

GEMTORTM

... when your life is on the lineTM

READ CAREFULLY!

INSTRUCTION, CARE & MAINTENANCE GUIDE

Self-Retracting Lanyard/Fall Limiter



Applicable Series:

SRD-6W - 6' Web SRL

SRD-T6W - Twin 6' Web SRLs

SRD-11W - 11' Web SRL

SRD-10G - 10' Cable SRL

SHC-2U - Universal SRD Harness Connector

Warning

You must read and fully understand all instructions, or have all instructions explained to you, before attempting to use this equipment. Equipment must not be installed, operated or inspected by anyone who does not understand this Owner's Manual. Failure to observe these instructions could result in serious injury or death. Careless or improper use of this equipment can result in serious injury or death. Training and instruction review should be repeated at regular intervals. If you have any questions regarding these instructions or need additional copies, call Gemtor, Inc. at 800-405-9048.

IMPORTANT: THESE INSTRUCTIONS SHOULD BE KEPT WITH THE DEVICE AT ALL TIMES.



Gemtor, Inc. • One Johnson Avenue • Matawan, NJ 07747
Phone: 732-583-6200 • 800-405-9048 • Fax: 732-290-9391
Web: www.gemtor.com • Email: sales.info@gemtor.com

DESCRIPTION:

Gemtor, G-Force personal fall protection device with 6 ft. or 11 ft. of UHMWPE/polyester webbing, or 10 ft. of 3/16" galvanized cable on a spring-wound drum with a centrifugal braking system. The housing is made of glass filled nylon. The device allows maximum freedom of movement and stops a worker within 2 ft. (including deceleration distance, does not include free fall distance) if a fall occurs.

Gemtor, G-Force Self-Retracting Lanyards (SRLs/SRDs) are part of a complete fall protection system which should consist of:

- 1) An anchorage point meeting OSHA requirements for retracting lanyards.
Anchorage used for attachment of personal fall arrest equipment shall be independent of any anchorage being used to support or suspend platforms and capable of supporting at least 5,000 pounds (22.2 kN) per employee attached [OSHA 1926.502(d)(15)]
- 2) A locking type connector (such as the supplied locking carabiner or SHC harness connector) to mount the SRL device to the anchorage point or harness.
- 3) A Gemtor G-Force Self-Retracting Lanyard/Fall Limiter.
- 4) A full-body harness with attachment point located in the center of the back at shoulder level. A front attachment point may also be used when ascending or descending a vertical fixed ladder.

AVAILABLE MODELS:

SRD-6W Self-retracting lanyard w/ 6 ft. of webbing.

SRD-6WZ Self-retracting lanyard w/ 6 ft. of webbing, 3100 snaphook.

SRD-T6W Twin SRD-6W self-retracting lanyards w/SHC-2U connector.

SRD-T6WZ.... Twin SRD-6W self-retracting lanyards, 3100 snaphooks, SHC-2U.

SRD-11W Self-retracting lanyard w/ 11 ft. of webbing.

SRD-11WZ.... Self-retracting lanyard w/ 11 ft. of webbing, 3100 snaphook.

SRD-10G..... Self-retracting lanyard w/ 10 ft. of galvanized cable.

SPECIFICATIONS:

Model #	SRD-6W(Z)	SRD-T6W(Z)	SRD-11W(Z)	SRD-10G
Capacity Range	130-310* lbs. (59-140kg)			
Lanyard Length	6' (1.8m)	2 x 6' (1.8m)	11' (3.35m)	10' (3.05m)
Lanyard Width/Dia.	.75" (20mm)	.75" (20mm)	1" (25mm)	3/16" (5mm)
Lanyard Strength	4000 lbs. (1815kg)	4000 lbs. (1815kg)	4000 lbs. (1815kg)	4200 lbs. (1905kg)
Lanyard Material	UHMWPE & polyester webbing	UHMWPE & polyester webbing	UHMWPE & polyester webbing	Galv. steel cable
Housing Material	Engineered nylon			
ANSI Z359.14 Class	A	A	A	A
Avg. Arresting Force	<1350 lbs. (6kN)	<1350 lbs. (6kN)	<1350 lbs. (6kN)	<1350 lbs. (6kN)
Max. Arrest Distance	≤ 24" (610mm)	≤ 24" (610mm)	≤ 24" (610mm)	≤ 24" (610mm)
Weight w/3100 snaphook (Z)	2.25 lbs. (.9kg) (3.35 lbs. (1.52kg))	5.0 lbs. (2.27kg) (7.2 lbs. (3.27))	4 lbs. (1.8kg) (5.1 lbs. (2.3kg))	5.25 lbs. (2.4kg)

*The SRD is designed for use by persons with a combined weight (clothing, tools, etc.) ranging from 130 lbs. (59kg) to 310 lbs. (140kg). Make sure all the components in your system are rated to an appropriate capacity for the application. **NOTE:** 130-310 lbs. (59-140kg.) is the capacity range allowed by ANSI Z359.14. This SRD has been designed and tested to a capacity of 350 lbs. (159kg) For weights between 310-350 lbs. (140-159kg) use Max. Arrest Distance ≤54" (1,372mm) to calculate potential fall distances.

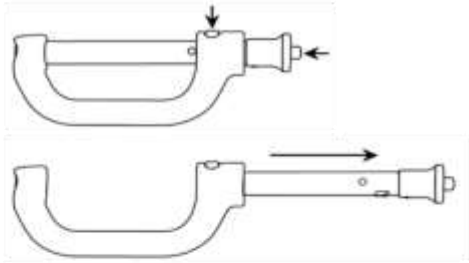
INSTALLATION:

- 1) To minimize the possibility of a swing fall hazard, install the device directly over the work area (see fig 3, page 7.)
- 2) Attach the device to the anchor point (must meet OSHA requirements) using a locking connector.

- 3) Attach the locking snaphook at end of lanyard to the D-ring on the back of the harness. The D-ring must be in center of wearer's back at or above shoulder level.
- 4) A single SRD may also be attached to the back D-ring of the full body harness using the supplied carabiner. One (1) or Two (2) SRDs may be attached to the back of the harness below the dorsal D-ring using the supplied universal SHC connector.

Attaching One (1) or Two (2) Gemtor SRDs to a Harness using a SHC-2U Universal SRD Connector

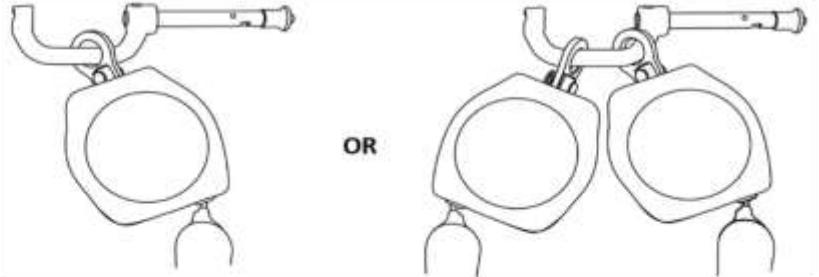
Step 1



Open SHC-2U SRD Connector

Depress both the top and side release buttons and then slide the locking bar into the open position

Step 2



Attach SRD(s)

Place either one (1) or two (2) SRDs on the connectors SRD bar.

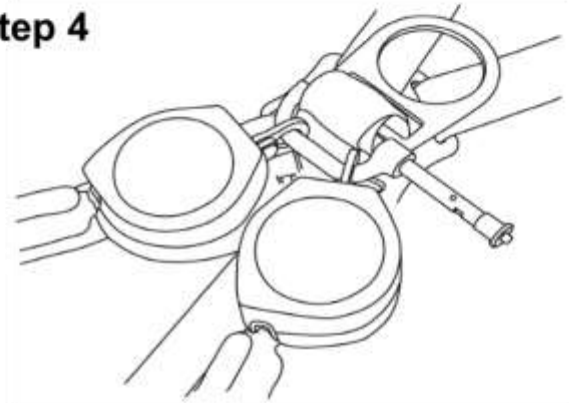
Step 3



Prepare harness for attachment of SHC-2U

Flip the D-ring up and pull out the harness straps where they intersect in the bottom D-ring slot to create sufficient space for the SHC-2U to fit between the straps and the D-ring pad.

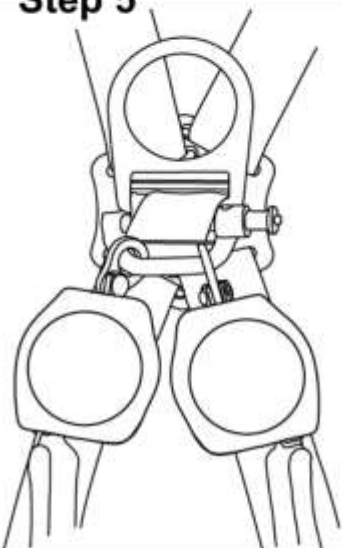
Step 4



Connect the SHC-2U Connector to Harness

Attach the SHC-2U connector to the harness by inserting the locking bar through the slacked loops, underneath the D-ring. Make sure that the locking bar goes behind both harness straps.

Step 5



Close/lock Connector Locking Bar to Harness

Make sure that the locking bar is fully seated in the locked position. Check that the red mark in the notch at the end of the locking bar is not visible.

Finalize installation

Pull the harness straps back through the D-ring pad to eliminate slack in the webbing and secure the connector between the harness straps and D-ring pad.

TRAINING:

The employer shall provide a training program for each employee who might be exposed to fall hazards. The program shall enable each employee to recognize the hazards of falling and shall train each employee in the procedures to be followed in order to minimize these hazards. [OSHA 1926.503(a)(1)]

The employer shall assure that each employee has been trained, as necessary, by a competent person qualified in the following areas:

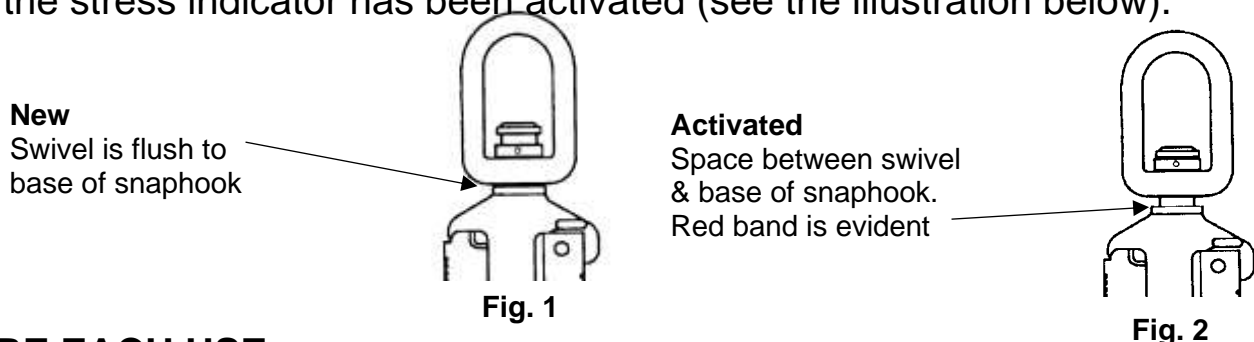
- (i) The nature of fall hazards in the work area;
- (ii) The correct procedures for erecting, maintaining, disassembling, and inspecting the fall protection systems to be used;
- (iii) The use and operation of guardrail systems, personal fall arrest systems, safety net systems, warning line systems, safety monitoring systems, controlled access zones, and other protection to be used;
- (iv) The role of each employee in the safety monitoring system when this system is used;
- (v) The limitations on the use of mechanical equipment during the performance of roofing work on low-sloped roofs;
- (vi) The correct procedures for the handling and storage of equipment and materials and the erection of overhead protection; and
- (vii) The role of employees in fall protection plans;
- (viii) The standards contained in this subpart. [OSHA1926.503(a)(2)]

The employer shall verify compliance with paragraph (a) of this section by preparing a written certification record. The written certification record shall contain the name or other identity of the employee trained, the date(s) of the training, and the signature of the person who conducted the training or the signature of the employer. If the employer relies on training conducted by another employer or completed prior to the effective date of this section, the certification record shall indicate the date the employer determined the prior training was adequate rather than the date of actual training.[OSHA 1926.503(b)(1)]

INSPECTION:

STRESS INDICATOR

The energy absorber at the end of the SRLs webbing just above the snaphook (if so equipped) serves as a stress indicator. If the energy absorber shows any signs of extension, this indicates that the SRL has been subjected to forces and should be removed from service and discarded. Never use an SRL with an activated energy absorber regardless of the amount of extension. Additionally, your SRL may have also been supplied with a snaphook with an integrated stress indicator. **DO NOT** use the SRL if the stress indicator has been activated (see the illustration below).



BEFORE EACH USE

Inspect the entire fall arrest unit for any indication of damage, wear or malfunction to include but not limited to, worn webbing/cable or damaged locking snaphook. Remove from service immediately if the unit is damaged, has been subjected to a fall, does not pass inspection, the energy absorber has been activated or if the unit has not been inspected by a competent person within the last 12 months (shorter inspection intervals should be used if the unit is subjected to harsh conditions).

Inspect work area:

Inspect and clear the vicinity around the work area of debris and other materials and hazards that could cause injuries or interfere with the operation of the device.

Check webbing/cable:

Pull all of the webbing/cable out of the housing and allow it to retract slowly under light tension. While the lanyard is retracting, check for cuts, knots, broken strands or stitching, excessive wear, foreign substances or other damage.

Check locking mechanism:

Pull approximately two (2) feet of webbing/cable out of the housing and give it a quick hard tug. The device should lock and remain locked until you release the webbing.

Check webbing/cable retraction before each use:

Pull approximately four (4) feet of webbing/cable out of the housing and allow it to retract; maintain slight tension on lanyard. The webbing/cable should retract smoothly and completely. Do not allow webbing to retract freely.

Inspect snaphooks and connecting hardware:

Snaphooks and connecting hardware shall not be distorted nor have any sharp edges, burrs, cracks, worn parts or corrosion. The snaphook keeper spring shall provide tension to close the keeper in the locked position the stress indicator shall not be activated.

DO NOT attempt to adjust, repair or modify Gemtor self-retracting lanyards.

Operating Instructions:

The SRL shall be attached to an overhead anchor point which meets OSHA requirements for self-retracting lanyards. The worker shall use a full-body harness with a D-ring in the center of the wearer's back near shoulder level.

Attachment points, connectors and other equipment must meet applicable OSHA and ANSI standards.

The unit releases webbing/cable out as the worker moves to allow maximum freedom of movement and automatically retracts to reduce the possibility of free fall injury caused by slack lanyard. In the event of a fall, a centrifugal brake mechanism is activated, and the fall is arrested within 24 inches*.

Always allow lanyard to retract completely when not in use. Use a tag-line to pull lanyard out of housing that is connected to anchorage too high for the worker to reach.

Equipment must be inspected before each use; if bent, damaged, if parts have been substituted or if operation is questionable in any way, **DO NOT USE**.

Avoid lifeline contact with sharp or abrasive surfaces/edges.

* see chart on page 2 for distances that apply to each model. This distance includes brake engagement distance and deceleration distance. This distance may be greater if these instructions are not followed or the rated capacity is exceeded. When using with a horizontal lifeline system with integral energy absorbing components, use greatest listed arrest distance to calculate minimum required clearance.

INSPECTION POLICY:

Both OSHA and ANSI require an inspection by the user before each use and ANSI also requires an additional inspection by a Competent Person other than the user at intervals of no more than one year.

OSHA and ANSI define a Competent Person as:

One who is capable of identifying existing and predictable hazards in the surroundings and working conditions that are unsanitary, hazardous or dangerous to employees, and who has the authority to take prompt corrective measures to eliminate such hazards.

ANSI Z359.1 E6.1.1 The purpose of two-level inspection of equipment is to provide two independent means for guarding against oversight in the detecting and controlling against the use of defective, damaged and improperly maintained equipment. If such equipment conditions are observed by the competent person's inspection, measures should be taken to provide the user with additional training or retraining in equipment inspection, maintenance, use and storage. Such observations may also suggest the need for election of alternative equipment more suitable for the conditions of use. The frequency of periodic inspection by a competent person should be established by the user's organization based upon careful consideration of relevant factors. Such factors include the nature and severity of workplace conditions affecting the equipment and the modes of use and exposure time of the equipment.

Swing Fall Hazard

Work directly under your anchorage whenever possible. If a swing fall can occur, ensure that there are no hazards in the swing fall path. Total fall distance is greater in a swing fall than in a vertical fall. Ensure that you account for the added distance when calculating Minimum Required Fall Space.

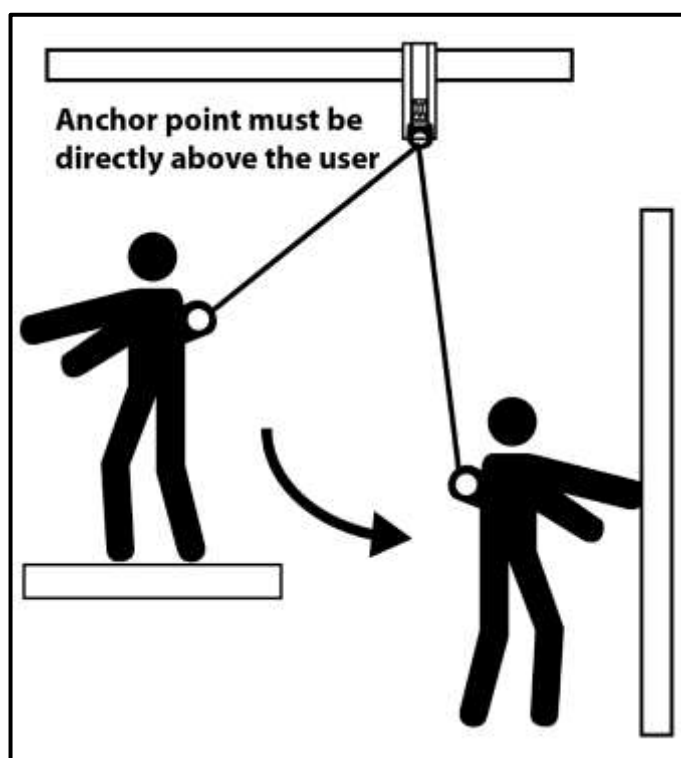


Fig 3.

WARNINGS:

DO NOT USE IF:

- The device appears to be damaged.
- The lanyard (web or cable) is worn or partially cut.
- The locking snaphook does not function properly.
- The lanyard does not retract properly.
- The device does not lock and stop the webbing/cable.
- The unit has arrested a fall.
- The stress indicator has been activated.
- The energy absorber shows any signs of extension.
- The unit has not been inspected by a competent person within the last 12 months

- **DO NOT** attempt to adjust, repair or modify Gemtor Self-Retracting Lanyards; for prompt repair or reconditioning, contact Gemtor, Inc. for return authorization and instructions.
- **AVOID** lifeline contact with sharp or abrasive surfaces/edges.
- **NEVER ALLOW LANYARD** (web or cable) **TO RETRACT FREELY.**
- **DO NOT** attach more than one worker to the device.
- **DO NOT** use for lifting or towing.
- **DO NOT** use as a work positioning device.
- **DO NOT** attach anything to the snaphook at the end of the retractable lanyard to extend its length beyond its designed length.
- **NEVER** clamp off or stand on lanyard nor allow lanyard to become slack during use.
- **NEVER** allow lanyard to cross under or wrap around the legs, arms, neck or torso of the user or other workers.
- **NEVER** work above the anchor point.
- **ALWAYS** work directly under the anchor point. Worker must be vertically in line with device to avoid swing-fall injuries (pendulum effect).

ALWAYS rig to allow a minimum of 3 ft. clearance (when mounted above the worker with no slack webbing/cable) to the next lower level or obstructions below.

IF YOU HAVE ANY QUESTIONS CONCERNING THE CORRECT USAGE OF THIS OR ANY GEMTOR PRODUCT, DO NOT USE, CALL (TOLL FREE) 1-800-405-9048

Do not try to adjust, repair or modify Gemtor Self-Retracting Lanyards; for prompt service, please contact:

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Matawan, NJ 07747
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732-290-9391 (fax)
sales.info@gemtor.com
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