

User Instructions

PointGuard Concrete

Anchorage Connector Strap

**Model Number / Numero de modelo /
Numero de modele**



Doc./Mat.: 10044136/08
Print Spec.: 10000005389 (F)
CR 800000034410



WARNING!

National standards and state, provincial and federal laws require the user to be trained before using this product. Use this manual as part of a user safety training program that is appropriate for the user's occupation. These instructions must be provided to users before use of the product and retained for ready reference by the user. The user must read, and understand (or have explained), and heed all instructions, labels, markings and warnings supplied with this product and with those products intended for use in association with it. **FAILURE TO DO SO MAY RESULT IN SERIOUS INJURY OR DEATH.**



The Safety Company

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For your local MSA contacts please go to our website www.MSAafety.com

1 Safety Regulations

1.1 Correct Use

The PointGuard Concrete Anchorage Connector Strap is primarily a component of a personal fall arrest system, serving as an anchorage connector. It may also be used for work positioning, travel restriction, rescue, retrieval, evacuation and confined space entry/exit operations, depending on the associated system components used together with the PointGuard Concrete Anchorage Connector Strap.

Use of the PointGuard Concrete Anchorage Connector Strap must comply with these user instructions and, further, is subject to approval under the user's safety rules and regulations and by the user's safety director, supervisor, or a qualified safety engineer. Be certain the selection of an anchorage connector is suited for the intended use and work environment. If there is any conflict between these user instructions and other directives or procedures of the user's organization, do not use the PointGuard Concrete Anchorage Connector Strap until such conflicts are resolved. Consult all local, state, and federal Occupational Health and Safety Administration (OSHA) requirements for personal safety equipment. Also consult building codes and all other applicable laws and regulations.

1.2 Compliance

The product may comply with:

- ANSI Z359.18, Type A and / or;
- OSHA requirements

See product label for specific compliance notifications.

Anchorage connectors labeled with ANSI Z359.18 have been tested in compliance with the requirements of ANSI/ASSE Z359.7.

NOTICE

ANSI compliance and testing covers only the hardware and does not extend to the anchorage and substrate to which the anchorage connector is attached.

1.3 Usage Specifications

- The PointGuard Concrete Anchorage Connector Strap has a minimum breaking strength of 5,000 lbs.
- The PointGuard Concrete Anchorage Connector Strap is designed for the attachment of a single personal fall arrest system and use by one person.
- The MSA PointGuard Concrete Anchorage Connector Strap polyester webbing is 1.75 in (44.5 mm) nominal width with a minimum breaking strength, when new, of 6,800 lbf (30.2 kN).
- Optional D-ring (hardware) is stamped steel, zinc plated, with a minimum breaking strength of 5,000 lbf (22.2 kN), and 100% proof tested to 3,600 lbf (16 kN).
- Must be used in conjunction with a personal fall arrest system under the supervision of a qualified person. Fall arresting forces must not exceed 1,800 lbf (8 kN).
- The PointGuard Concrete Anchorage Strap is available in lengths between 3 and 10 feet (1 and 3 meters).

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1.4 Safety and Precautionary Measures to be Adopted



WARNING!

- ▶ DO NOT exceed the allowable free fall distance or exceed the maximum fall arrest forces as specified by governing standards or subsystem components.
- ▶ The anchorage to which the PointGuard Concrete Anchorage Connector Strap is attached must be rated in the direction of intended use. See sections 2.2 "Anchorages and Anchorage Connectors" and 3 "Use" for details on anchorage strength and loading details.
- ▶ When installing or removing the PointGuard Concrete Anchorage Connector Strap limit exposure to fall hazards. A separate independent fall arrest system may be required.
- ▶ Ensure that fall clearance is sufficient to meet governing standards or subsystem component requirements.
- ▶ Fall clearance and free fall limits must take into account the additional length that the PointGuard Concrete Anchorage Strap adds to the lanyard length.
- ▶ Prevent swing falls and impact with objects in or adjacent to the fall path. Always remove obstructions below the work area to ensure a clear fall path. Keep work area free from debris, obstructions, trip hazards, spills or other hazard which could impair the safe operation of the fall protection system. DO NOT use the PointGuard Concrete Anchorage Connector Strap unless a qualified person has inspected the workplace and determined that identified hazards can neither be eliminated nor exposures to them prevented.
- ▶ Work directly under the anchorage/anchorage connector at all times. A full body harness is the only acceptable body holding device that can be used in a fall arrest system.
- ▶ DO NOT rely on feel or sound to verify proper snaphook or carabiner engagement. Ensure that gate and keeper are closed before use.
- ▶ If the PointGuard Concrete Anchorage Connector Strap is damaged or is subjected to fall arrest forces or impact forces, it must be immediately removed from service and marked as "UNUSABLE" until it has been destroyed.
- ▶ DO NOT leave the PointGuard Concrete Anchorage Connector Strap installed in environments which could cause damage or deterioration to the product. Refer to sections 4 "Care, Maintenance and Storage" and 5 "Inspection" for care and inspection details. Do not leave unattended loads on the PointGuard Concrete Anchorage Connector Strap.
- ▶ DO NOT use where lanyard or shock absorber may be exposed to sharp or abrasive edges or sheared, expanded metal, or frame cut steel. Sharp edges may cut a lanyard or shock absorber during a fall. Cover all sharp or abrasive edges with padding or sheathing before working above edge.
- ▶ Chemical hazards, heat and corrosion may damage the PointGuard Concrete Anchorage Connector Strap. More frequent inspections are required in these environments.
- ▶ DO NOT use PointGuard Concrete Anchorage Connector Strap adjacent to moving machinery, electrical hazards, or in the presence of excessive heat, open flame or molten metal.
- ▶ DO NOT use fall arrest or rescue equipment in environments with temperatures greater than 130°F (34°C) or temperatures lower than -30°F (-34°C).
- ▶ DO NOT use the PointGuard Concrete Anchorage Connector Strap near energized equipment or where contact with high voltage power lines may occur. The metal cable may provide a path for electrical current to flow, resulting in an electrical shock or electrocution.
- ▶ Remove any surface contamination such as, but not limited to, concrete, stucco, roofing material, etc that could accelerate cutting or abrading of attached components.
- ▶ PointGuard Concrete Anchorage Connector Straps are to be designated and used solely for approved applications.
- ▶ Unauthorized alterations, relocations, or additions to the anchorage connector extension are not permitted.

- ▶ DO NOT alter this equipment or intentionally misuse it. DO NOT use fall protection equipment for purposes other than those for which it was designed. DO NOT use fall protection equipment for towing, hoisting or material handling.
- ▶ If PPE is resold, it is essential that instructions for use, maintenance, and periodic examination are provided in the language of destination.
- ▶ DO NOT use MSA Fall Protection products if under the influence of drugs or alcohol.
- ▶ MSA or persons or entities authorized in writing by the manufacturer, shall make all repairs to the equipment. No unauthorized repairs and/or modifications are permitted.
- ▶ RESCUE AND EVACUATION: The user must have a rescue plan and the means at hand to implement it. The plan must take into account the equipment and special training necessary to effect prompt rescue under all foreseeable conditions. If the rescue be from a confined space, the provisions of OSHA regulation 1910.146 and ANSI Z 117.1 must be taken into account. Although a rescue plan and the means to implement it must always be in place, it is a good idea to provide means for user evacuation without assistance of others. This will usually reduce the time to get to a safe place and reduce or prevent the risk to rescuers.

Failure to follow these warnings can result in serious personal injury or death.

1.5 Usage Limitations

The following applications limitations must be considered and planned for before using the PointGuard Concrete Anchorage Connector Strap.

1.5.1 Physical Limitations

The anchorage connector strap is designed for one person. See instruction labels on each fall protection subsystem component to determine the limiting user weight capacity of the system.

1.5.2 Chemical Hazards

Acidic, alkaline or other environments with harsh substances may damage the hardware elements of the anchorage connector strap. If working in a chemically aggressive environment, consult MSA to determine which anchorage connector material is better for your specific conditions. When working in the presence of chemicals, more frequent inspection of the anchorage connector strap is required.

1.5.3 Corrosion

Do not expose the anchorage connector strap to corrosive environments for prolonged periods. Organic substances and salt water are particularly corrosive to metal parts. When working in corrosive environments, more frequent inspection, cleaning and drying of the anchorage connector strap is required.

1.5.4 Electrical Hazards

Use extreme caution when working near energized electrical sources. Metal hardware will conduct electric current. Maintain a safe working distance (preferably at least 10 feet - 3 m) from electrical hazards.

1.5.5 Impact Forces

Any anchorage connector strap which has been subjected to the forces of arresting a fall must be immediately removed from service and marked as "UNUSABLE" until destroyed.

1.6 Liability

MSA accepts no liability in cases where the device has been use inappropriately or not as intended. The selection and use of the device are the exclusive responsibility of the individual operator.

Product liability claims, warranties and guarantees made by MSA with respect to the device are voided, if not used, serviced or maintained in accordance with the instructions in this manual.

1.7 Warranty

Express Warranty – MSA warrants that the product furnished is free from mechanical defects or faulty workmanship for a period of one (1) year from first use or eighteen (18) months from date of shipment, whichever occurs first, provided it is maintained and used in accordance with MSA's instructions and/or recommendations. Replacement parts and repairs are warranted for ninety (90) days from the date of repair of the product or sale of the replacement part, whichever occurs first. MSA shall be released from all obligations under this warranty in the event repairs or modifications are made by persons other than its own authorized service personnel or if the warranty claim results from misuse of the product. No agent, employee or representative of MSA may bind MSA to any affirmation, representation or modification of the warranty concerning the goods sold under this contract. MSA makes no warranty concerning components or accessories not manufactured by MSA, but will pass on to the Purchaser all warranties of manufacturers of such components. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, AND IS STRICTLY LIMITED TO THE TERMS HEREOF. MSA SPECIFICALLY DISCLAIMS ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Exclusive Remedy - It is expressly agreed that the Purchaser's sole and exclusive remedy for breach of the above warranty, for any tortious conduct of MSA, or for any other cause of action, shall be the repair and/or replacement, at MSA's option, of any equipment or parts thereof, that after examination by MSA are proven to be defective. Replacement equipment and/or parts will be provided at no cost to the Purchaser, F.O.B. Purchaser's named place of destination. Failure of MSA to successfully repair any nonconforming product shall not cause the remedy established hereby to fail of its essential purpose.

Exclusion of Consequential Damages Purchaser specifically understands and agrees that under no circumstances will MSA be liable to Purchaser for economic, special, incidental, or consequential damages or losses of any kind whatsoever, including but not limited to, loss of anticipated profits and any other loss caused by reason of the non-operation of the goods. This exclusion is applicable to claims for breach of warranty, tortious conduct or any other cause of action against MSA.

For additional information please contact the Customer Service Department at 1-800-MSA-2222 (1-800-672-2222).

1.8 Training

Purchasers of PointGuard Concrete Anchorage Connector Strap must ensure that users are familiar with the User Instructions and are trained by a competent person in:

- workplace hazard identification, evaluation and control
- selection, inspection, use, storage and maintenance
- usage planning including calculation of free and total fall distance; maximum arresting force compatibility and selection of anchorage/anchorage connectors including connection to help prevent accidental disengagement (rollout)
- proper lanyard/harness connection locations
- evacuation and rescue planning and implementation
- consequences of improper use

For Confined Space applications:

- See OSHA 29 CFR 1910.146 and ANSI Z117.1.

Periodically (at least annually) assess effectiveness of training and determine the need for retraining or additional training. Contact MSA for training information.

2 Description

The MSA PointGuard Concrete Anchorage Connector is a component designed specifically for coupling a single personal fall arrest system to an anchorage.

2.1 Attachment Elements

- D-Ring (Optional)
- Small sewn loop
 - For connecting carabiner or snap hook
- Large Sewn Loop
 - Wraps around approved structural rebar, concrete is cast with strap in place.

2.2 System Requirements

2.2.1 Compatibility of Components and Subsystems

PointGuard Concrete Anchorage Connector Straps are designed to be used with MSA approved components and connecting subsystems. Use of the PointGuard Concrete Anchorage Connector Straps with products made by others that are not approved in writing by MSA may adversely affect the functional compatibility between system parts and the safety and reliability of the complete system. Connecting subsystems must be suitable for use in the application (e.g. fall arrest or restraint). MSA produces a complete line of connecting subsystems for each application. Contact MSA for further information. Refer to the manufacturer's instructions supplied with the component or connecting subsystem to determine suitability. For fall arrest applications using the PointGuard Concrete Anchorage Connector Strap, the maximum fall arrest force must not exceed 1,800 lbf (8 kN). This will maintain a 2:1 safety factor for the system. Contact MSA with any questions regarding compatibility of equipment used with the PointGuard Concrete Anchorage Connector Strap.

2.2.2 Compatibility of Connectors

Connectors, such as D-rings, snap hooks, and carabiners, must be rated at 5,000 lbf (22 kN) minimum breaking strength. MSA connectors meet this requirement. Connecting hardware must be compatible in size, shape, and strength. Non-compatible connectors may accidentally disengage ("rollout"). Always verify that the connecting snap hook or carabiner and the D-ring on the harness or anchorage connector are compatible. Use only self-closing, self-locking snap hooks and carabiners with the PointGuard Concrete Anchorage Connector Strap.

2.2.3 Anchorages and Anchorage Connectors

Anchorages for personal fall arrest systems must either: (a) have a strength capable of supporting and withstanding at least 5,000 pounds (22.2 kN) in the directions permitted by the system without failure, or (b), must be certified by a professional engineer as having the required strength for fall arrest or travel restraint, as applicable. See ANSI Z359.18 for definition of certification. When more than one personal fall arrest system is attached to an anchorage, the anchorage strengths set forth in (a) and (b) must be multiplied by the number of systems attached to the anchorage. This requirement is consistent with OSHA requirements under 20 CFR 1910, Subpart F, Section 1910.66, Appendix C. Do not proceed with installation and use of the anchorage connector if an assessment of strength cannot be made.

3 Use

3.1 Planning the Use of Systems

3.1.1 Free Fall Distance, Total Fall Distance and System Elongation

Refer to separate User Instructions accompanying the personal energy absorber (shock absorbing lanyard or self-retracting lanyard) to determine total system clearance requirements.

3.1.2 Pendulum (Swing) Falls

Swing fall hazards must be minimized by anchoring directly above the user's work space. The force of striking an object in a pendular motion can cause serious injury. Always minimize swing falls by working as directly below the anchorage point as possible.

3.2 Inspection Before Each Use

Inspect the PointGuard Concrete Anchorage Connector Strap to verify that it is in serviceable condition. Examine every inch of the straps for severe wear, cuts, burns, frayed edges, abrasion, damage to webbing or other damage. Examine stitching for any pulled, loose, or torn stitches. Do not use a PointGuard Concrete Anchorage Connector Strap if inspection reveals an unsafe condition.

3.3 Installation of the PointGuard Concrete Anchorage Connector Strap



WARNING!

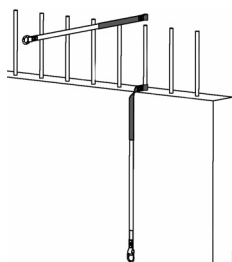
When installing or removing PointGuard Concrete Anchorage Connector Straps, limit exposure to fall hazards. A separate independent fall arrest system may be required.

Failure to follow this warning can result in serious personal injury or death.

PointGuard Concrete Anchorage Connector Straps are designed to be attached to buildings, while under construction, to act as an anchorage connector.

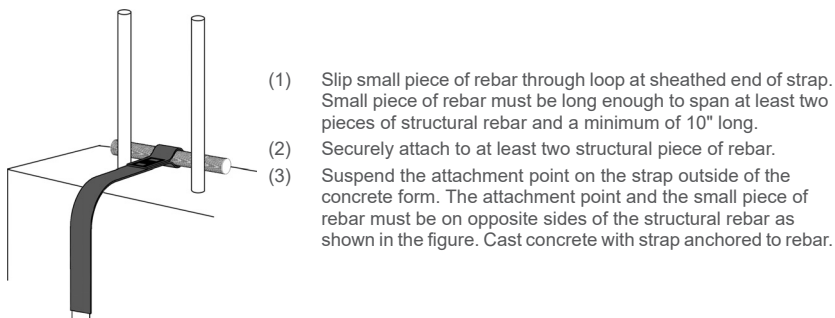
- Rebar must be a minimum of 4 inches from edge of any concrete slab.
- Concrete wall must have attained a minimum compression strength of 2250 PSI before using.
- One anchorage point (single piece of rebar) is only to be used for one anchorage connector (PointGuard Anchorage Connector Strap).

3.3.1 Embed the Strap in Structural Concrete Wall Column or Ceiling



- (1) Slip the large loop end of the PointGuard Concrete Anchorage Connector Strap over the integral re-bar.
- (2) Suspend attachment end of strap outside of concrete form. Cast concrete with strap anchored to rebar.

3.3.2 Alternate Method of installation



WARNING!

Attach small piece of rebar on opposite side of structural rebar from worker.

Failure to follow this warning can result in serious personal injury or death.

3.4 Making Connections

When using a snap hook or carabiner to connect to an anchorage or when coupling components of the system together, do not make knots. Snap hooks and carabiners must not be connected to each other. Do not attach two snap hooks or carabiners into one D-ring. Always follow the manufacturer's instructions supplied with each system component. When connecting snap hook or carabiner to the model with no D-ring, ensure that webbing does not load gate.

Fall clearance and free fall limits must take into account the additional length that the PointGuard Concrete Anchorage adds to the lanyard length.

3.5 Removal Of The PointGuard Concrete Anchorage Connector Strap

Before attempting removal of the PointGuard Concrete Anchorage Connector Strap, disconnect all loads and attachment elements from the PointGuard Concrete Anchorage Connector Strap. Use a sheetrock knife, shears, or other cutting instruments to cut the strap at the intersection of the strap and roof, wall, etc. Even if a strap is removed seemingly "intact" it is to be DISCARDED immediately.

4 Care, Maintenance and Storage

4.1 Cleaning Instructions

Clean the PointGuard Concrete Anchorage Connector Strap with a solution of water and mild laundry detergent. Dry hardware with a clean cloth and hang to air dry. Do not speed dry with heat. Excessive accumulation of dirt, paint, or other foreign matter may prevent proper function of the PointGuard Concrete Anchorage Connector Strap and, in severe cases, weaken the webbing. Questions concerning anchorage connector conditions and cleaning should be directed to MSA.

4.2 Storage

Store the anchorage connector in a cool, dry and clean place out of direct sunlight. Avoid areas where heat, moisture, light, oil, and chemicals or their vapors or other degrading elements may be present. Equipment which is damaged or in need of maintenance should not be stored in the same area as usable equipment. Heavily soiled, wet, or otherwise contaminated equipment should be properly maintained (e.g. dried and cleaned) prior to storage. Prior to using equipment which has been stored for long periods of time, a Formal Inspection should be performed by a competent person.

4.3 Maintenance and Service

Maintenance and storage of equipment shall be conducted by the users organization in accordance with MSA instructions. Unique issues, which may arise due to conditions of use, shall be addressed with MSA. Devices which are in need of or scheduled for maintenance shall be tagged as "UNUSABLE" and removed from service until maintenance is completed. Do not attempt field repairs.

5 Inspection

- (1) The PointGuard Concrete Anchorage Connector Strap shall be inspected by the user before each use and additionally by a competent person other than the user at intervals of no more than one year. Detailed inspections must be recorded in the inspection log (See 5.2 "Inspection Log").
- (2) The program administrator shall maintain documentation of equipment inspections. This documentation shall include, at a minimum, the identity of the equipment, inspection date, name of the competent or qualified person conducting the inspection and the result of that inspection.
- (3) The program administrator shall set inspection criteria for the equipment. Such criteria shall equal or exceed the most restrictive of the criteria established by the ANSI Z359.18 standard or the manufacturer's user instructions. Keep inspection criteria current in relationship to changing patterns or conditions of use.
- (4) When inspection reveals damage or inadequate maintenance of the PointGuard Concrete Anchorage Connector Strap, the anchorage connector strap shall be permanently removed from service and replaced or undergo adequate corrective maintenance before returning to service.
- (5) Remove PointGuard Concrete Anchorage Connector Strap from service immediately if:
 - the product has been subjected to the forces of a fall.
 - label is missing or illegible.
 - there is evidence of improper function or alterations of any portion.
 - if inspection reveals evidence of damage including cracks, tears, abrasions, undue stretching, mildew/mold, dents, sharp edges, deformation, kinks, corrosion, chemical attack, excessive heating, excessive aging, or excessive wear.

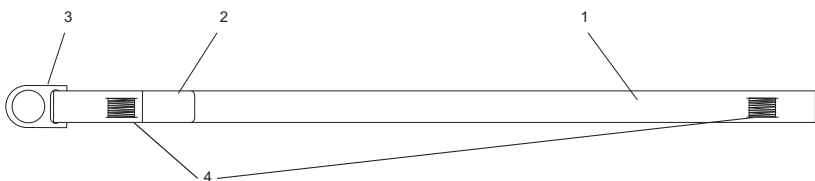
5.1 Corrective Action

When inspection in accordance with section 5 "Inspection" reveals any of the identified conditions, the PointGuard Concrete Anchorage Connector Strap must be immediately removed from service and marked as "UNUSABLE" until destroyed or subjected to corrective maintenance by the user's organization in accordance with this user instruction. Damage, excessive wear, malfunction, and aging are generally not repairable. If detected, immediately remove PointGuard Concrete Anchorage Connector Strap from use and mark it as "UNUSABLE" until destroyed. For final disposition, submit the PointGuard Concrete Anchorage Connector Strap to a competent person who is authorized to perform Formal Inspection. If there is any question as to repairability, contact MSA or a service center authorized in writing by MSA before further use of the product.

5.2 Inspection Log

Model No.:	Inspector:
Serial No.:	Inspection Date:
Date Made:	Disposition:
Comments:	

5.3 Inspection Diagram



- | | | | |
|---|--------------|---|----------------------|
| 1 | Black Sheath | 3 | D-ring - (optional) |
| 2 | Labels - 2 | 4 | Stitching - 2 places |

