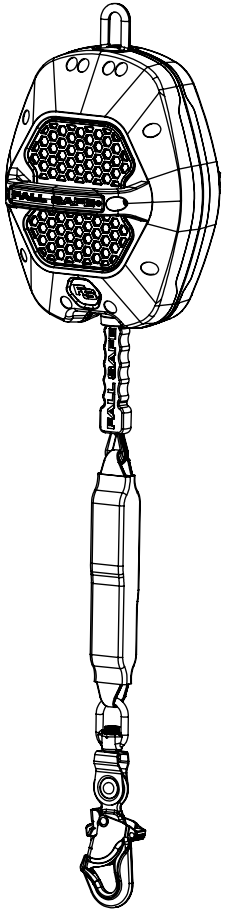
USER INSTRUCTIONS FOR

F.L.O.

FLEXIBLE LOCK OPTIMIZATION

MODEL # 4710000-XX



FALL SAFE®
Ph. 800-323-7402

Canada | SureWerx
Coquitlam, BC V3K 0B3

USA | SureWerx USA Inc.
Elgin, IL 60123

FALL SAFE®

CONTENTS

User Instructions
Fall Safe F.L.O. Class 2 Self Retracting Lanyards

This manual is intended to meet the Manufacturer's Instructions as required by the current ANSI Z359.14 and should used as part of an employee training program as required by OSHA.

⚠WARNING⚠

This product is one part of a personal fall arrest system. Without the other necessary components in such sub-systems the Self Retracting Lanyard itself serves no useful purpose. The user must follow the manufacturer's instructions for each component of the system. These instructions must be provided to the user before using this product and retained for ready reference by the user. The user must read, 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 before using this equipment. Manufacturer's instructions must be followed for proper use and maintenance of this equipment. National standards and state, provincial and federal laws require the user to be trained before using this product. This manual can be used as part of a such a user safety training program that is appropriate for the user's occupation.

⚠WARNING⚠

Alterations or misuse of this product or failure to follow instructions may result in serious injury or death. If you have questions on the use, care, or suitability of this equipment for your application, contact Fall Safe for information.

DESCRIPTION

The Flexible Lock Optimization (F.L.O.) Class 2 Self Retracting Lanyard (SRL) is designed to be a component in a personal fall arrest systems (PFAS). It may be used in most situations where a combination of worker mobility and fall protection is required (i.e. inspection work, general construction, maintenance work, steel stick work, etc.). The F.L.O. Class 2 SRL is designed for use by a single user weighing from 130 lbs. (59 kg) to 310 lbs. (140 kg) including clothing, tools and equipment. F.L.O. Class 2 Self Retracting Lanyard features a patented acceleration based locking mechanism. This locking method significantly reduces nuisance locks, but there is a possibility that the unit will lock when the user is moving at a higher rate of speed than possible with a typical locking mechanism.

⚠WARNING⚠

While the F.L.O. locking mechanism greatly reduces nuisance locks, it increases the possibility of locking when the user is moving at a high rate of speed. Caution must be used to ensure that the user is not running or moving in a manner that could cause the user to be pulled off their feet if the locking mechanism were to engage unexpectedly.

Identifying Components of F.L.O. Class 2 Self Retracting Lanyard

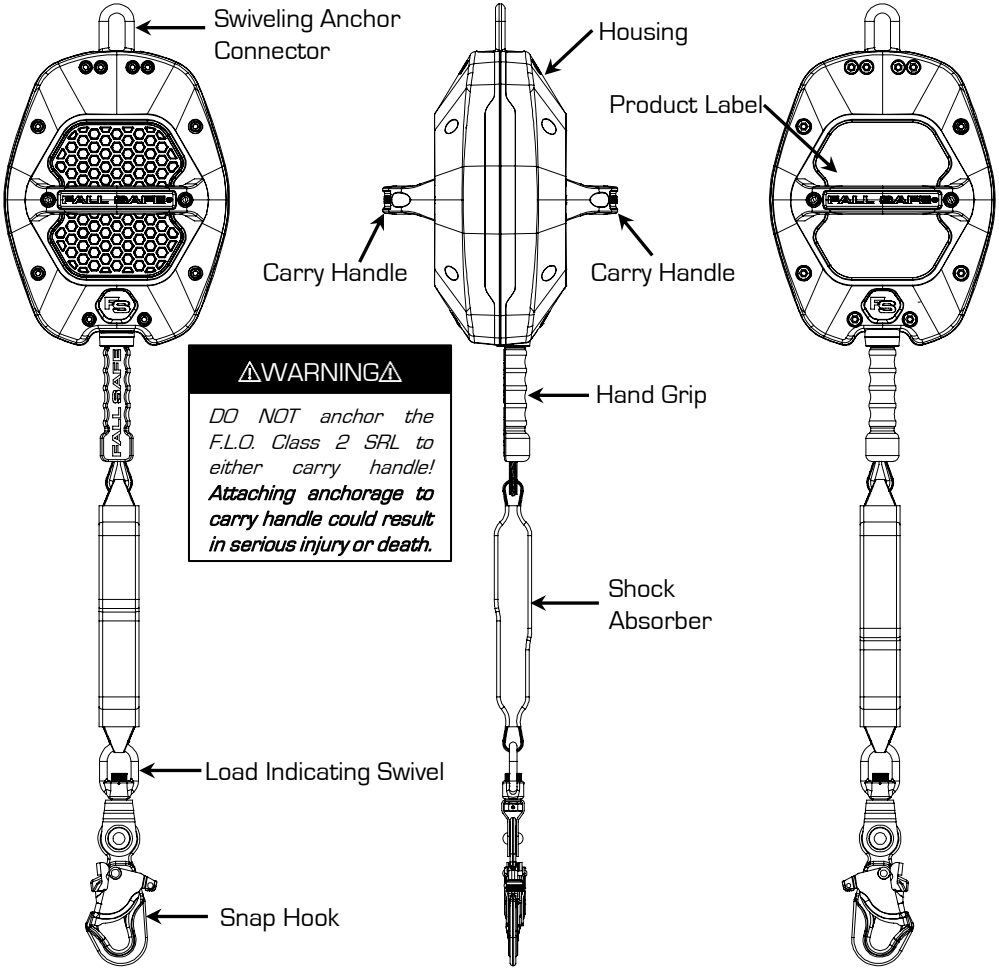


Figure 1 – 4710000-XX

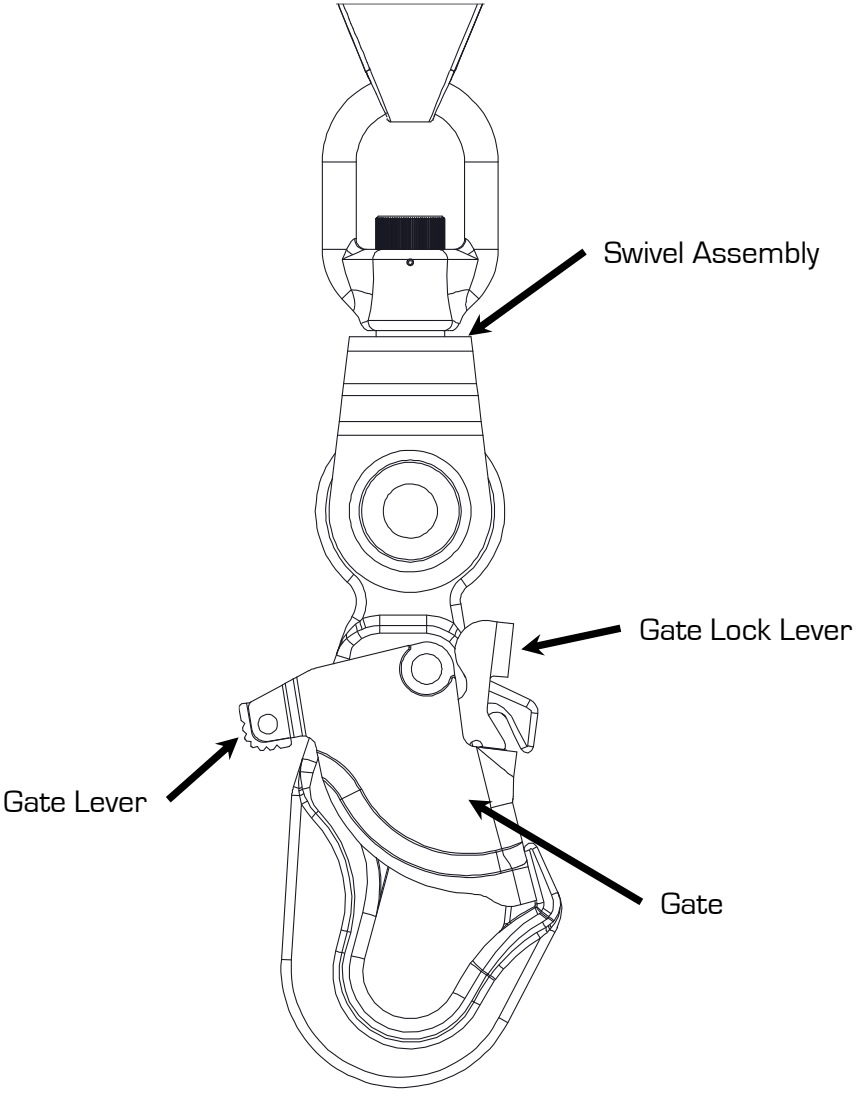


Figure 2 – Swivel "Pelican" Snap Hook

FALL SAFE®

F.L.O. Class 2 Product Specifications

Part #	Working Length	Line Type	Weight	SRL Type	Hook Type	Housing Type	Housing Dimensions
4710000-30	30' 9.1 m	7/32" (5.5mm) Wire Rope	21.9 lbs. 9.9 kg	Class 2	3007 Swivel Pelican Snap Hook	Fiberglass-Reinforced Nylon	12.3"x9.4"x9.8" 31.2cm x 23.9cm x 24.9cm
4710000-40	40' 12.2 m	7/32" (5.5mm) Wire Rope	22.8 lbs. 10.4 kg	Class 2	3007 Swivel Pelican Snap Hook	Fiberglass-Reinforced Nylon	12.3"x9.4"x9.8" 31.2cm x 23.9cm x 24.9cm

The following specifications apply to all F.L.O. Class 2 Self Retracting Lanyards and meet the Class 2 SRL requirements of ANSI Z359.14-2021 for users from 130 lbs. (59 kg) to 310 lbs. (140 kg) including clothing, tools and equipment:

LEADING EDGE (Anchored below dorsal d-ring)
MAXIMUM ARREST FORCE (MAF): ≤ 1,375 lbs (6.1 kN)
AVERAGE ARREST FORCE (AAF): ≤ 1,000 lbs (4.4 kN)
ARREST DISTANCE (AD): ≤ 9' (2.74 m)
FALL CLEARANCE (FC): 15' 6" (4.7 m) to 20' (6.1 m) (See Chart Pg 10)

OVERHEAD (Anchored at or above dorsal d-ring)
MAXIMUM ARREST FORCE (MAF): ≤ 1,350 lbs (6.0 kN)
AVERAGE ARREST FORCE (AAF): ≤ 950 lbs (4.2 kN)
ARREST DISTANCE (AD): ≤ 24" (61 cm)
FALL CLEARANCE (FC): 4' 0" (1.2 m) to 6' 0" (1.8 m) (See Chart Pg 9)

⚠WARNING⚠

The clearances provided here assume the fall occurs from a standing position. If the worker is kneeling or crouching an additional 3 ft (91 cm) clearance is needed. ***Failure to heed this warning may result in serious injury or death.***

SELF RETRACTING LANYARD APPLICATION

A. PURPOSE

Fall Safe Self Retracting Lanyards (SRL's) are used as one component in a personal fall arrest system (PFAS). The SRL's described in this manual meet, ANSI Z359.14-2021 and OSHA requirements. These instructions, and markings borne by the SRL, fulfill the instruction and marking requirements of those standards and regulations. This equipment is specifically designed to dissipate fall energy and limit the fall arrest forces that are transferred to the body.

1. PERSONAL FALL ARREST

The Self Retracting Lanyard is used as a component of a personal fall arrest system. Personal fall arrest systems typically include a full body harness, a connecting subsystem (energy absorbing device such as a shock absorbing lanyard or Self Retracting Lanyard) and an anchorage connector. Average arresting force must not exceed 1350 lbs. (6kN) for ANSI Z359.14-2021 and a Maximum Arrest Force of 1,800 lbs. (8kN) for OSHA and ANSI Z359.14-2021.

⚠WARNING⚠

Users with muscular, skeletal, or other physical disorders should consult a physician before using. Pregnant women and minors must never use this equipment. Increasing age and diminished physical fitness may reduce a person's ability to withstand shock loads during fall arrest or prolonged suspension. Consult a physician if there is any question about a user's physical ability to safely use this product to arrest a fall or remain suspended.

B. USE LIMITATIONS

Consider the following application limitations before using this equipment:

1. CAPACITY

The F.L.O. Class 2 SRL is designed for use by a single person weighing from 130 lbs. (59 kg) to 310 lbs. (140 kg) including clothing, tools and equipment.

2. FREE FALL

When anchored overhead, the arrest distance will be significantly reduced. To avoid increased fall distances, anchor the SRL directly above the work level. Avoid working where your SRL may cross or tangle with that of another worker. Avoid working where an object may fall and strike the SRL, resulting in loss of balance or damage to the SRL. Do not allow the SRL to pass under arms or between legs. Never clamp, knot, or prevent the SRL from retracting or being taut. Avoid slack line. Do not lengthen SRL by connecting a lanyard or similar component. Do not allow free fall to exceed 5 ft. (1.5 m).

⚠WARNING⚠

Do not allow the lifeline to pass under arms or between legs. Never clamp, knot or prevent the lifeline from retracting or being taut. Avoid slack line. Do not lengthen the SRL by connecting a lanyard or other components without consulting Fall Safe engineering.

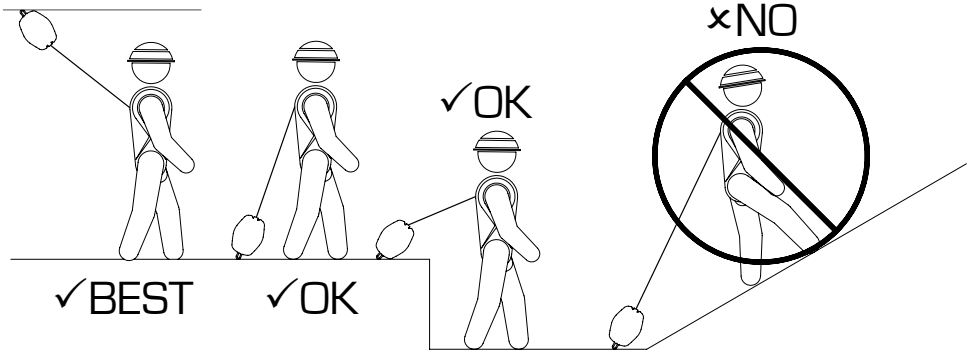


Figure 3 – Allowable Anchorages

⚠WARNING⚠

Use of this device while attached to a "foot-level" anchorage or while exposed to an unprotected structural edge should be a LAST RESORT. Every effort should be made to attach to a properly rated overhead anchorage in an effort to reduce the overall fall distance. DO NOT allow the retractable line to come into contact with a sharp, jagged, serrated or abrasive edge. A "foot-level" or "leading-edge" fall is likely to result in the injury of the user – the first hazard in the fall path is and always will be the structural edge, itself! Elevate your anchorage to the extent possible for the best outcome.

3. FALL CLEARANCE

Figures 4A and 4B illustrate fall clearance requirements. Ensure adequate clearance exists in the fall path to prevent striking an object during a fall. If a user is working at a position that is not directly below the SRL anchorage point, the clearance required and vertical fall distance increase. When using on a leading edge, the angle between the anchor and vertical over the edge must not be less than 90 degrees (see figure 5, pg. 10).

Determine Fall Clearance Required: When mounting overhead (at or above the user's dorsal d-ring) use figure 4A to determine the required fall clearance. Always mount directly overhead to prevent a swing fall (see figure 6, pg. 11).

When mounting below the dorsal d-ring (below the user's dorsal d-ring) use figure 4B (pg. 10) to determine required fall clearance. **Minimum edge setback for the F.L.O. Class 2 SRL is 5 feet from edge. Do not use over a concrete leading edge.**

Anchored at or above dorsal d-ring

Anchor Distance Above Walking Surface	Required Clearance Below Walking Surface
7' or more	4'0"
6'	5'0"
5'	6'0"
Less than 5'	Use Below Dorsal D-Ring Chart Pg 10

SRL Extension ≤40" plus 24" Safety Factor

Figure 4A

Anchored below dorsal d-ring

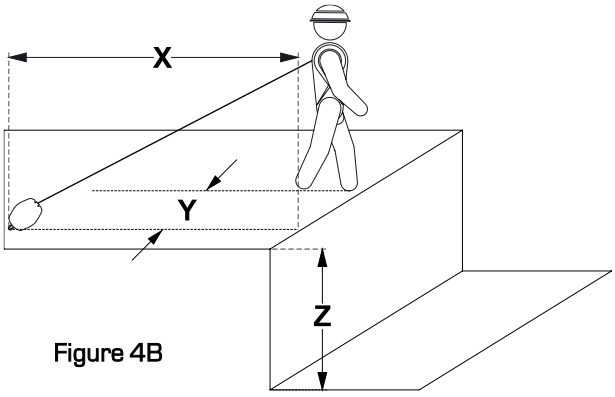


Figure 4B

Distance off Axis of Anchorage (Y)

Setback Distance (X) - Min 5 Feet	0 Feet	3 Foot	6 Feet	9 Feet	12 Feet	15 Feet	17 Feet	20 Feet	23 Feet
5 Feet	15' 6"	16' 3"							
10 Feet	14' 9"	15'	16' 3"						
15 Feet	14' 6"	14' 6"	15' 6"	16' 9"					
20 Feet	14' 3"	14' 6"	15'	16'	17' 6"				
25 Feet	14'	14'	14' 9"	15' 6"	16' 6"	18'			
30 Feet	14'	14'	14' 6"	15' 3"	16' 3"	17' 6"	18' 6"		
35 Feet	14'	14'	14' 6"	15'	15' 9"	17'	17' 9"	19'	
40 Feet	14'	14'	14' 3"	14' 9"	15' 6"	16' 6"	17' 3"	18' 6"	20'

⚠WARNING⚠
Do not rig your device in this area!
Doing so may result in
serious injury or death!

Clearance Required (Z) - Includes 3' Safety Factor

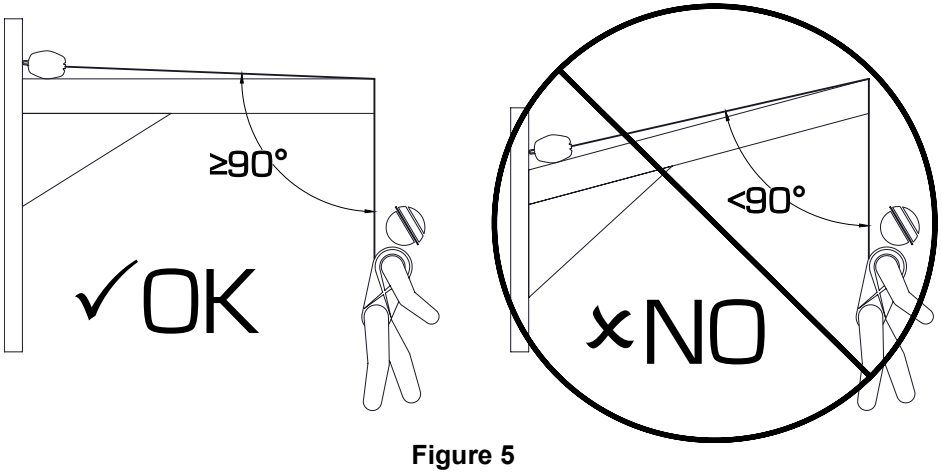


Figure 5

4. SWING FALLS

Swing falls occur when the anchorage point is not directly above the point where a fall occurs (see Figure 6). The force of striking an object in a swing fall may cause serious injury. In a swing fall, the total vertical fall distance will be greater than if the user had fallen directly below the anchorage point, thus increasing fall clearance required to safely arrest the user. Use Figures 4A (pg. 9) or 4B (pg. 10) to determine the fall clearance for your application. Minimize swing falls by working as directly below the anchorage point as possible. Never permit a swing fall if injury could occur.

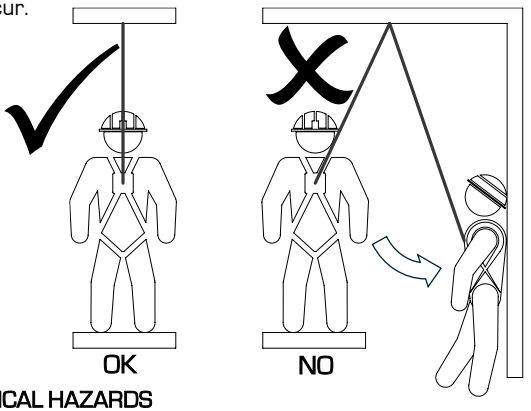


Figure 6

5. CHEMICAL HAZARDS

Acidic, alkaline, or other environments with harsh substances may damage the webbing, wire rope and hardware elements of this SRL. If working in a chemically aggressive environment contact Fall Safe engineering to verify compatibility.

6. HEAT

Do not expose SRL's that utilize a web energy absorber to environments with temperatures greater than 185°F (85°C). Protect the energy absorber when used near welding, metal cutting, or other heat producing activities. Sparks may damage the energy absorber and reduce its strength.

⚠CAUTION⚠

When working with equipment or materials that generate high heat or while working in high heat environments, ensure that all associated fall protection equipment can withstand high temperatures. If necessary, provide protection for all fall protection equipment.

7. CORROSION

Do not expose the device to corrosive environments for prolonged periods. Organic substances and salt water are particularly corrosive to metal parts. When working in a corrosive environment more frequent inspection, cleaning, and drying of the SRL is required. See Care and Inspection sections for cleaning and inspection details (page 20).

8. ELECTRICAL HAZARDS

Use extreme caution when working near energized electrical sources. Metal components of the SRL will conduct electric current. Maintain a safe working distance [at least 10' (3m)] from electrical hazards.

9. MOVING MACHINERY

When working near moving machinery parts (e.g., conveyors, rotating shafts, presses, etc.), make sure that loose equipment is secured. Maintain a safe working distance from machinery that could entangle clothing, the SRL, the harness, or other components connected to it.

10. SHARP EDGES AND ABRASIVE SURFACES

Do not expose SRL to sharp edges or abrasive surfaces that could cut, tear, abrade, or damage the cable. If working around sharp edges and abrasive surfaces is unavoidable use heavy padding or other protective barriers to prevent direct contact.

11. WEAR AND DETERIORATION

Any SRL which shows signs of excessive wear, deterioration or aging, must be removed from use and marked "UNUSABLE" until destroyed. See detailed inspection procedures (see page 21).

12. IMPACT FORCES

Any SRL that has been subjected to the forces of arresting a fall must be removed from service, mark "UNUSABLE", DO NOT USE until it has been inspected and recertified by an authorized Fall Safe service center. . F.L.O. Class 2 SRL's have impact load indicators built into the snap hook swivel that facilitate inspection for fall loading (see page 21).

13. ULTRAVIOLET (UV) EXPOSURE

Environmental or man-made UV exposure will cause degradation to all synthetic webbing materials. UV light can affect the strength of the webbing in varying degrees ranging from slight to total degradation. Factors which affect the degree of strength loss are: the length of continuous exposure time, webbing construction, design and other environmental factors such as, weather conditions, elevation and geographic location. Care must be taken to minimize and reduce UV exposure and inspect for the evidence of UV damage. DO NOT store product outside. DO NOT subject product to direct or indirect indoor UV exposure during storage. Inspect webbing for UV degradation, indicated by discoloration and/or the presence of fiber splinters or slivers on the webbing surface. Products used in environments where they are subject to continuous or repeated exposure to ultraviolet light should be inspected at least quarterly. Damaged or questionable webbing elements require the removal of the SRL from service.

SYSTEMS REQUIREMENTS

COMPATIBILITY OF SYSTEM PARTS

1. COMPATIBILITY OF COMPONENTS AND SUBSYSTEMS

Fall Safe SRL's are designed to be used with Fall Safe approved components and connecting subsystems. Use of the SRL with products made by other manufacturers should be evaluated by a competent person to ensure compatibility of components and hardware. Connecting subsystems must be suitable for use in the application (e.g., fall arrest or restraint). Fall Safe manufactures a line of connecting subsystems for most applications, contact Fall Safe for further information. Refer to the manufacturer's instructions supplied with the component or connecting subsystem to determine suitability. Contact Fall Safe with any questions regarding compatibility of equipment used with the SRL.

2. COMPATIBILITY OF CONNECTORS

Connectors, such as d-rings, snap hooks, and carabiners, must be rated at 5,000 lbs. (22 kN) minimum breaking strength and comply with ANSI Z359.12. Fall Safe connectors meet these requirements. Connecting hardware must be compatible in size, shape, and strength. Non-compatible connectors may accidentally disengage ("rollout") or have a false engagement. **F.L.O. Class 2 SRL's must be connected to the users harness at the dorsal d-ring only.**

EXAMPLES OF INAPPROPRIATE CONNECTIONS

a) To a d-ring to which another connector is attached
b) In a manner that would result in a load on the gate.
c) In a false engagement, where features that protrude from the snap hook or carabiner catch on the anchor and seem to be fully engaged to the anchor point.(Fall Safe has designed the width of the head and gates of Fall Safe snap hooks to prevent this issue in most d-rings.)
d) Snap hooks attached to each other.
e) Directly to webbing or rope lanyard or tie-back.
f) To any object shaped such that the snap hook or carabiner will not close and lock, or that could cause roll-out should a fall occur.
g) Connecting a lanyard or other lengthening device to the snap hook.

3. ANCHORAGES AND ANCHORAGE CONNECTORS

Anchorages for personal fall arrest systems must have a strength capable of supporting a static load, applied in directions permitted by the system, of at least: (a) 3,600 lbs. (16 kN) when certification exists, or (b) 5,000 lbs. (22 kN) in the absence 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 29 CFR 1910 & 1926.

Anchorage connectors must be selected carefully. Eyebolts should not be used if they will be loaded at an angle to their axis, unless the loads fall within design parameters for such use. Weld-on lugs should not be less than 1/2 in (12.7mm) in width and should not be made of steel with less than 50,000 PSI (34 Mpa) yield strength. The proper stress areas and weld areas must be calculated to assure proper safety. If in question, consult Fall Safe Engineering for proper design requirements.

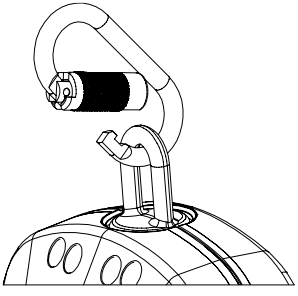
INSTALLATION PROCEDURE

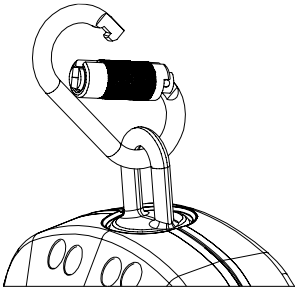
⚠WARNING⚠

DO NOT anchor the F.L.O. Class 2 SRL to either carry handle! (see page 4). ***Attaching anchorage to carry handle could result in serious injury or death.***

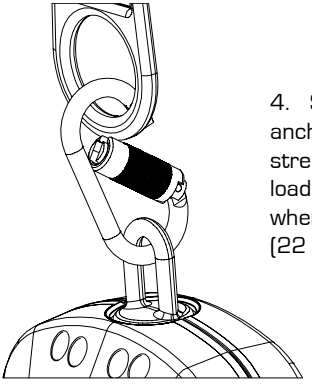
A. CONNECTING F.L.O. CLASS 2 TO AN ANCHORAGE WITH A CARABINER (5,000 lb. minimum breaking strength double or triple locking)

1. Open carabiner and slide through top swivel on the F.L.O. Class 2 SRL.

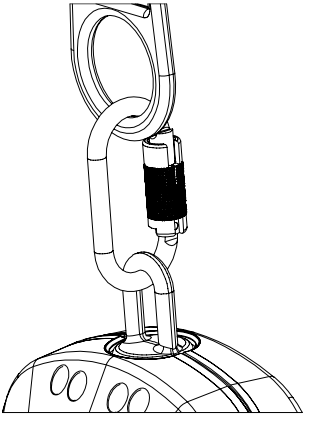




2. Rotate carabiner so that the open end is on top.

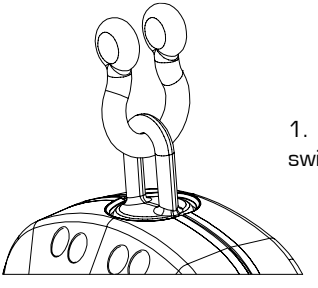


4. Slide open end of carabiner over the anchorage. Anchorage must have a strength capable of supporting a static load of at least: (a) 3,600 lbs. (16 kN) when certification exists, or (b) 5,000 lbs. (22 kN) in the absence of certification.

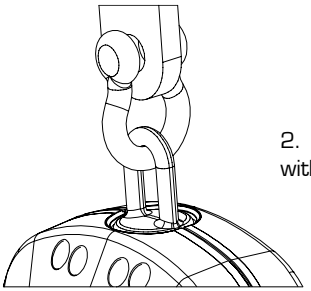


5. Allow anchor ring to close. Once closed check carabiner gate to ensure it is locked by pressing on the gate, it should not open.

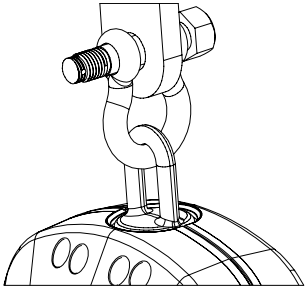
B. CONNECTING F.L.O. CLASS 2 TO AN ANCHORAGE WITH A BOW SHACKLE (5,000 lb. minimum breaking strength)



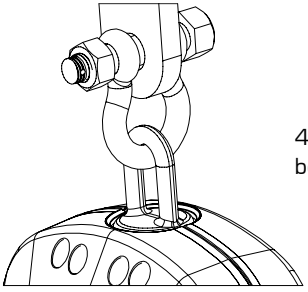
1. Slide bow shackle through top swivel on the F.L.O. Class 2 SRL.



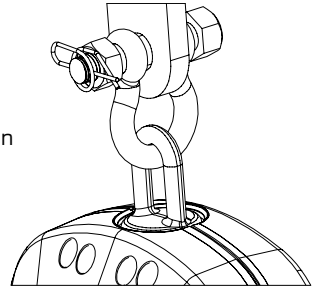
2. Align bow shackle through hole with anchorage.



3. Slide bow shackle bolt through the bow shackle and the anchorage.



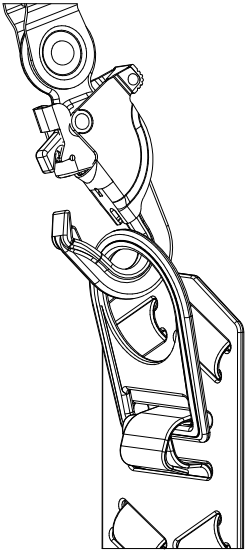
4. Tighten nut onto the bow shackle bolt.



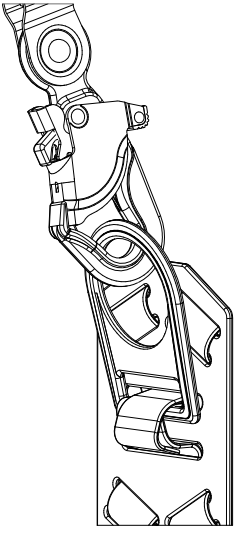
5. Slide locking pin through hole in the end of the bow shackle bolt.

This does not cover all possible methods of anchoring the F.L.O. Class 2 SRL. Consult Fall Safe engineering for guidance on alternate mounting methods.

C. CONNECTING F.L.O. CLASS 2 TO HARNESS DORSAL D-RING



1. Open Pelican Snap Hook by depressing the gate locking lever and pulling on the gate lever (see page 5). Slide open hook over the dorsal d-ring on the user's harness.



2. Allow the gate to close, ensuring that the d-ring is captured by the hook. Check locking function by pulling on the gate lever without depressing the gate locking lever.

D. PREPARATION FOR USE

1. Once the F.L.O. Class 2 has been attached to a harness, extract a few feet of cable slowly to verify that there is tension on the line and the retraction spring is functioning correctly.
2. Grasp the handgrip and give it a quick, sharp tug. The unit should lock; this ensures that the locking mechanism is operating.

⚠CAUTION⚠

The line must always be released slowly and in a controlled manner when rewinding the cable back into the unit; it should never be fully released in an uncontrollable manner. Allowing the line to retract in an uncontrolled fashion could cause damage to the SRL, the workplace, or other users in the area. Uncontrolled retraction can cause the SRL to lock in the retracted position. Always use a tagline attached to the snap hook to help guide the line back into the unit when it is installed too far overhead to reach directly; this will also help in pulling the snap hook down to the user for connection to his harness.

E. INSPECT PRIOR TO USE

Before the use of this SRL, inspect the SRL and all components of the PFAS:

1. Inspect the SRL to verify that it is in serviceable condition. Examine every inch of the cable for severe wear, cuts, burns, "bird nests", or other damage. Examine webbing components for cuts, excessive fraying or excessive wear. Examine stitching for any pulled, loose, or torn stitches. See Inspection Procedure section (page 21).

⚠WARNING⚠

DO NOT USE if any unsafe condition is found! Always err on the side of caution.

F. PLAN SCOPE OF WORK TO BE PERFORMED (JOB SAFETY TASK ANALYSIS)

Plan procedures to safely perform tasks when using any components of a PFAS. Some considerations are listed below .

1. Anchorage Selection. In addition to strength considerations, the anchorage should be rigged to prevent a fall onto the structure when considering 2 and 4 below.

⚠WARNING⚠

Use of this device while attached to a "foot-level" anchorage or while exposed to an unprotected structural edge should be a LAST RESORT. Every effort should be made to attach to a properly rated overhead anchorage in an effort to reduce the overall fall distance. DO NOT allow the retractable line to come into contact with a sharp, jagged, serrated or abrasive edge. A "foot-level" or "leading-edge" fall is likely to result in the injury of the user – the first hazard in the fall path is and always will be the structural edge, itself! Elevate your anchorage to the extent possible for the best outcome

2. Swing pendulum fall (see page 11).
3. Rough surfaces or unprotected sharp edges that could cut or abrade the equipment if unprotected.
4. Workplace Geometry
a) Free fall distance - Personal fall arrest systems used with this equipment should be mounted overhead whenever possible in such a way as to eliminate the possibility of a free fall.
b) Deceleration distance - See Clearance Charts for fall clearances (pg. 9 & 10)
c) Total fall distance - See Clearance Charts for fall clearances (pg. 9 & 10)
d) A careful examination must be made of the workplace by a Competent Person before the selection or installation of F.L.O. Class 2 anchorage points. Consideration must be given both to the movement of materials (Will cranes be used to "fly" equipment or parts in?) and workers around the workplace to ensure that potentially hazardous situations are avoided.
e) Areas where overhead cranes or gantries are used must be examined to verify that neither the moving loads or lifting wires can interfere or snag the extended cable of a F.L.O. Class 2 SRL causing a worker to be dislodged.
f) Overhead lighting and electrical cables must also be identified to ensure that installation of the SRL is sufficiently far enough away to prevent an electrocution hazard.
g) Consideration of obstacles present in the work area must include ALL locations that COULD be reached if the entire length of the cable were extracted from the SRL. Obstacles that pose no threat when a worker is on a platform, for example, may be exposed to a dangerous situation should the worker climb downwards or moves laterally towards another work surface.
h) Avoid installations where debris, contaminants, & other objects falling from above could damage the F.L.O. Class 2 and/or its cable.
j) Extreme caution must also be exercised when considering the use of the F.L.O. Class 2 SRL as a means of fall protection in areas where a user is working on a sloped surface such as a pitched roof or tank bottom, or on piles of loose material (such as grain or sand) that may shift or slide. If the user falls or begins to slide on such a surface, the F.L.O. Class 2 SRL may not be extracted fast enough for the device to lock-up and arrest the sliding fall. The user might continue to slide over a roof edge, or into some other hazardous zone causing serious injury or death. The use of a travel restriction system or a work-positioning system may be more appropriate for such locations and should be considered first. Contact Fall Safe engineering for help in selecting equipment for these applications.
5. Rescue and Evacuation
The user and employer must have a rescue plan in place, training in its use, and the means to implement it at hand. The employer must have the ability to perform a rescue quickly and safely. **Do not plan to rely on others for rescue because prolonged suspension can cause serious injury or death.**

CARE OF THE F.L.O. CLASS 2 SRL

A. Clean exterior by wiping away excess dirt, grease, or other materials that might interfere with operation of the unit or obscure the labels. If necessary, use only a mild detergent such as dish soap or Simple Green. Dry hardware with a clean, dry cloth, and hang to air dry. Do not attempt to disassemble the unit. A buildup of dirt, solvents, paint, etc. on the device may prevent the SRL from working properly and should be removed from service. More information on cleaning is available from Fall Safe. If you have questions concerning the condition of your SRL or have any doubt about putting it into service, contact Fall Safe.

B. Store SRL's in a cool, dry, clean environment. Avoid areas where heat, oil, chemicals or their vapors may exist. Thoroughly inspect after extended storage. Good safety practice requires separate storage of unusable product from usable product.

INSPECTION

A. INSPECTION FREQUENCY

1. The SRL must be fully inspected by the user prior to each use.
2. A competent person other than the user must inspect the SRL in accordance with ANSI Z359.14-2021 as specified in the following inspection schedule.

Record the results of each formal inspection in the inspection and maintenance log as described.

ANSI Z359.14-2021 Inspection Schedule

Type of Use	Application Examples	Conditions of Use	Inspection Frequency
Frequent to Light	Rescue and Confined Space, Factory Maintenance	Good Storage Conditions, Indoor or Infrequent Outdoor Use, Room Temperature, Clean Environments	Annually
Moderate to Heavy	Transportation, Residential Construction, Utilities, Warehouse	Fair Storage Conditions, Indoor and Extended Outdoor Use, All Temperatures, Clean or Dusty Environments	Semi-Annually to Annually
Severe to Continuous	Commercial Construction, Oil & Gas, Mining	Harsh Storage Conditions, Prolonged or Continuous Outdoor Use, All Temperatures, Dirty Environments	Quarterly to Semi-Annually

B. INSPECTION PROCEDURE

1. Prior to each use, the worker must inspect the F.L.O. Class 2 Self Retracting Lanyard for any physical damage, wear, corrosion, or malfunctioning parts. Verify that the load indicator is not deployed by checking the load indicator on the snap swivel (Figure 7). **Any F.L.O. Class 2 Self Retracting Lanyard that has a deployed load indicator has seen a fall-arrest load and must be removed from service, mark "UNUSABLE", DO NOT USE until it has been inspected and recertified by an authorized Fall Safe service center.**

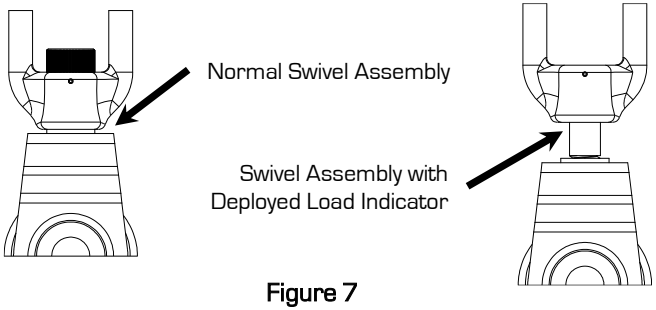


Figure 7

2. The worker should also verify that conditions around the SRL location have not changed that may affect its' ability to arrest a fall, such as obstacles or equipment directly below the anchorage point.

3. Before every use, the worker should extract all of the cable and examine it for defects that would affect its overall strength. These defects would include but are not limited to: " bird nests", cuts, nicks, fraying, abrasion, excessive wear or burns (Figure 8). Any damage to the cable can reduce the strength of the cable by 30%-80% and must be removed from service, mark "UNUSABLE", DO NOT USE until it has been inspected and recertified by an authorized Fall Safe service center.

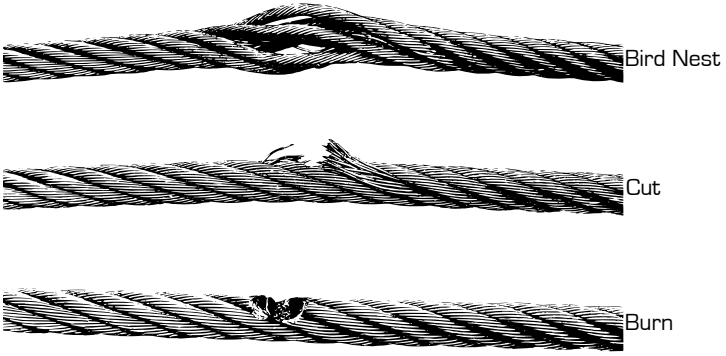


Figure 8

4. After the cable has been allowed to retract into the unit, grasp the hand grip and pull sharply to verify proper lockup of the unit. If unit fails to lockup when pulled quickly, or if the cable fails to retract properly after lockup, the unit must be removed from service.
5. Carefully inspect the plastic housing for cracks or fractures. Evidence of cracks or fractures requires inspection by an authorized Fall Safe service center. Scuffing and minor indentations that do not inhibit the retraction of the unit are cosmetic issues.

TRAINING

It is the responsibility of the employer to train all workers prior to using this system (per OSHA 1926.503 (a)(1)). 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. The employer shall assure that, as necessary, each employee has been trained by a competent person qualified in the following areas:
1. OSHA regulations governing the use of horizontal lifelines.
2. Ability to recognize potential fall and workplace hazards.
3. Method of inspection of safety equipment.
4. Rescue procedures.
5. Installation and removal techniques.

RESCUE PLANNING

Prior to system use, a rescue plan must be prepared, the workers must be trained in its use, and the rescue equipment must be on hand to implement it in case of a fall. Typical rescue plans include (but are not limited to) the following items:
1. List of equipment that must be readily accessible in the event of an emergency and the names of those workers certified to use or operate that equipment.
2. Emergency contact phone numbers (ambulance, hospital, fire department...) and a means to contact them (cell phone, emergency radio).
3. List of employees on the site, and the specific tasks they will perform to affect the rescue.
4. The equipment that will be used to aid in the rescue of any worker should be attached to structural anchorages independent of those used for the personal fall arrest system. During installation of anchorages, tie-off and equipment hard points should be attached and clearly marked in such a manner as to provide a means to rescue a worker in any position along the worksite.

SERVICING

If the SRL has been subjected to fall arrest forces or inspection reveals any unsafe or defective condition, remove the SRL from service, mark "UNUSABLE", DO NOT USE until the SRL has been recertified by an authorized Fall Safe service center.

GUARDING AGAINST APPLICATION FAILURE

To avoid property damage, injury or death, the user must take reasonable steps to prevent "Application Failure". An application failure may be any unacceptable use, misuse, or application error on the part of the user or system designer. Because each end user might use this product in a manner different from Fall Safe testing platform, and because the user might use this product in combination with other manufacturer's products in a manner not evaluated, contemplated, or tested by Fall Safe, the user or system designer is ultimately responsible for verifying or validating the suitability and compatibility of this product for use in his application or system. Whenever questions regarding proper use or compatibility arise, please contact Fall Safe engineering.

WARNINGS AND LIMITATIONS

⚠WARNING⚠

1. Proper care should always be taken to visually scan the work area prior to use. Remove any obstruction, debris, and other materials from, and beneath the work area that could cause injuries or interfere with the operation of this system. Be cautious of swing fall hazards if working anywhere but directly below the anchorage point of the SRL. Be aware of the movements of others using SRL's or shock-absorbing lanyards in close proximity, knowing that if the lines become crossed or tangled and a fall occurs, the sudden motion could pull others off balance and make rescue more difficult.
2. During use, do not allow the cable to wrap around arms or legs, or become entangled in clothing or other items. In the event of a fall, they could cause injury or prevent the F.L.O. Class 2 SRL from functioning properly.
3. Users should be familiar with pertinent regulations governing the use of this personal fall arrest system and its components. Only trained and competent personnel should install and supervise the use of this system.
4. Do not tie knots in the cable of the unit. Tying knots in the cable reduces the overall strength of the cable. Do not cross lines with another worker. Should the lines become entangled, a fall by one worker could dislodge others.

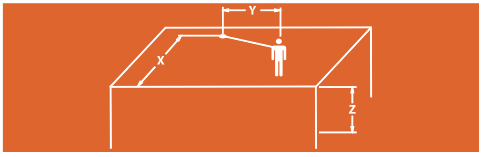
⚠CAUTION⚠

1. Do not release the cable when extended and allow it to retract back into the unit uncontrollably. Releasing the cable and allowing it to reel itself in uncontrollably could cause damage to the F.L.O. Class 2 SRL or cause the SRL to lock in the retracted position. The cable should be allowed to retract slowly into the unit.
2. Use only Fall Safe supplied or qualified compatible components.

LABELING

The illustrations here are representations of the actual labels that appear on Fall Safe F.L.O. Class 2 Self Retracting Lanyards. All the information on the SRL Specifications Label is important for the safe use of this product, so the user should ensure that the label has not been removed and that the descriptions it contains match the task and environment in which the product is intended to be used.

Figure 9A Specifications Label



Leading Edge Fall Clearance Chart - Read Instructions for Complete Details

Distance off Axis of Anchorage (Y)

Setback Distance (X) - Min 5 Feet

	0 Feet	3 Foot	6 Feet	9 Feet	12 Feet	15 Feet	17 Feet	20 Feet	23 Feet
5 Feet	15' 6"	16' 3"							
10 Feet	14' 9"	15'	16' 3"						
15 Feet	14' 6"	14' 6"	15' 6"	16' 9"					
20 Feet	14' 3"	14' 6"	15'	16'	17' 6"				
25 Feet	14'	14'	14' 9"	15' 6"	16' 6"	18'			
30 Feet	14'	14'	14' 6"	15' 3"	16' 3"	17' 6"	18' 6"		
35 Feet	14'	14'	14' 6"	15'	15' 9"	17'	17' 9"	19'	
40 Feet	14'	14'	14' 3"	14' 9"	15' 6 "	16' 6"	17' 3"	18' 6"	20'

⚠WARNING⚠
Do not rig your device in this area!
Doing so may result in serious injury or death!

Clearance Required (Z) - Includes 3' Safety Factor

⚠WARNING⚠
Not intended for use over a concrete edge.

⚠WARNING⚠
Read instructions and consult clearance chart before use.

Figure 9B Shock Absorber Labels

WARNING: This Class 2 self-retracting device, when attached to a foot-level anchorage, poses significant risk of injury. The user, the competent person and/or qualified person should all acknowledge that normal use of this device MAY NOT PREVENT A SERIOUS INJURY.

Failure to follow all manufacturer's instructions and warnings may result in serious injury or death.

Figure 9C Warning Card

Notes:

EQUIPMENT RECORD	
PART NUMBER	
SERIAL NUMBER	
DATE MANUFACTURED	
PURCHASE DATE	
ASSIGNED TO	

INSPECTION RECORD		
DATE	INSPECTOR	PASS/FAIL

These Instructions Apply to the Following Part Numbers:

4710000-30
4710000-40

SPECIFICATIONS

Certified to meet ANSI Z359.14-2021 and OSHA regulations for the Class 2 Self Retracting Lanyard component of a complete personal fall arrest system.

Individual serial number and date of manufacture are on product label.

Assembled in Texas, USA

Warranty

Products manufactured by Fall Safe are warranted against factory defects in workmanship and materials for a period of one year from date of purchase. Upon notice of product defect or fault, Fall Safe will promptly repair or replace all defective items. Fall Safe reserves the right to elect to have any defective item returned to its manufacturing plant, authorized service center or distributor for inspection before making a repair or replacement. This warranty does not cover equipment damages or defects resulting from abuse, damage in transit, or other damage beyond the control of Fall Safe. This warranty applies only to the original purchaser and is the only one applicable to our products and services, and is in lieu of all other warranties, expressed or implied. When products offered by Fall Safe are manufactured by a third party, original equipment manufacturer (OEM) warranty shall apply and may be outside the control of Fall Safe.

4700000-200 REV B

FALL SAFE®
Ph. 800-323-7402

Canada | **USA**
SureWerx | SureWerx USA Inc.
Coquitlam, BC V3K 0B3 | Elgin, IL 60123