

# FRONTLINE®

## FALL PROTECTION

[www.FrontlineFall.com](http://www.FrontlineFall.com)

## USER INSTRUCTION MANUAL

### *SELF-RETRACTING LIFELINE*

### *WITH LEADING EDGE*

Class

2

Anchor above or below dorsal D-ring



## **WARNING:**

Compliant fall protection equipment must only be used as it was designed and adhere to the hierarchy of controls as discussed in Z359.2. This product is part of a personal fall arrest, work positioning, or rescue system. Exposure to a sharp or serrated structural edge could damage the device and anchorage should be elevated to the extent possible to limit the risk of damage or failure. The user must follow the manufacturer's instruction for each component of the system. This instruction must be provided to the user of this equipment. Manufacturer's instructions must be followed for proper use and maintenance of this equipment. Alterations or misuse of this product or failure to follow instructions may result in serious injury or death. This equipment is intended to be used by persons trained in its correct application and use.

## IMPORTANT:

If you have questions on the use, care, or suitability of this equipment for your application, contact Frontline Fall Protection at [info@frontlinefall.com](mailto:info@frontlinefall.com) or visit us at [www.frontlinefall.com](http://www.frontlinefall.com).

Before using this equipment, record the product identification information from the ID label and RFID tag in the inspection and maintenance log of this manual.

This personal protective equipment is designed and used as a connecting element in fall protection system to protect users against falls from heights in working areas and is meant to be used with other certificated components.

## DESCRIPTION:

Material: aluminum, Galvanized steel cable wire, Thermoplastic Housing, Stainless steel & non-corrosive components, zinc-plated steel, high-strength ABS, and polyester.

### Leading Edge Use Application:

Average Arresting Force: 1,350 lbs.  
Maximum Arresting Force: 1,800 lbs.  
Minimum Setback Distance: 2ft (0.6m)  
Max Free Fall: 6 ft (1.8m)  
Fall Clearance: 13.5 ft

### Overhead Use Application:

Maximum Deceleration Distance:  $\leq 30$  inch  
Fall Clearance: 6.5 ft

| Model No# | Length | Description   |
|-----------|--------|---|
| RPG081SLE | 8'     | 3/16" Galvanized cable SRL w/snap hook. Includes Back pad, connector        |
| RPG082SLE | 8'     | 3/16" Galvanized cable Twin SRL w/snap hooks. Includes Back pad, connector  |
| RPG081RLE | 8'     | 3/16" Galvanized cable SRL w/rebar hook. Includes Back pad, connector       |
| RPG082RLE | 8'     | 3/16" Galvanized cable Twin SRL w/rebar hooks. Includes Back pad, connector |
| RPGC30LE  | 30'    | 3/16" Galvanized cable SRL w/snap hook, Swivel Top.                         |
| RPGC50LE  | 50'    | 3/16" Galvanized cable SRL w/snap hook, Swivel Top.                         |
| RPGC65LE  | 65'    | 3/16" Galvanized cable SRL w/snap hook, Swivel Top.                         |

## LIMITATIONS:

### Capacity:

The SRL-LEs are designed for use by one person with a combined weight (person, clothing, tools, etc.) of up to 310 lbs. (141kg) for all application including leading edge.

### Connector:

Connectors must be compatible in size, shape, and strength.

Self-closing, self-locking connectors are required by ANSI and OSHA.

-5000 lbs. (22.2 KN) for non-certified anchorages.

-Two times the maximum arrest force permitted when certification exists

Manual Revision Code: Frontline-SRL-LE-05 10-25-24

## Compatibility:

### Connecting Component Limitations:

A Competent Person must ensure the compatibility of all connections and that of the system.

If any other component in the system doesn't operate properly or if any connector doesn't lock, don't use the system.

Don't use if any part of the system appears to be damaged, or a body belt for fall arrest applications.

All connector gates withstand minimum loads of 3,600 lbs.

### Compatible Connections:



For Tie-Back Models Only

### Incompatible connections:



## **INSPECTION FREQUENCY:**

SRL-LEs shall be inspected by the authorized person or rescuer before each use.

Inspection shall be conducted by a competent person other than the user.

The competent person shall use Inspection Schedule and checking list for appropriate inspection intervals and procedures.

Results of the Competent person inspection should be recorded in the " Inspection and Maintenance Log" on the back pages of instruction.

## **APPLICATIONS:**

### **Purpose:**

This product is part of a personal fall arrest, restraint, work positioning, suspension, or rescue system.

A Personal Fall Arrest System (PFAS) is typically composed of an anchorage and a Full Body Harness (FBH), with a connecting device, i.e., a Shock Absorbing Lanyard (SAL), or a Self-Retracting Device (SRL), attach to the dorsal D-ring of the FBH.

SRL-LEs are designed for use in applications where falls may occur, including falls over edges, such as roofing, leading edge construction, etc.

SRL-LEs covered by this manual, SRL-LEs may be used in many situations where a combination of work mobility and fall protection is required. (i.e. inspection work, general construction, maintenance work, oil production, confined space work, etc.)

Dual-connections of twin leg SRL-LE's shall only be made for the purposes of 100% tie-off transitions. If a dual connection is made for any other purpose, anchorages of different elevations must be utilized.

### **Standards:**

SRL-LEs confirm to the national standard identified on the label. Refer to local, state, and federal (OSHA) requirements governing occupational safety for additional information. The standard is **ANSI Z359.14** - *Safety Requirement for Self-Retracting Device for Personal Fall Arrest and Rescue Systems*.

### **Free Fall:**

When anchorage overhead, SRL-LEs will limit the free fall distance to 2ft. (61cm) or less.

To avoid increased fall distances, anchor the SRL-LE directly above the work level.

Avoid working where your lifeline may cross or tangle with that of another worker.

Never clamp, knot, or prevent the lifeline from retracting or being taut.

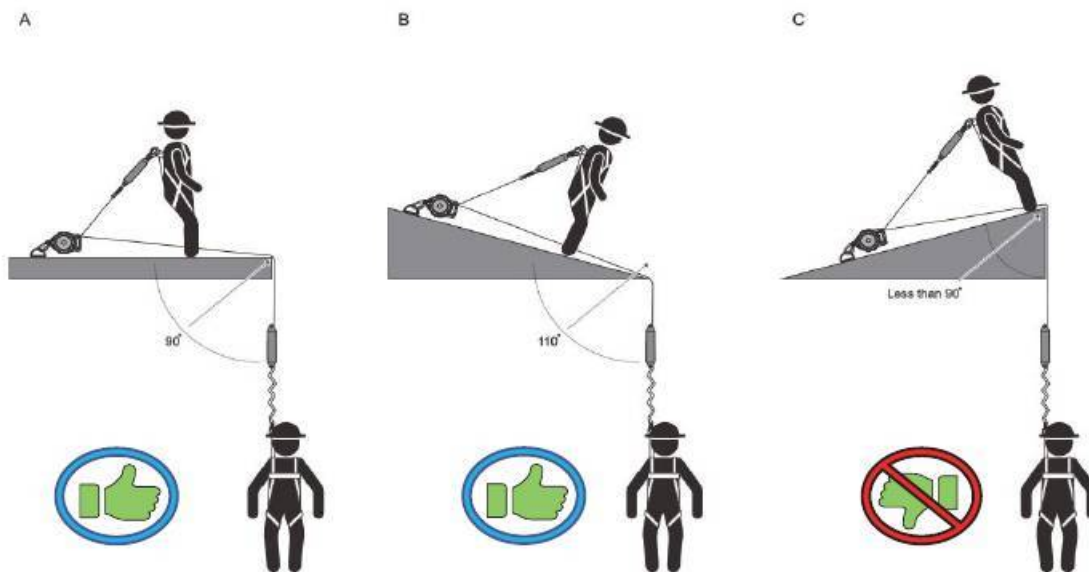
### **Angle of Redirection:**

The angle of redirection is the angle of the lifeline over an edge during a fall event.

Install the SRL so that the angle of the two parts of the lifeline are at least 90° , or more, but never less.

The lifeline must never rise up to the edge as it may bend the lifeline in too small a radius and/ or severely abrade, or otherwise compromise, the lifeline.

## Drawing 1.



| Leading Edge Angle of Lifeline Redirect |  |
|---|--|
| A                                       | OK- 90° Minimum Angle over Leading Edge              |
| B                                       | OK- Greater than 90° Minimum Angle over Leading Edge |
| C                                       | Not OK- less than 90° Angle over Leading Edge        |

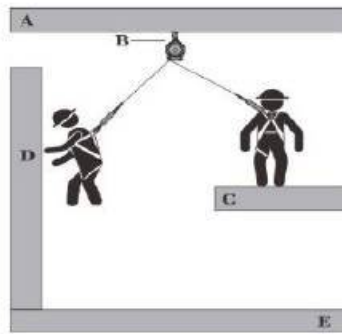
### Swing Falls:

Swing falls occur when the anchorage point is not directly above the point where a fall occurs. The force of striking an object 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.

Minimize swing falls by working as directly below the anchorage point as possible.

Never permit a swing fall if injury could occur.

**Drawing 2.**



| Swing Fall Hazards Non- Leading Edge |                                    |
|--------------------------------------|------------------------------------|
| A                                    | Anchorage                          |
| B                                    | Self-Retracting Lifeline           |
| C                                    | Walking/ Working Surface           |
| D                                    | Swing Fall impact after fall event |
| E                                    | Next Lower Level or Obstruction    |

## CLEARANCE REQUIREMENTS:

The Minimum Required Fall Clearance (MRFC) would consider seven variables when calculating. These seven are labeled A, B, C, D, E, F and G, H is the MRFC.

These variables are:

A= Free Fall Distance due to Below D-ring Anchorage.

B= SRL deceleration distance.

C= Dorsal D-Ring shift and FBH Stretch

D= Additional Deceleration Distance.

E= Safety Factor

F= Sub Total- Minimum Required Fall Clearance.

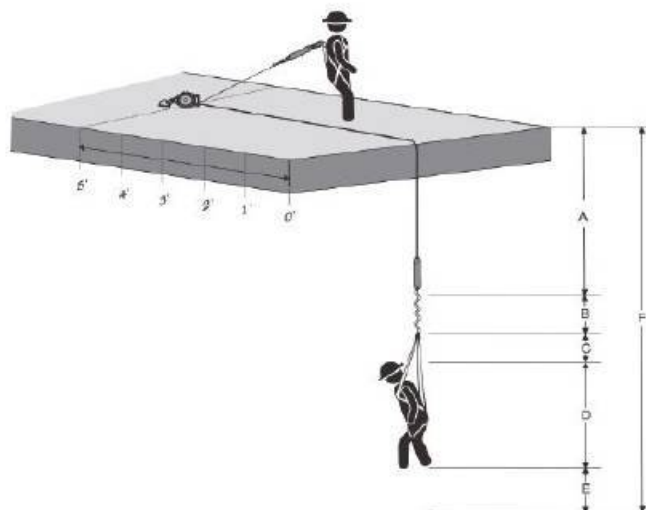
G= Additional Fall Clearance Calculation for swing fall- 4' maximum.

H= Minimum Required Fall Clearance.

The MRFC for this anchorage geometry is calculated as  $A+B+C+D+E=F$  (Sub-total MRFC)

The value is the G variable  $G+F=H$ .

**Drawing 3.**



## Clearance requirement with offset and setback distance

For leading edge applications for RPG081SLE, RPG082SLE, RPG081RLE & RPG082RLE

| Class 2 Clearance Chart - Read Instructions for Complete Details |                 |  |                     |                     |                     |                     |                      |  |                      |                      |                      |                      |                      |
|--|-----------------|--|---------------------|---------------------|---------------------|---------------------|----------------------|--|----------------------|----------------------|----------------------|----------------------|----------------------|
| Distance off Axis of Anchorage (Y)                               |                 |  |                     |                     |                     |                     |                      |  |                      |                      |                      |                      |                      |
|  |                 | 0.00 Foot<br>0.00 m  | 2.00 Foot<br>0.60 m | 4.00 Foot<br>1.20 m | 6.00 Foot<br>1.80 m | 8.00 Foot<br>2.40 m | 10.00 Foot<br>3.00 m |  |                      |                      |                      |                      |                      |
| Set-Back Distance (X)  | 2 Foot<br>0.6 m | WARNING! WORKING IN THIS ZONE<br>MAY RESULT IN SERIOUS INJURY OR<br>DEATH. |                     |                     |                     |                     |                      |  |                      |                      |                      |                      |                      |
|  | 4 Foot<br>1.2 m |  |                     |                     |                     |                     |                      |  | 13.50 Foot<br>4.05 m | 13.97 Foot<br>4.19 m | 15.16 Foot<br>4.55 m | 16.71 Foot<br>5.01 m |                      |
|  | 6 Foot<br>1.8 m |  |                     |                     |                     |                     |                      |  | 13.50 Foot<br>4.05 m | 13.82 Foot<br>4.15 m | 14.71 Foot<br>4.41 m | 15.99 Foot<br>4.80 m | 17.50 Foot<br>5.25 m |
|  | 8 Foot<br>2.4 m |  |                     |                     |                     |                     |                      |  | 13.50 Foot<br>4.05 m | 13.75 Foot<br>4.12 m | 14.44 Foot<br>4.33 m | 15.50 Foot<br>4.65 m | 16.81 Foot<br>5.04 m |
|  | 10 Foot<br>3 m  |  |                     |                     |                     |                     |                      |  | 13.50 Foot<br>4.05 m | 13.70 Foot<br>4.11 m | 14.27 Foot<br>4.28 m | 15.16 Foot<br>4.55 m | 16.31 Foot<br>4.89 m |
| <b>Clearance Required (Z) - Includes 2 foot Safety Margin</b>    |                 |  |                     |                     |                     |                     |                      |  |                      |                      |                      |                      |                      |

Example: With the SRL-LE anchor set back 8 feet from the edge, the user can work up to 8 feet (2.4m) offset along the leading edge. The required clearance is 16.81 feet (5.04m) from the working level to the nearest obstruction below.

## Clearance requirement with offset and setback distance

For leading edge applications for RPGC30LE, RPG50LE, and RPG65LE

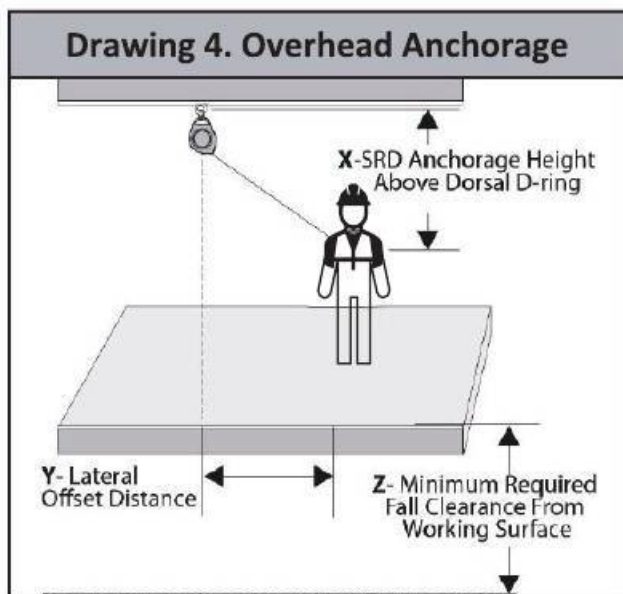
| Class 2 Clearance Chart - Read Instructions for Complete Details |                    |                      |                      |                      |  |                     |                      |                      |                      |                      |
|--|--------------------|----------------------|----------------------|----------------------|--|---------------------|----------------------|----------------------|----------------------|----------------------|
| Distance off Axis of Anchorage (Y)                               |                    |                      |                      |                      |  |                     |                      |                      |                      |                      |
|  |                    | 0.00 Foot<br>0.00 m  | 2.00 Foot<br>0.60 m  | 4.00 Foot<br>1.20 m  | 6.00 Foot<br>1.80 m  | 8.00 Foot<br>2.40 m | 10.00 Foot<br>3.00 m |                      |                      |                      |
| Set-Back Distance (X)  | 2 Foot<br>0.6 m    | 18.50 Foot<br>5.55 m | 19.33 Foot<br>5.80 m | 20.97 Foot<br>6.29 m | WARNING! WORKING IN THIS ZONE<br>MAY RESULT IN SERIOUS INJURY OR<br>DEATH. |                     |                      |                      |                      |                      |
|  | 4 Foot<br>1.2 m    | 18.50 Foot<br>5.55 m | 18.97 Foot<br>5.69 m | 20.16 Foot<br>6.05 m |  |                     |                      | 21.71 Foot<br>6.51 m |                      |                      |
|  | 6 Foot<br>1.8 m    | 18.50 Foot<br>5.55 m | 18.82 Foot<br>5.65 m | 19.71 Foot<br>5.91 m |  |                     |                      | 20.99 Foot<br>6.30 m | 22.50 Foot<br>6.75 m |                      |
|  | 8 Foot<br>2.4 m    | 18.50 Foot<br>5.55 m | 18.75 Foot<br>5.62 m | 19.44 Foot<br>5.83 m |  |                     |                      | 20.50 Foot<br>6.15 m | 21.81 Foot<br>6.54 m |                      |
|  | 10 Foot<br>3 m     | 18.50 Foot<br>5.55 m | 18.70 Foot<br>5.61 m | 19.27 Foot<br>5.78 m |  |                     |                      | 20.16 Foot<br>6.05 m | 21.31 Foot<br>6.39 m |                      |
|  | 12 Foot<br>3.7 m   | 18.50 Foot<br>5.55 m | 18.67 Foot<br>5.60 m | 19.15 Foot<br>5.74 m |  |                     |                      | 19.92 Foot<br>5.97 m | 20.92 Foot<br>6.26 m | 22.12 Foot<br>6.61 m |
|  | 14 Foot<br>4.3 m   | 18.50 Foot<br>5.55 m | 18.64 Foot<br>5.59 m | 19.06 Foot<br>5.71 m |  |                     |                      | 19.73 Foot<br>5.91 m | 20.62 Foot<br>6.17 m | 21.70 Foot<br>6.49 m |
|  | 16 Foot<br>4.9 m   | 18.50 Foot<br>5.55 m | 18.62 Foot<br>5.59 m | 18.99 Foot<br>5.70 m |  |                     |                      | 19.59 Foot<br>5.87 m | 20.39 Foot<br>6.11 m | 21.37 Foot<br>6.40 m |
|  | 18 Foot<br>5.5 m   | 18.50 Foot<br>5.55 m | 18.61 Foot<br>5.58 m | 18.94 Foot<br>5.68 m |  |                     |                      | 19.47 Foot<br>5.84 m | 20.20 Foot<br>6.05 m | 21.09 Foot<br>6.32 m |
|  | 20 Foot+<br>6.1 m+ | 18.50 Foot<br>5.55 m | 18.60 Foot<br>5.58 m | 18.90 Foot<br>5.67 m |  |                     |                      | 19.38 Foot<br>5.81 m | 20.04 Foot<br>6.01 m | 20.86 Foot<br>6.25 m |
| <b>Clearance Required (Z) - Includes 2 foot Safety Margin</b>    |                    |                      |                      |                      |  |                     |                      |                      |                      |                      |

Example: With the SRL-LE anchor set back 8 feet from the edge, the user can work up to 8 feet (2.4m) offset along the leading edge. The required clearance is 21.81 feet (6.54m) from the working level to the nearest obstruction below.

## Overhead Anchorage Application

LE-SRLs may be used as a standard SRL in an overhead condition, in which the SRL is installed anywhere in the allowable attachment area, which ranges from directly above the user to level with the full body harness D-ring, as shown in Drawing 4.

The overhead condition minimum required fall clearance (MRFC) is calculated using four metrics, measured from the walking-working surface: SRL Deceleration Distance, D-ring Shift and Harness Stretch, Safety Factor, and Swing Fall.



| Class 2 Clearance Chart - Read Instructions for Complete Details (Overhead Anchorage) |                    |                     |                     |                      |                      |                      |                      |                      |                      |
|---|--------------------|---------------------|---------------------|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Lateral Offset Distance (Y)   |                    |                     |                     |                      |                      |                      |                      |                      |                      |
|   |                    | 0.00 Foot<br>0.00 m | 2.00 Foot<br>0.60 m | 4.00 Foot<br>1.20 m  | 6.00 Foot<br>1.80 m  | 8.00 Foot<br>2.40 m  | 10.00 Foot<br>3.00 m | 15.00 Foot<br>4.57 m | 20.00 Foot<br>6.10 m |
| SRD Anchorage Height Above Dorsal D-ring (X)  | 0 Foot<br>0 m      | 6.50 Foot<br>1.98 m | 8.50 Foot<br>2.59 m | 10.50 Foot<br>3.20 m | 12.50 Foot<br>3.81 m | 14.50 Foot<br>4.42 m | 16.50 Foot<br>5.03 m | 21.50 Foot<br>6.55 m | 26.50 Foot<br>8.08 m |
|   | 5 Foot<br>1.52 m   | 6.50 Foot<br>1.98 m | 7.00 Foot<br>2.13 m | 7.50 Foot<br>2.29 m  | 9.00 Foot<br>2.74 m  | 10.50 Foot<br>3.20 m | 12.50 Foot<br>3.81 m | 17.00 Foot<br>5.18 m | 22.00 Foot<br>6.71 m |
|   | 10 Foot<br>3.05 m  | 6.50 Foot<br>1.98 m | 6.50 Foot<br>1.98 m | 7.50 Foot<br>2.29 m  | 8.50 Foot<br>2.59 m  | 9.50 Foot<br>2.90 m  | 11.00 Foot<br>3.35 m | 14.50 Foot<br>4.42 m | 18.50 Foot<br>5.64 m |
|   | 15 Foot<br>4.57 m  | 6.50 Foot<br>1.98 m | 6.50 Foot<br>1.98 m | 7.00 Foot<br>2.13 m  | 7.50 Foot<br>2.29 m  | 8.50 Foot<br>2.59 m  | 9.50 Foot<br>2.90 m  | 13.50 Foot<br>4.11 m | 17.50 Foot<br>5.33 m |
|   | 20 Foot<br>6.1 m   | 6.50 Foot<br>1.98 m | 6.50 Foot<br>1.98 m | 6.50 Foot<br>1.98 m  | 7.50 Foot<br>2.29 m  | 8.50 Foot<br>2.59 m  | 9.00 Foot<br>2.74 m  | 11.50 Foot<br>3.51 m | 15.50 Foot<br>4.72 m |
|   | 25 Foot<br>7.62 m  | 6.50 Foot<br>1.98 m | 6.50 Foot<br>1.98 m | 6.50 Foot<br>1.98 m  | 7.00 Foot<br>2.13 m  | 8.00 Foot<br>2.44 m  | 8.50 Foot<br>2.59 m  | 11.00 Foot<br>3.35 m | 14.50 Foot<br>4.42 m |
|   | 30 Foot<br>9.14 m  | 6.50 Foot<br>1.98 m | 6.50 Foot<br>1.98 m | 6.50 Foot<br>1.98 m  | 7.00 Foot<br>2.13 m  | 7.50 Foot<br>2.29 m  | 8.00 Foot<br>2.44 m  | 10.50 Foot<br>3.20 m | 13.00 Foot<br>3.96 m |
|   | 35 Foot<br>10.67 m | 6.50 Foot<br>1.98 m | 6.50 Foot<br>1.98 m | 6.50 Foot<br>1.98 m  | 7.00 Foot<br>2.13 m  | 7.50 Foot<br>2.29 m  | 8.00 Foot<br>2.44 m  | 10.50 Foot<br>3.20 m | 13.00 Foot<br>3.96 m |
|   | 40 Foot<br>12.19 m | 6.50 Foot<br>1.98 m | 6.50 Foot<br>1.98 m | 6.50 Foot<br>1.98 m  | 7.00 Foot<br>2.13 m  | 7.50 Foot<br>2.29 m  | 8.00 Foot<br>2.44 m  | 10.00 Foot<br>3.05 m | 13.00 Foot<br>3.96 m |
|   | 45 Foot<br>13.72 m | 6.50 Foot<br>1.98 m | 6.50 Foot<br>1.98 m | 6.50 Foot<br>1.98 m  | 7.00 Foot<br>2.13 m  | 7.50 Foot<br>2.29 m  | 8.00 Foot<br>2.44 m  | 10.00 Foot<br>3.05 m | 13.00 Foot<br>3.96 m |
|   | 50 Foot<br>15.24 m | 6.50 Foot<br>1.98 m | 6.50 Foot<br>1.98 m | 6.50 Foot<br>1.98 m  | 7.00 Foot<br>2.13 m  | 7.50 Foot<br>2.29 m  | 8.00 Foot<br>2.44 m  | 9.50 Foot<br>2.90 m  | 12.50 Foot<br>3.81 m |

Clearance Required (Z) - Includes 1.5 foot Safety Margin

Example: If the user needs to work 6 foot (1.8m) away from directly under the SRL, the SRL needs to be anchored at least 10 foot (3.05m) above the user's Dorsal D-ring. Minimum required fall clearance is 8.5 foot (2.59m) at maximum allowable swing fall.

Work Zone Area in **WHITE** = Allowable Use Area

Work Zone Area in **RED** = Not Allowed Use Area (working in this area may result in serious injury or death)

## Compatibility of Components & Connectors:

Frontline equipment is designed for use with Frontline approved components and subsystems only. Non-approved components or subsystems may jeopardize compatibility of equipment and may affect complete system.

Connectors (hooks, carabiners, and D-rings) must be capable of supporting at least 5000 lbs. (22.2KN) Non-compatible connectors may unintentionally disengage.

Per ANSI Z359 and OSHA, self-locking snap hooks and carabiners are required.

## INSTALLATION:

### Anchorage:

For users exceeding 310 lbs. (141kg), anchorage point must not be more than 5ft(1.52m) below the Dorsal D-Ring. For users exceeding 310 lbs. (141kg), the anchorage point must not be more than 2ft.(0.6m) below the Dorsal D-Ring and higher when connecting off to the user's left or right side.

### Harness Mounting:

To mount the RPG081SLE, RPG082SLE, RPG081RLE & RPG082RLE on a full body harness.

1. Compress and hold both release buttons and slide pin to open position.



2. Taking some web out and then loose them beneath harness dorsal D-ring, slide SRL Bracket pin through loop and lock closed. Retighten web loop after install.



3. Turing whole configuration over in opposite side. Unraveling velcro tape and then put strap inside of the velcro tape. Then having velcro tape be hidden beneath the web loop.



4. With RPG081SLE, RPG082SLE, RPG081RLE & RPG082RLE attached to harness as shown, it is permitted to connect separate connecting device to the harness dorsal D-ring. However, never work with more than one connecting device connected to an anchorage connector at any time.



## Use:

### *Frontline friendly reminder-*

Do not alter or intentionally misuse this equipment.

Some subsystem and component combinations may interfere with the operation of this equipment. Use caution when using this equipment around moving machinery, electrical hazards, chemical hazards, sharp edges, or overhead materials that may fall onto the lifeline. Do not loop the lifeline around structural members. (only lanyard designed for tie-back are approved for tie-back directly onto the webbing). Tie-back can be used to tie-off directly to the structure and back to the unit itself when a suitable structure anchor is available and which can also withstand the required fall forces. Never attach the tie-back snap hook to the tie-back SRL between the shock pack and the housing of the SRL.

**DO NOT** extend the lifeline past the operational limit.

**DO NOT** allow one SRL lifeline to become tangled or twisted with another SRL lifeline during use.

**DO NOT** allow any lifeline to pass under arms or between legs during use.

**DO NOT** clamp, knot, or prevent the lifeline from retracting or being taut.

**DO NOT** lengthen the SRL by connecting a lifeline or similar component.

**DO NOT** allow the lifeline to remain outside the housing when not in use.

**DO NOT** allow the lifeline to freewheel back into the housing. Use a tag line to maintain tension and rewind the lifeline during periods of inactivity.

Use the tag line to retrieve the leg end connector for the next use.

**DO NOT** leave the tag line connected to the leg end connector when using the SRL for fall protection.

Consult your doctor if there is reason to doubt your fitness to safely absorb the shock from a fall arrest. Age and fitness seriously affect a worker's ability to withstand falls. Pregnant women or minors must not use Frontline self-retracting lifelines. Failure to heed this warning may result in serious injury or death.

## Operation:

Prior to use, inspect the SRL-LE as described in Inspection sentence. Connect the snap hook, carabiner attachment to a suitable anchorage. Ensure hooks are fully closed and locked. Once attached, the worker is free to move about within the recommended working area. If a fall occurs, the SRL-LE will lock and arrest the fall. Upon rescue, remove the SRL-LE from use. When working with an SRL-LE, always allow the lifeline to retract back into the device under control.

### *Frontline friendly reminder-*

Do not tie or knot the lifeline. Avoid lifeline contact with sharp or abrasive surfaces. Inspect the lifeline frequently for cuts, fraying, burns, or signs of chemical damage. Dirt, contaminants, and water can lower dielectric properties of the lifeline. Use caution near power lines. Failure to heed this warning may result in serious injury or death.

### **After A Fall:**

If a fall event occurs, tag the SRL as " UNUSABLE", remove it from service, and store it separately. Remove from service any unit that has been subjected to fall arrest forces or that exhibits damage consistent with such forces.

### **Body Support:**

A full body harness must be worn when using SRL-LEs. Connect the SRL-LEs to the user's harness shoulder straps just below the back (dorsal) D-ring.

### *Frontline friendly reminder-*

Do not use a body belt for free fall applications. Per OSHA 1926.502 requirement.

### **Making Connections:**

Snap hooks and carabiners used with this equipment must be self-locking. Ensure all connections are compatible in size, shape and strength. Do not use equipment that is not compatible. Ensure all connectors are fully closed and locked, ensure unintended disengagement cannot occur.

Frontline connectors (snap hooks and carabiners) are designed to be used only as specified in each product's user's instruction.

### **Twin Leg RPG082SLE/ RPG082RLE SRL-LEs:**

With the twin leg RPG082SLE and RPG082RLE -LEs mounted on the back of a Full Body Harness, the user can have continuous fall protection (100% tie-off) while ascending, descending, or moving laterally. With the lifeline leg of one SRL-LE attached to an anchorage point, the worker can move to a new location, attach the unused lifeline leg of the other SRL-LE to another anchorage point, and then disconnect from the original anchorage point. The sequence is repeated until the worker reaches the desired location.

Considerations for twin leg 100% tie-off applications include the following:

- ⦿ Connection of each SRL-LE leg to a separate anchorage point is acceptable.
- ⦿ Never connect more than one person at a time to the twin-leg system.
- ⦿ Do not allow the lifelines to become tangled or twisted together as this may prevent them from retracting.
- ⦿ Do not allow the lifelines to pass under arms or between legs during use.

See below picture:

**Drawing 5.**



### **Horizontal Systems:**

In applications where the SRL-LE is used in conjunction with a horizontal system. (i.e. Horizontal Lifeline, Horizontal I-Beams Trolley), the SRL-LE snap hook and horizontal system components must be compatible. Horizontal systems must be designed and installed under the supervision of a qualified engineer.

### **Inspection:**

Before each use of this fall protection equipment carefully inspect it to assure it is in good working condition. Check for worn or damaged parts. Ensure all bolts are present and secure. Check that the lifeline is retracting properly by pulling out the line and allowing it to slowly retract. If there is any hesitation in retraction, remove the SRL-LE from service, mark " UNUSABLE". Inspect the lifeline for cuts, frays, burns, crushing and corrosion. Check locking action by pulling sharply on the line.

### **Inspection Frequency:**

The SRL-LE must be inspected at the intervals. More information could be found in Inspection Schedule and Checking List.

### **Product Life:**

The functional life of SRL-LE is determined by work conditions and maintenance. As long as the SRL-LE passes inspection criteria, it may remain in service.

### **Disposal:**

Dispose of SRL-LEs if it has been subjected to fall arrest forces or inspection reveals an unsafe or defective condition. Before disposing of the SRL-LE, cut the cable lifeline in half or otherwise disable the SRL-LE to eliminate the possibility of inadvertent reuse.

## **MAINTENANCE, SERVICING, AND STORAGE**

Cleaning: Cleaning procedures for SRL-LEs are as follows:

Ensure the SRL is kept free of excess paint, grease, dirt or other contaminants as this may cause to cable or retracting mechanism to malfunction. Ensure no debris enters the housing through the cable access port.

Clean the exterior of the unit as required with a detergent/water solution. Do not allow water other corrosion causing elements to enter the housing. After cleaning, pull the lifeline all the way out, allow the unit to air dry, then retract the lifeline into the unit. Do not allow the lifeline to freewheel back into the housing. Tag as " UNUSABLE" and store separately any unit in need of or scheduled for maintenance.

**DO NOT** use heat to dry.

**DO NOT** attempt to disassemble the SRL.

### Service:

RPGC30LE, RPG50LE, and RPG65LE are user repairable.

The SRL is designed to be used installed in an anchor cradle or attached overhead. While it may be used horizontally on a flat surface, the user may encounter a situation where the lifeline will not retract all the way due to misalignment and bunching up on the drum. If this happens, hang the SRL from a height sufficient to allow the full working length of the lifeline to be pulled off the drum, then allow the SRL to retract the lifeline completely. Maintain tension on the lifeline. Use a tag line if necessary.

### Storage:

Hang the SRL in a cool, dry, clean environment out of direct sunlight. Position the SRL so excess water can drain out. Avoid exposure to chemical or caustic vapors. Thoroughly inspect the SRL after any period of extended storage.

### Specifications:

SRL-LEs have been tested and certified to the performance requirements of the standard(s) identified on the labels. SRL-LEs documented in this instruction meet the following Arrest Force and Arrest Distance maximums when tested in accordance with ANSI Z359.14.

|                            |                   |
|----------------------------|-------------------|
| Average Arresting Force    | ≤ 1350 lbs. (6KN) |
| Maximum Arresting Force    | ≤ 1800 lbs. (8KN) |
| Maximum Arresting Distance | 30"               |

\*User weights above 310 lbs. are not within the scope of ANSI/ASSE Z359.14

The above results are valid when the SRL-LE lifeline is secured overhead. For applications where the SRL-LE is not secured overhead or where falls may occur over an edge, greater arresting distance will result.

### Dimensions:

Average working range for each kind of the SRL-LE is the different, such as the RPG081SLE, RPG082SLE, RPG081RLE & RPG082RLE are 8 ft(2.44m), the RPGC30LE is 30 ft(9.1m), RPG50LE is 50ft(15.2m), and the RPG65LE is 65ft(19.8m), but will vary slightly with length differences in the various End Connector options.

**Labeling:**

Illustrates the SRL-LEs labeling. All labels on the SRL-LE must be present and fully legible.



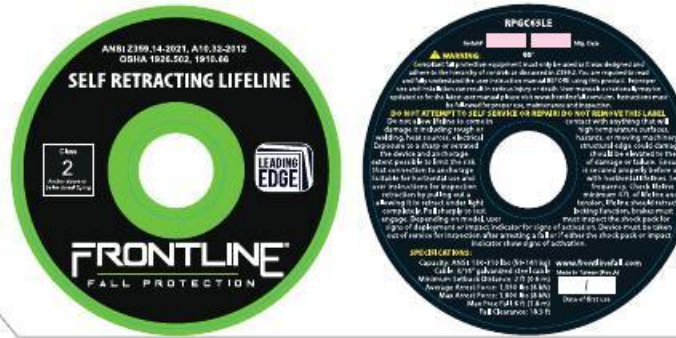
**RPG081SLE, RPG082SLE, RPG071RLE, RPG082RLE**



**RPGC3OLE**



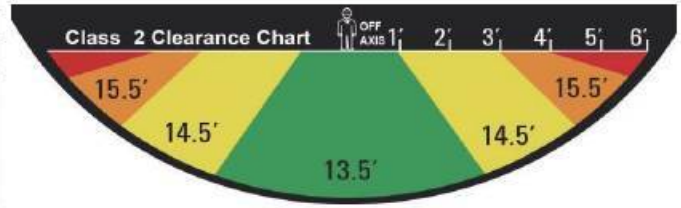
**RPGC5OLE**



**RPGC65LE**

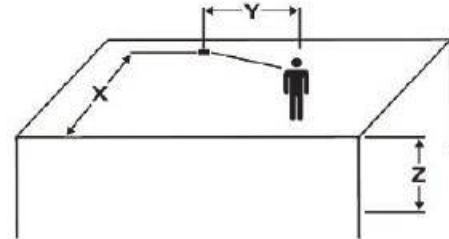
| Class 2 Clearance Chart - Read Instructions for Complete Details |                      |                      |                      |                      |                     |                      |
|--|----------------------|----------------------|----------------------|----------------------|---------------------|----------------------|
| Distance off Axis of Anchorage (Y)                               |                      |                      |                      |                      |                     |                      |
|  | 0.00 Foot<br>0.00 m  | 2.00 Foot<br>0.60 m  | 4.00 Foot<br>1.20 m  | 6.00 Foot<br>1.80 m  | 8.00 Foot<br>2.40 m | 10.00 Foot<br>3.00 m |
| Set-Back Distance (X)  | 2.00 Foot<br>0.60 m  |                      |                      |                      |                     |                      |
|  | 4.00 Foot<br>1.20 m  | 15.50 Foot<br>4.65 m | 13.07 Foot<br>4.19 m | 10.16 Foot<br>3.09 m | 7.71 Foot<br>2.35 m | 5.21 Foot<br>1.58 m  |
|  | 6.00 Foot<br>1.80 m  | 15.50 Foot<br>4.65 m | 13.02 Foot<br>3.96 m | 10.11 Foot<br>3.07 m | 7.66 Foot<br>2.33 m | 5.16 Foot<br>1.57 m  |
|  | 8.00 Foot<br>2.40 m  | 15.50 Foot<br>4.65 m | 13.02 Foot<br>3.96 m | 10.06 Foot<br>3.06 m | 7.61 Foot<br>2.32 m | 5.11 Foot<br>1.56 m  |
|  | 10.00 Foot<br>3.00 m | 15.50 Foot<br>4.65 m | 13.02 Foot<br>3.96 m | 10.01 Foot<br>3.05 m | 7.56 Foot<br>2.31 m | 5.06 Foot<br>1.55 m  |
|  | 12.00 Foot<br>3.60 m | 15.50 Foot<br>4.65 m | 13.02 Foot<br>3.96 m | 10.01 Foot<br>3.05 m | 7.56 Foot<br>2.31 m | 5.06 Foot<br>1.55 m  |

Clearance Required (Z) - Includes 2 foot Safety Margin

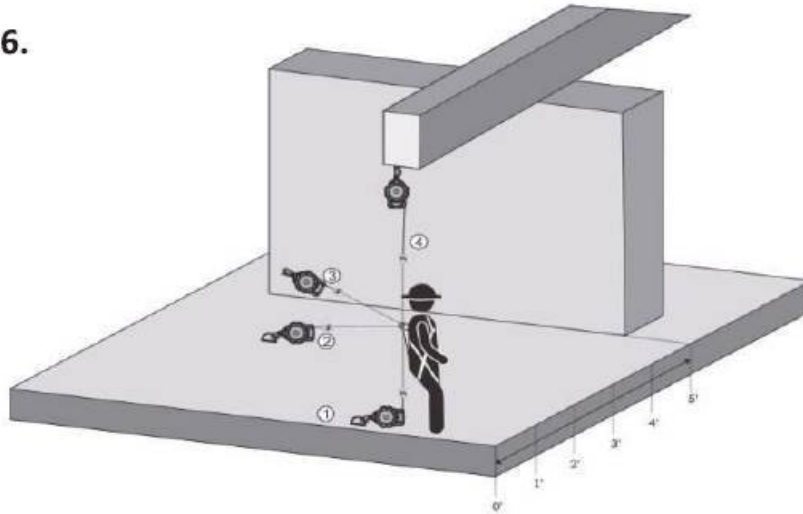


| Class 2 Clearance Chart - Read Instructions for Complete Details |                      |                      |                      |                      |                      |                      |
|--|----------------------|----------------------|----------------------|----------------------|----------------------|----------------------|
| Distance off Axis of Anchorage (Y)                               |                      |                      |                      |                      |                      |                      |
|  | 0.00 Foot<br>0.00 m  | 2.00 Foot<br>0.60 m  | 4.00 Foot<br>1.20 m  | 6.00 Foot<br>1.80 m  | 8.00 Foot<br>2.40 m  | 10.00 Foot<br>3.00 m |
| Set-Back Distance (X)  | 2.00 Foot<br>0.60 m  | 19.33 Foot<br>5.89 m | 16.33 Foot<br>4.98 m | 13.33 Foot<br>4.07 m | 10.33 Foot<br>3.15 m | 7.33 Foot<br>2.24 m  |
|  | 4.00 Foot<br>1.20 m  | 19.33 Foot<br>5.89 m | 16.27 Foot<br>4.95 m | 13.27 Foot<br>4.05 m | 10.27 Foot<br>3.13 m | 7.27 Foot<br>2.22 m  |
|  | 6.00 Foot<br>1.80 m  | 19.33 Foot<br>5.89 m | 16.21 Foot<br>4.93 m | 13.21 Foot<br>4.03 m | 10.21 Foot<br>3.11 m | 7.21 Foot<br>2.20 m  |
|  | 8.00 Foot<br>2.40 m  | 19.33 Foot<br>5.89 m | 16.15 Foot<br>4.91 m | 13.15 Foot<br>4.01 m | 10.15 Foot<br>3.09 m | 7.15 Foot<br>2.18 m  |
|  | 10.00 Foot<br>3.00 m | 19.33 Foot<br>5.89 m | 16.09 Foot<br>4.89 m | 13.09 Foot<br>3.99 m | 10.09 Foot<br>3.07 m | 7.09 Foot<br>2.16 m  |
|  | 12.00 Foot<br>3.60 m | 19.33 Foot<br>5.89 m | 16.03 Foot<br>4.87 m | 13.03 Foot<br>3.97 m | 10.03 Foot<br>3.05 m | 7.03 Foot<br>2.14 m  |
|  | 14.00 Foot<br>4.20 m | 19.33 Foot<br>5.89 m | 15.97 Foot<br>4.85 m | 12.97 Foot<br>3.95 m | 9.97 Foot<br>3.03 m  | 6.97 Foot<br>2.12 m  |
|  | 16.00 Foot<br>4.80 m | 19.33 Foot<br>5.89 m | 15.91 Foot<br>4.83 m | 12.91 Foot<br>3.93 m | 9.91 Foot<br>3.01 m  | 6.91 Foot<br>2.10 m  |
|  | 18.00 Foot<br>5.40 m | 19.33 Foot<br>5.89 m | 15.85 Foot<br>4.81 m | 12.85 Foot<br>3.91 m | 9.85 Foot<br>2.99 m  | 6.85 Foot<br>2.08 m  |
|  | 20.00 Foot<br>6.00 m | 19.33 Foot<br>5.89 m | 15.79 Foot<br>4.79 m | 12.79 Foot<br>3.89 m | 9.79 Foot<br>2.97 m  | 6.79 Foot<br>2.06 m  |
|  | 22.00 Foot<br>6.60 m | 19.33 Foot<br>5.89 m | 15.73 Foot<br>4.77 m | 12.73 Foot<br>3.87 m | 9.73 Foot<br>2.95 m  | 6.73 Foot<br>2.04 m  |
|  | 24.00 Foot<br>7.20 m | 19.33 Foot<br>5.89 m | 15.67 Foot<br>4.75 m | 12.67 Foot<br>3.85 m | 9.67 Foot<br>2.93 m  | 6.67 Foot<br>2.02 m  |

Clearance Required (Z) - Includes 2 foot Safety Margin



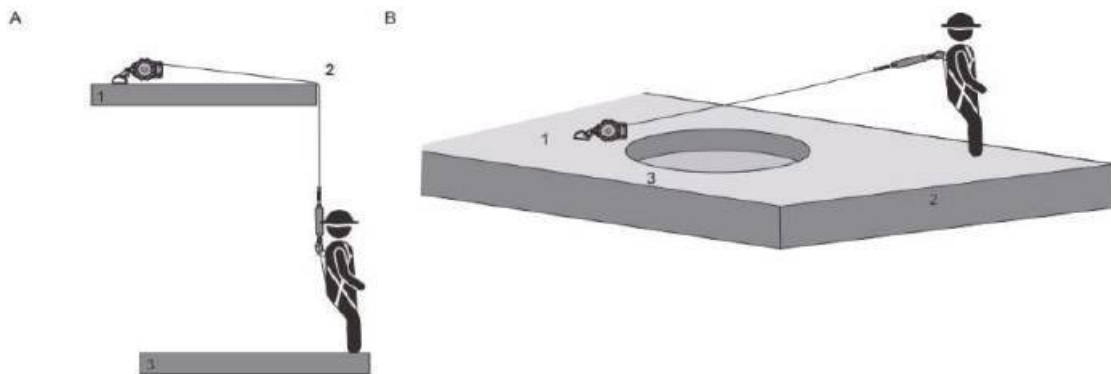
**Drawing 6.**



### Anchorage Range of Leading Edge SRL-LE

1. Anchorage of SRL at Foot Level with 0' Setback from Leading Edge.
2. Anchorage of SRL at Foot Level with 5' Setback from Leading Edge.
3. Anchorage of SRL Above Dorsal D-ring with 5' Setback from Leading Edge.
4. Overhead Anchorage of SRL Above Dorsal D-ring with 0' Setback from Leading Edge.

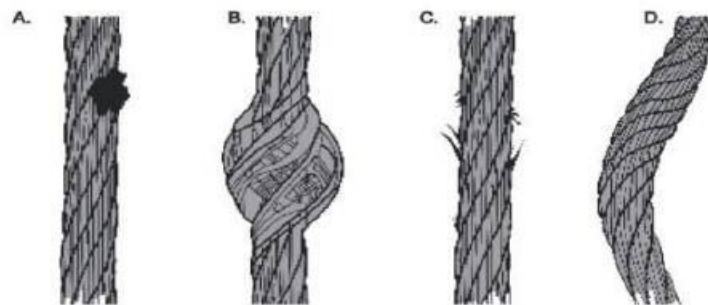
**Drawing 7.**



**Incorrect Use of Leading Edge SRL**

1. Do Not subject cable lifeline to Leading or Sharp Edge during normal use.
2. Do Not anchor SRL on opposite of existing hole or floor opening from work location.

**Drawing 8.**



**Incorrect Use of Leading Edge SRL**

- |  |                                 |
|--|---------------------------------|
| A. Heat Damage from Weld Spatter or Slag | C. Broken Wires within Strands. |
| B. Bird Caged                            | D. Curled, Bent or Kinked       |

**Indicator**



- A. The warning label is exposed at outside- immediately remove from service.
- B. Broken/ damaged indicator stitching- immediately remove from service.
- C. Intact indicator stitching- OK to use.

| Inspection requirements for self-retracting devices |  |  |                             |                                       |  |
|---|--|--|-----------------------------|---------------------------------------|--|
| ANSI Z359.14-2021                                   |  |  |                             |                                       |  |
| CSA Z2592.2-17                                      |  |  |                             |                                       |  |
| Type of use   | Application examples   | Example conditions of use  | Worker inspection frequency | Competent person inspection frequency | Product revalidation frequency   |
| Infrequent to Light                                 | Rescue and confined space, factory maintenance                 | Good storage conditions, indoor or infrequent outdoor use, room temperature, clean environments.         | Before each use             | Annually                              | At least every 5 years but not more than intervals required by the manufacturer. |
| Moderate to Heavy                                   | Transportation, residential construction, utilities, warehouse | Fair storage conditions, indoor and extended outdoor use, all temperatures, clean or dusty environments. | Before each use             | Semi-annually to annually             | At least every 2 years but not more than intervals required by the manufacturer. |
| Severe to continuous                                | Commercial construction, oil and gas, mining, foundry          | Harsh storage conditions, prolonged or continuous outdoor use, all temperatures, dirty environment.      | Before each use             | Quarterly to semi-annually            | At least annually but not more than intervals required by the manufacturer.      |

Notes:

- (1) Failure of a worker to perform [before each use] inspection or failure of an inspection by a worker shall initiate the requirement for inspection by a competent person.
  - (2) Failure of a competent person to perform inspections as specified in this Table, or failure of an inspection by the competent person shall initiate product revalidation or disposal.
  - (3) Determination of the type of use category shall be determined by a competent person.
  - (4) An SRL that is considered non-repairable, or not designed for disassembly such that internal inspection is not possible without rendering it unserviceable, is not subject to revalid
- ※These SRL's shall have service life and other inspection requirements as provided by the manufacturer's instructions.

| Component:             | Inspection:  |  | User |  | Competent Person |
|------------------------|--|--|------|--|------------------|
| SRL-LE                 | Inspect for loose or missing fasteners or damaged parts  |  |      |  |                  |
|                        | Inspect the housing for distortion, cracks, or damage  |  |      |  |                  |
|                        | Inspect the Harness Interface for distortion, cracks<br>The Interface should pivot freely.   |  |      |  |                  |
|                        | The Lifeline should pull out and retract fully without hesitation or creating a slack line condition.  |  |      |  |                  |
|                        | Ensure the SRL-LE locks up when the lifeline is jerked sharply.  |  |      |  |                  |
|                        | Lockup should be positive with no slipping.  |  |      |  |                  |
|                        | All labels must be present and fully legible.  |  |      |  |                  |
|                        | Inspect the entire SRL-LE for signs of corrosion.  |  |      |  |                  |
|                        | Lifeline   | Inspect the lifeline wire rope for cuts, kinks, broken wires, bird-caging, corrosion, welding splatter, chemical contact areas, or severely abraded areas.<br>Slide up Cable Guide Bumper and inspect ferrules for cracks or damage. The lifeline must be free of knots throughout its length. |      |  |                  |
| Harness Interface      | Inspect the Locking pin to ensure it is securely closed and locked around the harness shoulder straps.   |  |      |  |                  |
| Lanyard End Connectors | Inspect Snap hook for signs of damage, corrosion, and proper working condition.<br>Where present: Swivels should rotate freely and gates should open, close, lock and unlock properly. |  |      |  |                  |

