

MILLER

by SPERIAN



User Instruction Manual

Manuel D'utilisation

Manual de Instrucciones
Para El Usuario



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Thank You

Thank you for your purchase of Miller Fall Protection equipment. Miller brand products are produced to meet the highest standards of quality at our ISO 9001:2000 certified facility. Miller Fall Protection equipment will provide you with years of use when cared for properly.

WARNING

All persons using this equipment must read, understand and follow all instructions. Failure to do so may result in serious injury or death. Do not use this equipment unless you are properly trained.

Questions?

CALL
1.800.873.5242

It is crucial that the authorized person/user of this fall protection equipment read and understand these instructions. In addition, it is the employer's responsibility to ensure that all users are trained in the proper use, inspection, and maintenance of fall protection equipment. Fall protection training should be an integral part of a comprehensive safety program.

Proper use of fall arrest systems can save lives and reduce the potential of serious injuries from a fall. The user must be aware that forces experienced during the arrest of a fall or prolonged suspension may cause bodily injury. Consult a physician if there is any question about the user's ability to use this product. Pregnant women and minors must not use this product.

1.0 General Requirements, Warnings and Limitations

All warnings and instructions shall be provided to authorized persons/users.

All authorized persons/users must reference the regulations governing occupational safety, as well as applicable ANSI or CSA standards. Please refer to product labeling for information on specific OSHA regulations, and ANSI and CSA standards met by product.

Proper precautions should always be taken to remove any obstructions, debris, material, or other recognized hazards from the work area that could cause injuries or interfere with the operation of the system.

All equipment must be inspected before each use according to the manufacturer's instructions.

All equipment should be inspected by a qualified person on a regular basis.

To minimize the potential for accidental disengagement, a competent person must ensure system compatibility.

Equipment must not be altered in any way. Repairs must be performed only by the manufacturer, or persons or entities authorized in writing by the manufacturer.

Any product exhibiting deformities, unusual wear, or deterioration must be immediately discarded.

Any equipment subject to a fall must be removed from service.

The authorized person/user shall have a rescue plan and the means at hand to implement it when using this equipment.

Never use fall protection equipment for purposes other than those for which it was designed. Fall protection equipment should never be used for towing or hoisting.

All synthetic material must be protected from slag, hot sparks, open flames, or other heat sources. The use of heat resistant materials is recommended in these applications.

Never use natural materials (manila, cotton, etc.) as part of a fall protection system.

Environmental hazards should be considered when selecting fall protection equipment. Equipment must not be exposed to chemicals which may produce a harmful effect. Polyester should be used in certain chemical or acidic environments. Consult the manufacturer in cases of doubt.

Do not allow equipment to come in contact with anything that will damage it including, but not limited to, sharp, abrasive, rough or high-temperature surfaces, welding, heat sources, electrical hazards, or moving machinery.

Always check for obstructions below the work area to make sure potential fall path is clear.

Allow adequate fall clearance below the work surface.

Never remove product labels, which include important warnings and information for the authorized person/user.

Maximum capacity is 400 lbs. (181.4 kg). If the system is used by an employee having a combined tool and body weight between 310 lbs. (140.6 kg) and 400 lbs. (181.4 kg), then the employer must appropriately modify the criteria and protocols to provide proper protection for such heavier weights, or the system will not be deemed to be in compliance with the requirements of OSHA 1926.502(d)(16).

2.0 System Compatibility

Miller full-body harnesses and body belts are designed for use with Miller approved components. Substitution or replacement with non-approved component combinations or subsystems or both may affect or interfere with the safe function of each other and endanger the compatibility within the system. This incompatibility may affect the reliability and safety of the total system.

2.1 Miller Fall Protection Product Groups

A comprehensive fall protection program must be viewed as a "total system" beginning with hazard identification and ending with ongoing management review. Miller Fall Protection views its products as a "system within a system." Three key components of the "Miller System" need to be in place and properly used to provide maximum worker protection.

A. ANCHOR POINT/ANCHORAGE CONNECTOR

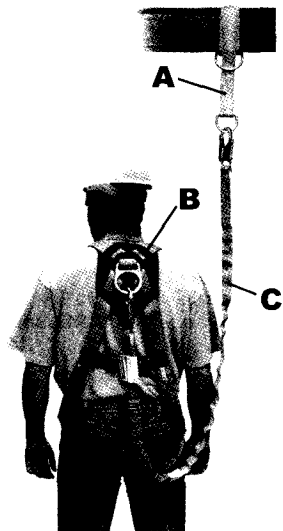
The first component is the anchor point/anchorage connector. The anchor point, also referred to as the tie-off point, is a secure point of attachment for connecting devices and must be capable of supporting 5,000 lbs. (22.2kN) per worker or meet OSHA 1926.502 requirements for a safety factor of two, such as an I-beam or other support structure. Anchorage connectors, such as the cross-arm strap and eyebolt, are sometimes necessary to make compatible connections between the connecting device and the anchor point.

B. BODY WEAR

The second system component is the personal protective gear worn by workers while performing the job. Miller Fall Protection manufactures full-body harnesses, positioning belts and body belts for use in specific work environments. Full-body harnesses are engineered to aid in the arrest of a free fall and should be worn in all situations where workers are exposed to a potential free fall. The full-body harness must be used in conjunction with shock-absorbing equipment to keep fall forces to a minimum. It is imperative that the harness be worn properly.

C. CONNECTING DEVICE

The third component of the system is the connecting device. The most important feature of the connecting device is the built-in shock absorber. Whether the connecting device is a shock-absorbing lanyard or self-retracting lifeline, they are designed to dramatically reduce fall arresting forces. Rope, web or cable lanyards being used for fall arrest **MUST** be used in conjunction with a shock absorber (i.e., Miller SofStop pack).



Individually, none of these components will provide protection from a fall. Used properly with each other, they form the "Miller System" and become a critically important part of the "total fall protection system."

2.2 Component Warnings and Limitations

ANCHORAGES

- Anchorages must be capable of supporting 5,000 pounds (22.2kN) per worker or meet OSHA 1926.502 requirements for a safety factor of two.
- Anchorage requirements based on ANSI are as follows:
 - For fall arrest systems, anchorages must withstand a static load of 5,000 lbs. (22.2kN) for non-certified anchorages or two times the maximum arresting force for certified anchorages.
 - For positioning systems, anchorages must withstand a static load of 3,000 lbs. (13.3kN) for non-certified anchorages or two times the foreseeable force for certified anchorages.
 - For travel restraint, anchorages must withstand a static load of 1,000 lbs. (4.5kN) for non-certified anchorages or two times the foreseeable force for certified anchorages.
 - For rescue systems, anchorages must withstand a static load of 3,000 lbs. (13.3kN) for non-certified anchorages or five-times the applied load for certified anchorages.
 - When more than one personal fall arrest system is attached to an anchorage, the above anchorage strengths must be multiplied by the number of personal fall arrest systems attached to the anchorage.
- Always work directly under the anchor point to avoid a swing-fall injury.
- Ensure that the anchorage connector is at a height that will not allow a lower level to be struck should a fall occur. When selecting an anchorage point, always remember that shock absorbers will elongate when subjected to fall arrest forces. Refer to the labels and instructions provided with the connecting device to obtain the maximum elongation distance. This maximum elongation distance must be considered when choosing an anchor point.
- Ensure that the anchor point is at a height that limits free fall distance to 6 feet (1.8m) or less.
- Anchorage connector must be compatible with snap hook or carabiner and must not be capable of causing a load to be applied to the keeper.
- Never use an anchorage connector which will not allow snap hook or carabiner keeper to close.

BODY WEAR

- Visually check all buckles to assure proper and secure connections before each use. All straps must be connected and adjusted to provide a snug fit.
- Fall protection connecting devices should be attached to the back D-ring of a full-body harness. A front D-ring attachment element may be used for fall arrest only in rescue, work positioning, rope access, and other ANSI Z359.1 recognized applications where the personal fall arrest system limits the maximum free fall distance to 2 ft. (0.6m) and limits the maximum arrest force to 900 lbs. (4.0kN).
- Side and front D-rings should be used for positioning only. (Note front D-ring exception above.)
- Shoulder D-rings should be used for retrieval only.
- Never attach non-locking snap hooks to a harness D-ring.
- Never attach rebar (pelican) hooks to a harness D-ring.
- Body belts should be used for positioning only.

CONNECTING DEVICES

- Make only compatible connections.
- Use only connecting devices containing locking snap hooks or auto-locking carabiners.
- Always visually check that each snap hook and carabiner freely engages the D-ring or anchor point, and that its keeper is completely closed and locked.
- Never disable or restrict locking keeper or alter connecting device in any way.
- Make sure snap hook/carabiner is positioned so that its keeper is never load bearing.
- The use of shock absorbers is required to reduce fall arresting forces.
- Tie-off in a manner which ensures a lower level will not be struck should a fall occur.
- Connect in a manner that limits free fall to the shortest possible distance. [6ft. (1.8m) maximum]
- Never allow a retractable lanyard or lifeline to become slack.
- Never allow a lanyard, or either leg of a two-legged lanyard, to pass under or entwine around the user's arms, legs, neck or any other obstacle.
- Do not tie knots in lanyards or lifelines, or wrap around sharp, rough edges, or small diameter structural members.
- Do not attach multiple lanyards together, or attach a lanyard back onto itself unless it is specifically designed for that purpose.

3.0 Wearing a Full-Body Harness

3.1 Donning a Harness

Full-body harnesses are the only form of body wear to be used for fall protection/fall arrest. It is very important to have a proper fitting harness throughout the entire course of a work shift. Do not allow your harness to become loose or slack. The following procedure will describe how to properly "don" (put on) a harness. The location of the chest, leg and sub-pelvic straps are critical to the optimal performance of a full-body harness in a fall arrest. (Refer to 3.2 Proper Harness Fit section.)

- ① Hold harness by back D-ring. Shake harness to allow all straps to fall in place.



- ② If chest, waist and/or leg straps are buckled, release straps and unbuckle at this time.



- ③ Slip straps over shoulders so D-ring is located in middle of back between shoulder blades.



- ④ Pull leg strap between legs and connect to opposite end. Repeat with second leg strap. Connect waist strap, if present. Waist strap should be tight but not binding.



- ⑤ Connect chest strap and position in midchest area 6" (152mm) to 8" (203mm) below the trachea but not below the sternum. Tighten to keep shoulder straps taut.



- ⑥ After all straps have been buckled, tighten all webbing so that harness fits snug but allows full range of movement. Pass excess strap through loop keepers.



- ⑦ To remove harness, reverse procedure.

- ⑧ Miller Fall Protection recommends hanging the harness by back D-ring to help it keep its shape when not in use and provide the worker with a starting point when next attempting to don the harness.

3.2 Proper Harness Fit

It is extremely important that your harness fits and is properly adjusted. Failure to do so can result in serious injury or death, and proper connection of both types of straps is essential to fall safety. After donning a harness, make sure to check:

CHEST STRAP: Should be positioned in the middle of your chest [6" (152mm) to 8" (203mm) below the trachea but not below the sternum]. If the chest strap is positioned too high, the strap may move upwards during a fall arrest causing you to run the risk of strangulation. If the chest strap is too low or not connected at all, you could fall out of your harness during a fall.

LEG STRAPS: Proper adjustment of the leg straps is critical for safety. Leg straps should be snug, but not snug to the point that they obstruct normal blood circulation in the legs. Failure to wear leg straps will not secure your body within the harness during a fall and could lead to serious injury or death.

SUB-PELVIC STRAP: Provides support in the event of a fall, and also provides support when used for positioning. In a seated position, the sub-pelvic strap should comfortably provide a "seat" for the buttocks. In the event of a fall, simply lift up your legs to transfer weight to the sub-pelvic strap.



3.3 Donning a Pullover Front D-Ring Harness



1. Disconnect the leg strap buckles if they are connected.
2. Hold the harness by the back D-ring. Turn the harness so the front D-ring is facing you and the Miller strap is away from you.
3. Grasp shoulder straps directly below the front D-ring with both hands. Place your head through the center of the harness between the front and back D-rings.
4. Spin the harness 180 degrees so that the front D-ring is positioned in the front.
5. Slide one strap down over each arm so that the front D-ring rests in the mid-chest area and shoulder straps run vertically over the chest.
6. Pull leg strap between legs and connect to opposite end. Repeat with second leg strap. Adjust leg straps until snug.
7. Make adjustments to position the front D-ring properly by feeding webbing through the friction buckles. Adjust shoulder straps until snug. Pass excess strap through loop keepers.
8. To remove: Reverse procedure. Hang harness by back D-ring.

3.4 Donning a Ms. Miller Harness

1. Hold harness by back D-ring. Shake harness to allow all straps to fall in place.
2. If chest and leg straps are buckled, release straps and unbuckle at this time.
3. Holding harness by the shoulder straps, step through the waist strap and slip shoulder straps over shoulders so the D-ring is located in the middle of the back between shoulder blades.
4. Pull leg strap between legs and connect to opposite end. Repeat with second leg strap. Tighten waist strap. Waist strap should be tight, but not binding.
5. Connect chest strap and position in midchest area 6" (152mm) to 8" (203mm) below the trachea but not below the sternum. Tighten to keep shoulder straps taut.
6. After all straps have been buckled, tighten all webbing so that harness fits snug but allows full range of movement. Pass excess strap through loop keepers.
7. To remove harness, reverse procedure. Hang harness by back D-ring.



3.5 Buckle Connection Instructions

SLOTTED MATING BUCKLE



① Ensure straps are not twisted. The loose end of webbing is for adjustment and must always be located on the outside (away from the user).

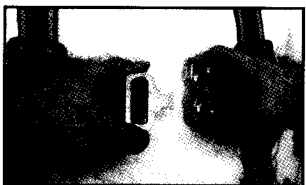


② Pass the buckle with the center bar under the square link. Turn the center bar buckle so that the edges line up with the slots in the square link. Pull the center bar buckle completely through the square link and allow it to fall into place on top of the square link.



③ Pull loose end of strap to tighten adjustment of the harness. Then slide rigid keeper (on chest strap only) up to buckle to reduce web sliding in buckle. Tuck excess webbing into elastic keepers.

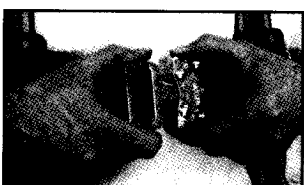
QUICK-CONNECT BUCKLE



① Ensure straps are not twisted. The loose end of webbing is for adjustment and must always be located on the outside (away from the user).

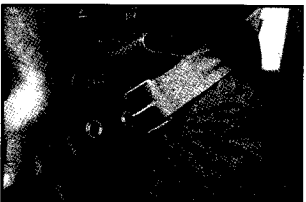


② Push both halves of the buckle together until you hear a click. Tug on both halves of the buckle to make sure it is firmly connected. Pull loose end of strap to tighten adjustment of the harness. Then slide rigid keeper (on chest strap only) up to buckle to reduce web sliding in buckle. Tuck excess webbing into elastic keepers.

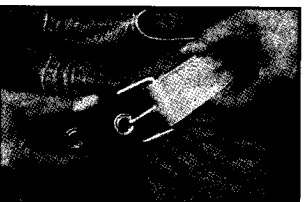


③ To disconnect, push forward on both release levers, then pull buckle apart.

TONGUE BUCKLE



① Insert the loose strap of webbing through the tongue buckle from the underside.

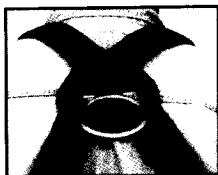


② Pull the strap through until snug, placing the buckle tongue through the appropriate grommet.



③ Tuck excess webbing into elastic keepers.

3.6 Proper Use of D-Rings



Back D-rings are for fall arrest or retrieval only.



Front D-rings are for positioning. *Note front D-ring exception below.*



Side D-rings are for positioning only.

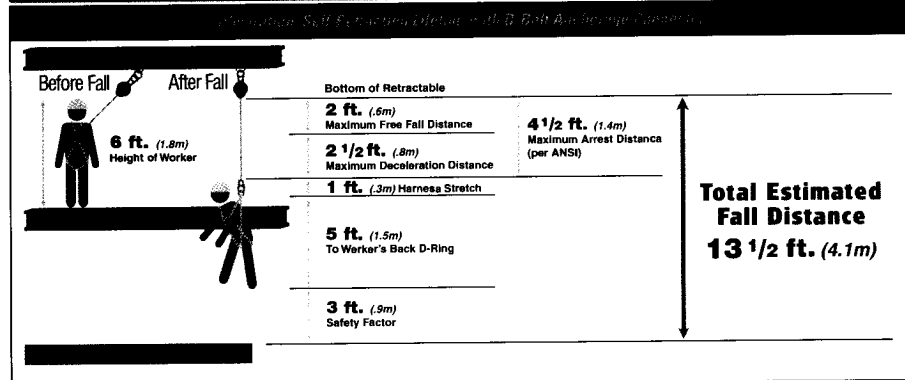
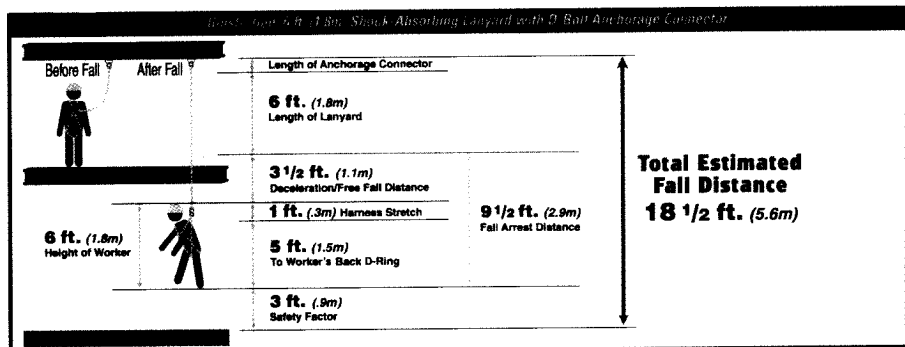


Shoulder D-rings are for retrieval only.

[Note Exception: Front D-rings may be used for fall arrest only in applications where the personal fall arrest system limits the maximum free fall distance to 2 ft. (0.6m) and limits the maximum arrest force to 900 lbs. (4.0kN).]

4.0 Calculating Fall Clearance Distance

It is important to understand how to calculate potential fall clearance to avoid contact with a lower level. The following diagrams demonstrate sample calculations using a shock-absorbing lanyard and self-retracting lifeline. When actually calculating fall clearance distance, the authorized person/user must consider all variables, including but not limited to, the height of the worker, the length of the lanyard, the maximum arrest distance of the self-retracting lifeline, the position of the person (standing or crouched), and the anchorage connector used, and then make necessary adjustments to the calculations.



Always refer to the instruction manual of the connecting device being used for more specific information and warnings regarding calculating fall clearance distance. If there is any question about calculating fall clearance distance, please contact Miller Technical Services at 1-800-873-5242.

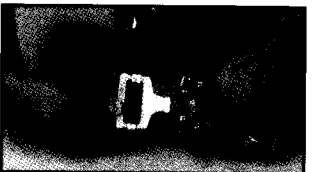
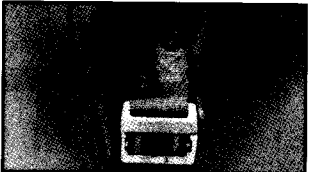
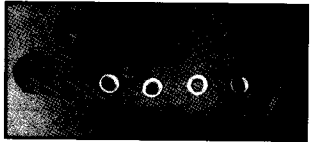
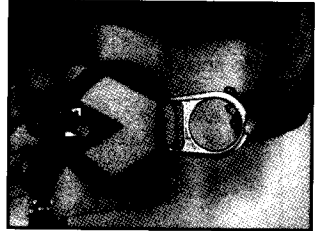
5.0 Inspection and Maintenance

Miller harnesses and body belts are designed for today's rugged work environments. To maintain their service life and high performance, harnesses and body belts should be inspected frequently. Inspect thoroughly before each use. Regular inspection by a competent person for wear, damage or corrosion should be a part of your safety program. Replace the equipment if any of the defective conditions explained in this manual are found.

5.1 Harness and Body Belt Inspection

Perform the following procedures:

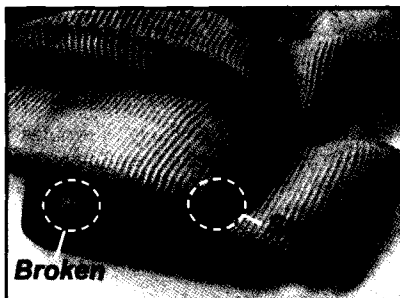
- ① **Webbing/Stitches**
Grasp the webbing with your hands 6 inches (152mm) to 8 inches (203mm) apart. Bend the webbing in an inverted "U" as shown. The surface tension resulting makes damaged fibers or cuts easier to detect. Follow this procedure the entire length of the webbing, inspecting both sides of each strap. Watch for frayed edges, broken fibers, pulled stitches, cuts, burns, and chemical damage.
- ② **D-Rings/Pads**
Check D-rings for distortion, cracks, breaks, and rough or sharp edges. The D-ring should pivot freely. Inspect for any unusual wear, frayed or cut fibers, or broken stitching of the D-ring attachments. Pads should also be inspected for cracks, excessive wear, or other signs of damage.
- ③ **Buckles**
Inspect for any unusual wear, frayed or cut fibers, or broken stitching of the buckle attachments.
- ④ **Tongue Buckles/Grommets**
Buckle tongues should be free of distortion in shape and motion. They should overlap the buckle frame and move freely back and forth in their socket. Roller should turn freely on frame. Check for distortion or sharp edges. Inspect for loose, distorted or broken grommets. Webbing should not have additional punched holes.
- ⑤ **Friction and Slotted Mating Buckles**
Inspect the buckle for distortion. The outer bars and center bars must be straight. Pay special attention to corners and attachment points at the center bar.
- ⑥ **Quick-Connect Buckles**
Inspect the buckle for distortion. The outer bars and center bars must be straight. Make sure dual-tab release mechanism is free of debris and engages properly.



7

Harness Fall Arrest Indicators

Inspect fall arrest indicators (located on the back D-ring pad) for signs of activation. Remove from service if broken or stretched between any of the 4 pairs of arrows.



AFTER FALL

5.2 Types of Material Damage

HEAT	CHEMICAL	MOLTEN METAL OR FLAME	PAINTS AND SOLVENTS
In excessive heat, rope/webbing becomes brittle and has a shriveled brownish appearance. Fibers will break when flexed. Should not be used above 180°F.	Change in color usually appearing as a brownish smear or smudge. Transverse cracks when rope/webbing is bent over a mandrel. Loss of elasticity in rope/webbing.	Rope/webbing strands fuse together. Hard shiny spots. Hard and brittle feel.	Paint which penetrates and dries restricts movement of fibers. Drying agents and solvents in some paints will appear as chemical damage.

Contact Miller Technical Service Department at 800-873-5242 if you have any questions about the above chart.

5.3 Cleaning and Storage

Basic care of all Miller Fall Protection equipment will prolong the durable life of the unit and will contribute toward the performance of its vital safety function. Proper storage and maintenance after use are as important as cleansing the equipment of dirt, corrosives, or contaminants. Storage areas should be clean, dry and free of exposure to fumes or corrosive elements. Wipe off all surface dirt with a sponge dampened in plain water. Squeeze the sponge dry. Dip the sponge in a mild solution of water and commercial soap or detergent. Work up a thick lather, with a vigorous back and forth motion. Then wipe dry with a clean cloth. Hang freely to dry, but away from excessive heat, steam, or long periods of sunlight.

5.4 Life Expectancy of Miller Brand Harnesses

It is the position of Miller Fall Protection (MFP) to use a 5-year life expectancy from date of first use as a guideline on all harnesses. MFP provides this recommendation as a general guideline, and is not to be used in lieu of the harness inspection section of this manual. This guideline only applies to product exhibiting no visual damage and that has not been exposed to chemicals, abnormal heat, or excessive ultra-violet light. It is possible that the equipment will last longer depending on the care and use the equipment may see.

Following these instructions may still necessitate removing the harness from service prior to the expiration of the 5-year life expectancy guideline. Likewise, proper adherence to the inspection and maintenance criteria may extend the useful life beyond five years. Ultimately, it is the responsibility of the end-user to determine when the harness is unfit for use and should be removed from service. Products removed from service should be disposed of in a manner that prevents inadvertent further use.

6.0 Preventing Suspension Trauma

- OSHA states that potentially fatal suspension trauma can occur within minutes while waiting for rescue after a fall.
- Average fall rescue time is 15 minutes.
- When used, the Relief Step Safety Device provides support and enhances blood circulation until rescue, permitting the ability to move and flex leg muscles.
- Small and lightweight, the Relief Step Safety Device attaches to any brand full-body harness.
- Contact your Miller distributor to purchase the Relief Step.



1. Mount to upper rear web strap by "choking" through loop. (Be sure loop is past metal adjustments.)

2. Attach "pull tab" button loop to the front leg strap above buckle.



Pull tab to deploy.



Insert foot into loop step and adjust.



The Relief Step provides the ability to stand allowing improved circulation.



Two Relief Steps provide added support, balance, and comfort.

7.0 Functional Product Categories

Fall protection products may be broken down into five functional categories: Fall Arrest, Ladder Climbing, Positioning, Suspension, and Retrieval.



FALL ARREST

A fall arrest system is required if any risk exists that a worker may fall from an elevated position.

As a general rule, Miller Fall Protection recommends that a fall arrest system be used any time a working height of six feet or more is reached. Working height is defined as the distance from the walking/working surface to a grade or lower level. A fall arrest system is designed to be passive and will only come into service should a fall occur. The following is an example of products recommended by Miller Fall Protection as part of a fall arrest system:



1. Personal Protective Gear: **Full-Body Harness**
2. Connecting Device: **Self-Retracting Lifeline or Shock-Absorbing Lanyard**
3. Anchor Point/Anchorage Connector: **Support Beam/ Cross-Arm Strap**



LADDER CLIMBING

The ladder climbing system is a fall arrest system typically mounted on or adjacent to ladders or towers and allows a worker to climb up and down in the work environment while receiving continuous fall protection. The following is an example of a ladder climbing system:

1. Personal Protective Gear: **Full-Body Harness**
2. Connecting Device: **Rope Grab or other Fall Arrester**
3. Anchorage Connector/Anchor Point: **Vertical Lifeline/Ladder**



POSITIONING

The personal positioning system holds a worker in place while allowing a hands-free work environment. Whenever a worker leans back, the system is activated, making this an "active" system. The following is an example of a widely used positioning system:

1. Personal Protective Gear: **Full-Body Harness**
2. Connecting Device: **Rebar Chain Assembly**
3. Anchor Point: **Symons Form**



Note that a fall arrest system must be used in conjunction with the personal positioning system. The use of such a combination system is necessary because a personal positioning system is not designed for fall arrest purposes. By using this combination system, the fall arrest components will be activated should the worker suffer a fall while working or changing work positions.



SUSPENSION

The personal suspension system, widely used in the window washing and painting industries, is designed to lower and support a worker while allowing a hands-free work environment. The following are components typical of a suspension system:

1. Personal Protective Gear: **Bos'n Chair**
2. Connecting Device: **Workline/Lifeline**
3. Anchorage Connector: **Cross-Arm Strap/Carabiner**

Because the suspension system components are not designed to arrest a free fall, a back-up fall arrest system must be used in conjunction with the personal suspension system. This fall arrest system will only activate should the worker experience a fall.



RETRIEVAL

The final category is most often used in confined space applications, and is known as a personal retrieval/fall arrest system. This system is primarily used where workers must be lowered into tanks, manholes, etc., and may require retrieval from above should an emergency occur. The following shows a typical personal retrieval system:

1. Personal Protective Gear: **Full Body Harness**
2. Connecting Device: **Retractable Lifeline/Rescue Unit**
3. Anchorage Connector: **Tripod**

Family Identification

Identification par Famille

Identificación de Familias de Productos



Python Webbing:
(Sangle Python /
Tejido Python)

Polyester

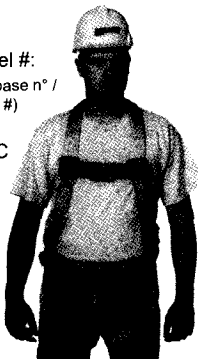
DuraFlex Python Ultra Harnesses

(Ultra-Harnais DuraFlex Python
/ Arneses Ultra de DuraFlex
Python)

Base Model #:

(Modèle de base n° /
Modelo base #)

P950QC



**DuraFlex Stretchable
Webbing:**
(Sangle Extensible
DuraFlex / Tejido Estirable
DuraFlex)

Polyester, Nylon, Lycra

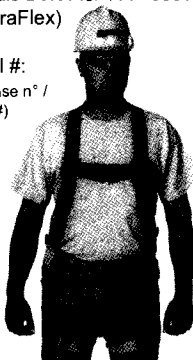
DuraFlex Ultra Harnesses

(Ultra-Harnais DuraFlex / Arneses
Ultra de DuraFlex)

Base Model #:

(Modèle de base n° /
Modelo base #)

E650QC



DuraFlex Harnesses

(Harnais DuraFlex / Arneses
DuraFlex)

Base Model #'s:

(Numéros des
modèles de base /
Núm. de modelo
base)

550/E552
E570
E650
E752/E753
E850

E650



**DualTech
Webbing:**
(Sangle DualTech /
Tejido DualTech)

Polyester, Nylon

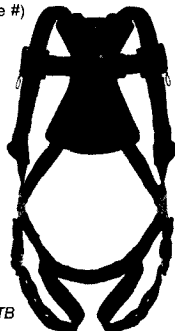
Revolution Harnesses with DualTech Webbing

(Harnais Revolution avec
Sangle DualTech / Arneses
Revolution con Tejido DualTech)

Base Model #:

(Modèle de base n° /
Modelo base #)

RDT



RDT-TB

Additional Revolution Har- nesses with varying webbing

(Harnais Revolution Additionnels avec
Sangles Variées / Arneses Revolution
Adicionales con Varios Tejidos)

Base Model #'s:

(Numéros des modèles de base /
Núm. de modelo base)

RDF RPY
RKN RKNAR
R10CN

NOTE: Miller Revolution Harnesses have been engineered with many components unique to the Revolution family only. Therefore, in addition to this manual, user's must also refer to the supplemental Miller Revolution Harness User Instruction Manual.

NOTA: Les harnais Revolution de Miller ont été conçus avec plusieurs composants exclusifs à la famille Revolution. Par conséquent, en plus du présent manuel, l'utilisateur doit aussi consulter le Manuel supplémentaire d'instructions de l'utilisateur de harnais Revolution.

NOTA: Los arneses Miller Revolution han sido fabricados con numerosos componentes exclusivos de la familia de arneses Revolution. Por lo tanto, el usuario debe consultar además de este manual, el Manual de Instrucciones para el Usuario de Arneses Revolution que se proporciona complementariamente.

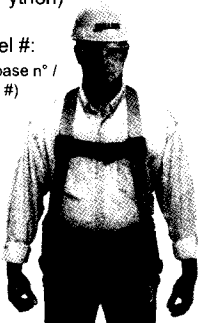
DuraFlex Python Harnesses

(Harnais DuraFlex Python / Arneses
DuraFlex Python)

Base Model #:

(Modèle de base n° /
Modelo base #)

P950



HP Webbing:
(Sangle HP / Tejido HP)

Polyester w/Teflon HT

HP (High Performance) Harnesses

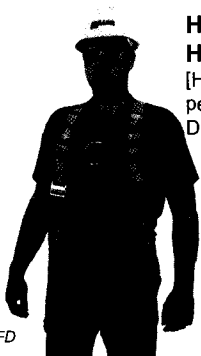
[Harnais HP (Efficacité Su-
périeure) / Arneses HP (Alto
Desempeño)]

Base Model #'s:

(Numéros des modèles de base /
Núm. de modelo base)

552T
650T
8428T
850T

850TFD





Standard Non-Stretch Webbing:
(Sangle Fixe Ordinaire / Tejido Estándar No Estirable)

Polyester

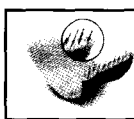
Non-Stretch Harnesses

(Harnais Fixes / Arnases No Estirables)

Base Model #'s:

(Numéros des modèles de base /
Núm. de modelo base)

550/552	570
750/751	752/753
650	8428
850	



T-Flex Stretchable Webbing:
(Sangle Extensible T-Flex / Tejido Estirable T-Flex)

Polyester, Nylon, Lycra

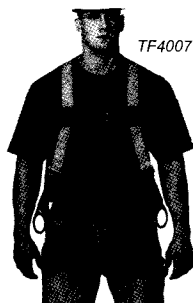
Titan T-Flex Stretchable Harnesses

(Harnais Extensible Titan
T-Flex / Arnases Estirable
Titan T-Flex)

Base Model #'s:

(Numéros des modèles de base /
Núm. de modelo base)

TF4000	TF4007
TF4500	TF4507
TF4577	



Kevlar-Nomex Webbing:
(Sangle Kevlar-Nomex / Tejido Kevlar-Nomex)

Kevlar-Nomex

Kevlar-Nomex Harnesses

(Harnais Kevlar-Nomex / Arnases
Kevlar-Nomex)

Base Model #'s:

(Numéros des modèles de base /
Núm. de modelo base)

650K
751K
850K

850K-4-UBK



Standard Non-Stretch Webbing:
(Sangle Fixe Ordinaire / Tejido Estándar No Estirable)

Polyester

Titan Non-Stretch Harnesses

(Harnais Fixes Titan /
Arnases Titan No Estirables)

Base Model #'s:

(Numéros des modèles de base /
Núm. de modelo base)

T4000	T4007
T4078	T4500
T4507	T4577



Miller Body Belts

(Ceintures de Sécurité Miller /
Cinturones Miller)

Base Model #'s:

(Numéros des modèles de
base / Núm. de modelo base)

2NA	3NA
123N	124N
4260NRL	8451
8452	



Titan Body Belts

(Ceintures de Sécurité
Titan / Cinturones Titan)

Base Model #'s:

(Numéros des modèles de
base / Núm. de modelo base)

T3010
T3020
T3310
T3320

All Miller harnesses and body belts include this instruction manual. Extensions of the base model numbers listed do apply. Special order and custom product model numbers may not be listed. New model numbers will be added as manual is updated. If there is any doubt as to whether this instruction manual applies to your particular product, please contact Miller Technical Services at 1-800-873-5242.

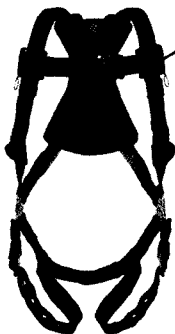
Tous les harnais et ceintures de sécurité Miller sont accompagnés du présent manuel d'instructions, y compris les modèles supplémentaires. Il se peut que des modèles de produits spéciaux ou personnalisés ne figurent pas dans la liste. De nouveaux modèles seront ajoutés lors des mises à jour du manuel. Au moindre doute sur l'application du présent manuel d'instructions à votre produit particulier, communiquez avec les Services techniques de Miller, au 1 (800) 873-5242.

Todos los arneses y cinturones Miller incluyen este manual de instrucciones. Se aplican las extensiones de los números de los modelos base. No se enumeran los números de productos de órdenes especiales y hechos a la orden. Los números de los nuevos modelos se añadirán a medida que se vaya actualizando este manual. Si no sabe con seguridad si este manual de instrucciones se aplica a su producto en particular, comuníquese con el Departamento de Servicio Técnico de Miller, llamando al 1-800-873-5242.

Product Labels

Étiquettes sur les Produits

Etiquetas de los Productos



Self-Contained Label Pack
(Paquet D'étiquettes / Portaetiquetas
Autónomo Completo)



Closed Label Pack
(Paquet D'étiquettes
Fermé / Portaetiquetas
Cerrado)



Open Label Pack
(Paquet D'étiquettes
Ouvert / Portaetiquetas
Abierto)

Label Pack (Paquet D'étiquettes Portaetiquetas);
Polypropylene, Santoprene

Labels (Étiquettes / Etiquetas);
Veleron

Model/Size (Modele/Grandeur) (Modele/Taille)	
Material/Materiel/Matériau:	
Inspection No. No. de inspection No. d'inspection	Date of Manufacture Date de fabrication Fecha de fabricación
CSA Classes:	WO#:
DO NOT REMOVE THIS LABEL Made in USA	

LB782 Front Rev. C

WARNING: Manufacturer's instructions supplied at time of shipment must be followed. Failure to do so could result in serious injury or death. Contact Miller Fall Protection if instruction manual is needed.
DO NOT REMOVE THIS LABEL.
Expiration Date: See manual for inspection. Remove from service if subject to a fall arrest.

AVERTISSEMENT: Vous devez respecter les instructions du fabricant que vous avez reçues avec le produit. Dans le cas contraire, vous risquez des blessures graves ou même la mort. Contactez Miller Fall Protection si vous avez besoin d'un nouveau manuel.

N'ENLEVEZ PAS CETTE LABEL.
Date De Expiration : Voir le manuel pour l'inspection. Enlevez du service si sujet à une arrestation de chute.

ADVERTENCIA: Deben seguirse las instrucciones del fabricante provistas con este producto al momento de despacho. El no hacerlo puede resultar en lesiones graves o la muerte. Si se requiere el manual de instrucciones consulte Miller Fall Protection.

NO QUITE ESTA ETIQUETA.
Fecha De Vencimiento: Vea el manual para la inspección. Quite de servicio si conforme a una detención de la caída.

LB782 Back Rev. C

PERSONAL IDENTIFICATION TAG

ÉTIQUETTE D'IDENTIFICATION
PERSONNELLE

ETIQUETA DE IDENTIFICACIÓN
PERSONAL



Questions?
Contact Miller Fall Protection

Des Questions? Appelez
Miller Fall Protection

¿Consultas? Llamar Al
Miller Fall Protection

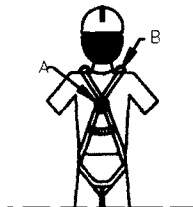
800-873-5242
Compliance:
Conformité:
Conformidad:
OSHA 1926.502
ANSI A10.32-2004
ANSI Z359.1 (130-310 lbs.)
CSA Z259.10-08
Max Weight: 400 lbs.
(See instructions & applicable
Fall Protection Code.)

LB783 Front Rev. A

A) Back D-ring is for fall arrest or retrieval
B) Shoulder D-rings, (if present) are for retrieval only. Use locking snaps only.
NOTE: Any D-rings not illustrated are for positioning only. See instruction manual for details.

A) Les anneaux d'arrimage arrière ne conviennent que pour l'arrêt d'une chute et le lavage.
B) Les anneaux d'arrimage des épaules ne servent que pour le lavage.
NOTE : Tous les clips D non illustrés sont pour placer seulement. Voir le manuel d'instruction pour des détails.

A) Los anillos D de la parte trasera son para detener la caída o para levantar solamente.
B) Los anillos D de los hombros son para levantar solamente.
NOTA: Cualquier anillo en D no ilustrado está para colocar solamente. Vea el manual de instrucción para los detalles.



LB783 Back Rev. A

LB784 Front Rev. A

LB784 Back Rev. A

For applicable class(es) for this harness, see silver ID label on inside, front cover.



CLASS E



CLASS D



CSA Z259.10-06

Para el clas(es) aplicable para este arnés, vea la etiqueta de plata de la identificación encendido adentro, portada.
Pour clas(es) applicable pour ce harnais, voir l'étiquette argentée d'identification dessus à l'intérieur, couverture.

For applicable class(es) for this harness, see silver ID label on inside, front cover.



CLASS A



CLASS L



CLASS P



CSA Z259.10-06

Para el clas(es) aplicable para este arnés, vea la etiqueta de plata de la identificación encendido adentro, portada.
Pour clas(es) applicable pour ce harnais, voir l'étiquette argentée d'identification dessus à l'intérieur, couverture.

Inspection Grid / Notation d'inspection / Tabla de inspección

YR	J	F	M	A	M	J	J	A	S	O	N	D
1												
2												
3												
4												
5												

Mark inspection grid on date of first use.
Marquez la grille d'inspection la date de la première utilisation.
Marque la tabla en la fecha de primer uso.

Material:



Model/Size:



Inspection No :
Date of Manufacture

Franklin, PA 16323 U.S.A

Toll Free: 800-873-5247

WARNING: NOT TO BE USED FOR FALL ARREST!

Warning: Manufacturer's instructions supplied with this product at time of shipment must be followed - failure to do so could result in serious injury or death. Contact Miller Fall Protection if instruction manual is needed.

Advertencia: Deben seguirse las instrucciones del fabricante provistas con este producto - el no hacerlo puede resultar en lesiones graves o la muerte. Si se requiere el manual de instrucciones consulte con Miller Fall Protection.

Advertisement: Vous devez respecter les instructions du fabricant que vous avez reçues avec le produit. Dans la cas contraire, vous risquez de blessures graves ou même la mort. Contactez Miller Fall Protection si vous avez besoin d'un nouveau manuel.

Made in the U.S.A.

INSPECTION GRID

YR	J	F	M	A	M	J	J	A	S	O	N	D
1												
2												
3												
4												
5												

MARK GRID ON DATE OF FIRST USE

Compliance: OSHA 1926.502
ANSI A10.12-2004 CSA Z259.1-95



WARNING: NOT TO BE USED FOR FALL ARREST!

DO NOT REMOVE THIS LABEL

Inspection and Maintenance Log

Registre D'inspection et D'entretien

Registro de Inspección y Mantenimiento

DATE OF MANUFACTURE: _____

DATE DE FABRICATION / FECHA DE FABRICACIÓN

MODEL NUMBER: _____

NUMÉRO DE MODÈLE / NÚM. DE MODELO

DATE PURCHASED: _____

DATE D'ACHAT / FECHA DE COMPRA

INSPECTION DATE <small>DATE D'INSPECTION FECHA DE INSPECCIÓN</small>	INSPECTION ITEMS NOTED <small>POINTS NOTÉS LORS DE L'INSPECTION PUNTOS DE INSPECCIÓN RELEVANTES</small>	CORRECTIVE ACTION <small>ACTION CORRECTIVE MEDIDA CORRECTIVA</small>	MAINTENANCE PERFORMED <small>ENTRETIEN EFFECTUÉ MANTENIMIENTO REALIZADO</small>
Approved by: Approuvé par: Aprobado por:			
Approved by: Approuvé par: Aprobado por:			
Approved by: Approuvé par: Aprobado por:			
Approved by: Approuvé par: Aprobado por:			
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Approved by: Approuvé par: Aprobado por:			
Approved by: Approuvé par: Aprobado por:			



MILLER® FALL PROTECTION PRODUCTS TOTAL SATISFACTION ASSURANCE

At Miller Fall Protection, we have been providing quality Miller brand fall protection equipment to millions of workers worldwide since 1945.

LIMITED LIFETIME WARRANTY BACKED BY OVER 60 YEARS IN THE FALL PROTECTION BUSINESS

We sincerely believe that our fall protection equipment is the best in the world. Our products endure rigorous tests to ensure that the fall protection equipment you trust is manufactured to the highest standards. Miller fall protection products are tested to withstand normal wear and tear, but are not indestructible and can be damaged by misuse. Our Limited Lifetime Warranty does not apply to normal wear and tear or abusive treatment of the product.

In the unlikely event that you should discover defects in either workmanship or materials, under our Limited Lifetime Warranty, we will repair or replace the product at our expense. If a replacement is necessary and your product is no longer available, a comparable product will be substituted. Should a product issue surface, contact us at 800.873.5242.

Manufacturing specifications are subject to change without notice.

PRODUITS MILLER® FALL PROTECTION ASSURANCE DE SATISFACTION TOTALE

Chez Miller Fall Protection, nous fournissons des équipements de protection contre les chutes de marque Miller de qualité à des millions de travailleurs dans le monde entier depuis 1945.

GARANTIE LIMITÉE À VIE ASSURÉE GRÂCE À PLUS DE 60 ANS PASSÉS DANS LE DOMAINE DE LA PROTECTION CONTRE LES CHUTES

Nous croyons sincèrement que notre équipement de protection contre les chutes est le meilleur au monde. Nos produits sont soumis à des tests rigoureux, afin d'assurer que les équipements de protection contre les chutes dans lesquels vous avez confiance sont fabriqués selon les normes les plus exigeantes. Les produits de protection contre les chutes Miller sont soumis à des essais pour vérifier qu'ils résistent à une usure normale; ils ne sont cependant pas indestructibles et peuvent s'endommager en cas de mauvaise utilisation. Notre garantie limitée à vie ne s'applique pas à l'usure normale ou à un usage abusif du produit.

Dans le cas peu probable où vous découvririez des défauts, soit de fabrication, soit de matériau, dans le cadre de notre garantie à vie, nous réparerons ou remplacerons le produit à nos frais. En cas de remplacement, si votre produit n'est plus offert, vous recevrez un produit comparable. En cas de problème sur un produit, nous contacter au 800-873-5242.

Les caractéristiques de fabrication peuvent être modifiées sans préavis.

PRODUCTOS ANTICAÍDAS MILLER® GARANTÍA DE SATISFACCIÓN TOTAL

En Miller Fall Protection, venimos suministrando desde 1945 los equipos de protección anticaídas con la calidad Miller a millones de trabajadores en todo el mundo.

GARANTÍA LIMITADA DE POR VIDA NOS RESPALDAN MÁS DE 60 AÑOS EN LA FABRICACIÓN DE EQUIPO ANTICAÍDAS

Sinceramente creemos que su equipo de protección contra caídas es el mejor del mundo. Nuestros productos resisten rigurosas pruebas para garantizar que el equipo de protección contra caídas en el que usted confía está fabricado de conformidad con las normas más elevadas. Los productos anticaídas Miller son sometidos a pruebas para que resistan el desgaste normal, pero no son indestructibles y su incorrecta utilización puede dañarlos.

Nuestra Garantía limitada de por vida no se aplica al desgaste normal ni al maltrato del producto.

En el poco probable caso de que usted descubriera defectos de mano de obra o materiales, por nuestra Garantía limitada de por vida, repararemos o sustuiremos el producto por cuenta nuestra. Si un reemplazo es necesario y nuestro producto ya no está disponible, se lo sustuiremos por otro comparable.

En caso de que surja un problema con el producto, contáctenos al 800.873.5242.

Las especificaciones de fabricación están sujetas a modificaciones sin previo aviso.

ASSISTED-RESCUE AND SELF-RESCUE SYSTEMS, SUBSYSTEMS AND COMPONENTS

Self-Retracting Lifelines with Rescue Capabilities

The following information and warnings apply to Miller MightEvac Self-Retracting Lifelines with emergency rescue capabilities (MR50, MR100 and MR130 units).

- Force required to operate rescue features when device is loaded to capacity is 22 lbs. (98N).
- **WARNING: Never allow the lifeline to become slack while in rescue mode.**

Rescue and Controlled Descent Devices

The following information and warnings apply to Miller SafeEscape Controlled Descent/Self-Rescue Systems (AG10 devices and kits) and Miller Series 70 Universal Rescue Systems (all base model 70 devices and systems).

- **WARNING: Always use the rope lifeline specifically designated by the manufacturer to be used with the system. The use of an incompatible rope lifeline could interfere with the proper functioning of the system.**
- **CAUTION: Avoid descending into electrical, thermal, chemical sources or other hazards.**

AG10 SafeEscape (Descent Device) Systems only

- SafeEscape Systems include 3/8" (9.5mm) polyester rope.
- Descent energy rating: 5,530,000 ft.-lbs.
- Maximum descent distance is 436 yards (400m). For two persons, maximum descent distance is 109 yards (100m).
- Maximum descent rate: 2.5 ft./sec. (.7m/s)

Series 70 (Rope Tackle Block) Systems only

- The Series 70 Systems use a 3/8" (9.5mm) kernmantle rope lifeline with a tensile strength of 5,600 lbs. (25kN).
- Maximum descent distance: 500 ft. (152m)
- Maximum descent rate: 2.5 ft./sec. (.7m/s)

Winches/Hoists

The following information and warnings apply to Miller ManHandler Hoists (8442 units).

- ManHandler hoists contain 3/16" (5mm) galvanized or stainless steel cable.
- Maximum working length of load line: 100 ft. (30.5m)
- Force required to operate rescue features when device is loaded to maximum capacity: 22 lbs. (98N)
- **WARNING: Never allow the lifeline to come into contact with sharp edges or abrasive surfaces.**



Sperian Fall Protection, Inc.
P.O. Box 271, 1345 15th Street
Franklin, PA 16323 USA

ANSI Z359-07 INSTRUCTION MANUAL SUPPLEMENT

This supplement is being issued with all Miller Fall Protection product instruction manuals in accordance with ANSI Z359.1, Z359.3 and Z359.4 standards.

All persons using this equipment must read and understand all instructions—those provided in the instruction manual as well as this supplement. Failure to do so may result in serious injury or death. In the event of any discrepancies, information and warnings provided in this supplement supersede those in the instruction manual. If there is any doubt, please contact Miller Technical Services Department at 1-800-873-5242.

GENERAL REQUIREMENTS

- All authorized persons/users must reference the ANSI Z359.1 standard and applicable regulations governing occupational safety. In addition, authorized persons/users of positioning and travel restraint equipment must reference ANSI Z359.3 and authorized persons/users of rescue equipment must reference ANSI Z359.4. Please refer to product labeling for information on specific OSHA, ANSI and CSA standards met by product.
- Never remove product labels, which include important warnings and information for the authorized person/user.
- Any equipment that has been subjected to damage as described by the manufacturer or has been subjected to the forces of arresting a fall or affecting a rescue must be removed from service.

ANCHORAGE REQUIREMENTS

- Anchorage requirements based on ANSI standards are as follows:
 - Anchorages selected for personal fall arrest systems shall have a strength capable of sustaining static loads of at least two times the maximum arrest force permitted on the system when certification exists, or 5,000 lbs. (22.2kN) in the absence of certification. When more than one personal fall arrest system is attached to an anchorage, the above anchorage strengths must be multiplied by the number of personal fall arrest systems attached to the anchorage.
 - For work positioning systems, anchorages must withstand a static load of 3,000 lbs. (13.3kN) for non-certified anchorages or two times the foreseeable force for certified anchorages.
 - For travel restraint systems, anchorages must withstand a static load of 1,000 lbs. (4.5kN) for non-certified anchorages or two times the foreseeable force for certified anchorages.
 - Anchorages selected for rescue systems shall have a strength capable of sustaining static loads of at least 3,100 lbs. (13.9kN) for non-certified anchorages, for connection of rescue system only, or meet a safety factor of 5:1 based on the static load placed on the system for certified anchorages.
 - Anchorage connectors shall not be attached to anchorages where such attachment would reduce the anchorage strength below the applicable levels set forth above.
 - Anchorage connections shall be stabilized to prevent unwanted movement or disengagement of the system from the anchorage.
 - Anchorage connectors shall be attached to no more than one PFAS or rescue system unless certified for such purpose.
- Miller steel carabiners with 3,600 lb. (16kN) gate load capacity meet ANSI Z359.1(07).

**WARNINGS****BODY WEAR**

- Harnesses equipped with a front D-ring for fall arrest shall be used only as part of a personal fall arrest system that limits the maximum free fall distance to two feet (0.6m) and limits the maximum arrest force to 900 lbs. (4kN).

CONNECTING DEVICES

- For lanyards with two, integrally connected legs:
 - Connect only the center snap hook to the fall arrest attachment element.
 - Do not attach the leg of the lanyard which is not in use to the harness except to attachment points specifically designated by the manufacturer for this purpose.
 - Do not rig the lanyard to create more than a six-foot (1.8m) free fall.
 - Do not allow the legs of the lanyard to pass under arms, between legs or around the neck.

MILLER[®]

by SPERIAN

Toll Free: 800.873.5242

Fax: 800.892.4078

Download this manual at: www.millerfallprotection.com
Téléchargez ce manuel à l'adresse: www.millerfallprotection.com
Puede bajar por Internet este manual en: www.millerfallprotection.com

Sperian Fall Protection, Inc.
P.O. Box 271, 1345 15th Street
Franklin, PA 16323 USA