOT REMOVE LABEL.

9507205 REV E

Warning Label - All Web Loop Energy Absorbing Lanyards Not Permanently Attached to Harness

FALL ARREST OR RESTRAINT SYSTEM CONNECTING WEB LOOP

HARNESS D-RING OR WEB LOOP

Warning Label - All Web Loop Energy Absorbing Lanyards Permanently Attached to Harness

9507096 REV E

**WARNING**  
ONLY COMPATIBLE CONNECTIONS MAY BE MADE WITH WEB LOOPS. SNAP-HOOKS (BOTH SELF LOCKING AND NON-LOCKING TYPES) CONNECTED INTO WEB LOOPS MAY RESULT IN INADVERTENT DISENGAGEMENT. REFER TO SEPARATE INSTRUCTIONS FOR FURTHER DETAILS. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN SERIOUS INJURY OR DEATH. DO NOT REMOVE LABEL.

9501452 REV B

**WARNING**  
ALWAYS ATTACH ENERGY ABSORBER PORTION OF LANYARD TO HARNESS DORSAL D-RING. DO NOT ALLOW LANYARD TO PASS UNDER ARMS OR LEGS. DO NOT ATTACH TWO USERS TO THIS LANYARD. SEE INSTRUCTIONS FOR MORE INFORMATION. FAILURE TO HEED INSTRUCTIONS AND WARNINGS MAY RESULT IN SERIOUS INJURY OR DEATH. DO NOT REMOVE THIS LABEL.

ARREST FORCE 1800 LBS WHEN RIGGED AS SHOWN

NO X

100% Tie-off Lanyard Warning Label

9500000 REV H

SERIAL NO. XXXXXX

INSPECTION LOG

DATE	INITIAL																			
------	---------	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--

DO NOT REMOVE THIS LABEL

Inspection Label

**WARNING**  
THIS DEVICE DOES NOT REDUCE FREE FALL DISTANCE

TO LIMIT RETRACTED LENGTH OF LANYARD, FULLY EXTEND LANYARD THEN SLIDE RETRACTOR AWAY FROM CENTER OF LANYARD.

9501417 REV A PATENT PENDING

Retrax Warning Label

**9.0 INSPECTION AND MAINTENANCE LOG**

**DATE OF MANUFACTURE:** \_\_\_\_\_

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

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

INSPECTION DATE	INSPECTION ITEMS NOTED	CORRECTIVE ACTION	MAINTENANCE PERFORMED
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			
Approved By:			

This instruction applies to the following models:

1100137	1106064	1220009	1220077	1220140	1220257	1220408	1220553	1220732
1100750	1106150	1220010	1220078	1220141	1220258	1220409	1220554	1220733
1100756	1106151	1220011	1220080	1220142	1220259	1220411	1220555	1220734
1100762	1106152	1220012	1220081	1220143	1220261	1220412	1220556	1220735
1100767	1106203	1220013	1220082	1220144	1220262	1220413	1220557	1220736
1100768	1106211	1220014	1220083	1220145	1220263	1220414	1220558	1220737
1100769	1106325	1220016	1220084	1220146	1220264	1220415	1220559	1220738
1100771	1106326	1220017	1220085	1220147	1220265	1220416	1220560	1220739
1100772	1106327	1220018	1220086	1220148	1220266	1220417	1220561	1220740
1101100	1106328	1220019	1220087	1220149	1220267	1220418	1220562	1220741
1101272	1106329	1220020	1220088	1220150	1220268	1220419	1220563	1220742
1101633	1106330	1220022	1220089	1220151	1220269	1220420	1220564	1220743
1101635	1106331	1220023	1220090	1220152	1220271	1220421	1220565	1220744
1101645	1106332	1220024	1220091	1220153	1220272	1220422	1220566	1220745
1101646	1106333	1220025	1220092	1220154	1220273	1220424	1220567	1220746
1101647	1106625	1220026	1220093	1220155	1220274	1220425	1220568	1220747
1101775	1106679	1220027	1220095	1220156	1220275	1220426	1220570	1220748
1101789	1106682	1220028	1220096	1220157	1220276	1220427	1220571	1220749
1101790	1106683	1220029	1220097	1220158	1220277	1220428	1220601	1220750
1101792	1106684	1220030	1220098	1220159	1220278	1220429	1220603	1220751
1101793	1106687	1220032	1220100	1220160	1220279	1220430	1220604	1220752
1101795	1106900	1220033	1220101	1220161	1220280	1220431	1220620	1220753
1101832	1106901	1220034	1220102	1220162	1220281	1220432	1220626	1220754
1101835	1106902	1220035	1220103	1220163	1220282	1220433	1220627	1220755
1101836	1106903	1220036	1220104	1220165	1220283	1220434	1220671	1220801
1101837	1106904	1220037	1220105	1220166	1220284	1220435	1220680	1220802
1101851	1106905	1220038	1220106	1220167	1220285	1220436	1220681	1220803
1101852	1107026	1220039	1220107	1220168	1220286	1220437	1220701	1220804
1101853	1107575	1220040	1220108	1220169	1220287	1220439	1220702	1220805
1101859	1107576	1220041	1220110	1220170	1220288	1220440	1220703	1220806
1101866	1107650	1220043	1220111	1220171	1220289	1220441	1220704	1220850
1101869	1107652	1220044	1220112	1220172	1220290	1220443	1220705	1220854
1102525	1107725	1220045	1220113	1220173	1220291	1220444	1220706	1220855
1102953	1107727	1220046	1220114	1220174	1220292	1220445	1220707	1220880
1103886	1107875	1220048	1220115	1220175	1220293	1220446	1220708	1220901
1104729	1107951	1220050	1220116	1220176	1220294	1220447	1220709	1220902
1104744	1107952	1220051	1220117	1220177	1220295	1220448	1220710	1220903
1104745	1107958	1220052	1220118	1220178	1220298	1220449	1220711	1220904
1104746	1107959	1220053	1220119	1220179	1220351	1220452	1220712	1220905
1104747	1107962	1220054	1220120	1220186	1220352	1220453	1220713	1220906
1104748	1107991	1220056	1220121	1220187	1220353	1220454	1220714	1220907
1104912	1107992	1220057	1220122	1220188	1220354	1220458	1220715	1220909
1104918	1108033	1220058	1220123	1220189	1220355	1220460	1220716	1220910
1104924	1108034	1220059	1220124	1220190	1220357	1220462	1220717	1220911
1105376	1108301	1220060	1220125	1220191	1220358	1220463	1220718	1220912
1106002	1108875	1220061	1220126	1220192	1220359	1220464	1220719	1220913
1106003	1108876	1220062	1220127	1220193	1220362	1220465	1220720	1220914
1106005	1109105	1220063	1220128	1220194	1220363	1220466	1220721	1220915
1106007	1109106	1220065	1220129	1220196	1220364	1220503	1220722	1220916
1106008	1109111	1220066	1220130	1220197	1220365	1220505	1220723	1220917
1106016	1110792	1220067	1220131	1220199	1220366	1220506	1220724	1220918
1106017	1110793	1220068	1220132	1220200	1220367	1220508	1220725	1220920
1106033	1220002	1220070	1220134	1220201	1220368	1220509	1220726	1220922
1106040	1220003	1220071	1220135	1220251	1220402	1220510	1220727	1220923
1106041	1220004	1220072	1220136	1220252	1220403	1220525	1220728	1220924
1106058	1220005	1220074	1220137	1220253	1220404	1220526	1220729	1220925
1106059	1220006	1220075	1220138	1220254	1220405	1220551	1220730	1220926
1106063	1220007	1220076	1220139	1220256	1220406	1220552	1220731	1220927

1220928	1221201	1224020	1224315	1224425	1106041C	1220028C	1221206C
1220929	1221204	1224021	1224316	1224426	1106042C	1220030C	1221460C
1220930	1221205	1224023	1224317	1224430	1106053C	1220035C	1221461C
1220931	1221206	1224024	1224318	1224431	1106054C	1220038C	1221801C
1220932	1221207	1224025	1224319	1224432	1106060C	1220039C	1221802C
1220935	1221209	1224026	1224321	1224433	1106061C	1220040C	1221803C
1220975	1221210	1224027	1224322	1224434	1106062C	1220042C	1221804C
1221001	1221211	1224028	1224324	1224435	1106203C	1220043C	1221805C
1221002	1221213	1224029	1224325	1224436	1106685C	1220048C	1221806C
1221003	1221214	1224030	1224326	1224437	1106689C	1220054C	1221807C
1221004	1221250	1224031	1224327	1224439	1106690C	1220057C	1221808C
1221005	1221251	1224032	1224328	1224440	1106698C	1220058C	1221809C
1221006	1221276	1224033	1224329	1224455	1106699C	1220068C	1221810C
1221008	1221277	1224034	1224330	1224456	1107160C	1220071C	1221811C
1221009	1221326	1224035	1224331	1224501	1107161C	1220074C	1221812C
1221010	1221327	1224036	1224332	1224601	1107162C	1220079C	1221813C
1221012	1221375	1224037	1224333	1225025	1107163C	1220080C	1221814C
1221013	1221401	1224038	1224334	1226000	1107164C	1220084C	1221851C
1221014	1221426	1224039	1224335	1229000	1107961C	1220086C	1221852C
1221016	1221451	1224040	1224336	1330025	1108028C	1220091C	1221853C
1221017	1221460	1224041	1224337	1330035	1108355C	1220092C	1221854C
1221018	1221461	1224042	1224338	1330100	1108356C	1220093C	1224006C
1221019	1221462	1224043	1224339	5002040	1108357C	1220098C	
1221020	1221463	1224101	1224340	5002041	1108358C	1220105C	
1221021	1221464	1224102	1224344	5002042	1108359C	1220108C	
1221022	1221480	1224103	1224345	5002050	1108528C	1220115C	
1221023	1221481	1224104	1224346	5900876	1108529C	1220132C	
1221024	1221482	1224105	1224347	5900877	1108530C	1220139C	
1221025	1221483	1224106	1224349	1100447C	1108534C	1220180C	
1221029	1221701	1224107	1224350	1100448C	1108603C	1220181C	
1221030	1221702	1224110	1224351	1100449C	1108678C	1220182C	
1221031	1221751	1224111	1224353	1100450C	1108679C	1220195C	
1221101	1221761	1224203	1224402	1100890C	1108680C	1220296C	
1221102	1221763	1224205	1224403	1100891C	1108684C	1220297C	
1221103	1221764	1224206	1224404	1100892C	1108685C	1220359C	
1221104	1222300	1224213	1224405	1100893C	1108686C	1220362C	
1221105	1223026	1224251	1224406	1101851C	1109025C	1220364C	
1221106	1224001	1224252	1224408	1101871C	1109037C	1220369C	
1221107	1224003	1224253	1224409	1102967C	1109038C	1220406C	
1221108	1224004	1224254	1224410	1102968C	1109057C	1220408C	
1221109	1224005	1224301	1224411	1102969C	1109058C	1220409C	
1221110	1224006	1224302	1224412	1102970C	1109061C	1220450C	
1221111	1224007	1224303	1224413	1102971C	1109432C	1220451C	
1221112	1224008	1224304	1224414	1103266C	1109433C	1220455C	
1221113	1224009	1224305	1224415	1103268C	1109434C	1220459C	
1221114	1224010	1224306	1224416	1103269C	1109435C	1220461C	
1221115	1224011	1224307	1224417	1103387C	1109436C	1220601C	
1221116	1224012	1224308	1224418	1103388C	1109437C	1220906C	
1221117	1224013	1224309	1224419	1103389C	1220006C	1220937C	
1221118	1224014	1224310	1224420	1103390C	1220007C	1220938C	
1221119	1224016	1224311	1224421	1103391C	1220012C	1221006C	
1221120	1224017	1224312	1224422	1103392C	1220016C	1221028C	
1221122	1224018	1224313	1224423	1106015C	1220017C	1221104C	
1221123	1224019	1224314	1224424	1106040C	1220024C	1221106C	

Additional model numbers may appear on the next printing of these instructions



**USA**

3833 Sala Way  
Red Wing, MN 55066  
Toll Free: 800-328-6146  
Phone: (651) 388-8282  
Fax: (651) 388-5065  
[www.salagroup.com](http://www.salagroup.com)

**Canada**

260 Export Boulevard  
Mississauga, Ontario L5S 1Y9  
Toll Free: 800-387-7484  
Phone: (905) 795-9333  
Fax: (905) 795-8777  
[www.salagroup.com](http://www.salagroup.com)

This manual is available for download at [www.salagroup.com](http://www.salagroup.com).



Form: 5902143  
Rev: I