User Instruction Manual

Rope Grab Assembly

Part Number:
RL-3002

ISO 9001: 2008 Registered
Manual 103-0061

RIGID LIFELINES®

General Safety Information

Under Penalty of Law

- This *User Instruction Manual* is not to be removed except by the user of this equipment.
- Current *User Instruction Manuals* must always be available to the user.
- Read and understand these instructions before using equipment.
- ***Do not throw away these instructions.***

WARNING

Misuse or failure to follow warnings and instructions may result in serious personal injury or death.

This system is NOT a rescue alternative.

Users MUST have a functional, prompt, and project-specific rescue plan.

Users must read and understand the *User Instruction Manual* provided with the product and be properly trained by their employer prior to use per OSHA 29 CFR 1910.66 and 1926.503 or applicable local standards. Please refer to product labeling for information on specific OSHA regulations, and ANSI and CSA standards met by the product.

Compliant fall protection and emergency rescue systems help prevent serious injury during fall arrest.

For instructions about proper use, refer to supervisor, *User Instruction Manual*, or call Rigid Lifelines at: 844-467-4443.

Instructions For Use

- Failure to follow all instructions and limitations on the use of this equipment may result in serious personal injury or death.
- Never remove product labels that include important warnings and information for the Authorized Person/User.
- Thoroughly evaluate and plan all elements of your fall protection system(s) before using your equipment. Make sure that your system is appropriate for your needs and facility. Also be sure to calculate fall clearance and swing fall clearance.
- Users must have a rescue plan and the means to implement it. This plan must provide prompt employee rescue or assure that employees have the ability to rescue themselves in the event of a fall.
- Before using a personal fall arrest system, employees shall be trained in accordance with the requirements of OSHA 29 CFR 1910.66 in the safe use of the system and its components.
- Prior to each use, inspect all personal fall arrest system equipment for wear, damage, and other deterioration. Defective components must be removed from service **immediately** in accordance with the requirements of OSHA 29 CFR 1910.66 and 1926.502.
- After a fall occurs, this equipment must be removed from service and destroyed **immediately**.
- Store this equipment in a cool, dry, and clean environment that is out of direct sunlight when not in use.
- Never use fall protection equipment for purposes other than those for which it was designed. Fall protection equipment should never be used for towing or hoisting.
- Protect all synthetic material from slag, hot sparks, open flames, or other heat sources. Using heat resistant materials is recommended.
- Inspect and service equipment more frequently in a highly corrosive or caustic environment to ensure system integrity.
- Do not expose the equipment to any hazard which it is not designed to withstand. Contact Rigid Lifelines with questions.
- Check for obstructions below the work area to make sure any potential fall path is clear.
- Allow adequate fall clearance below the work surface.

Warnings For Rope Grabs / Wire Rope Grabs

- For use by ONE person only. Maximum capacity is 310 pounds (140.6 kilograms), including tools — **DO NOT EXCEED THIS WEIGHT.**
- Do not use if any part of the device appears to be damaged.
- Do not attempt to service the device or alter it in any way.
- Attach the device to appropriate vertical lifelines only.
- Do not use this product on unstable surfaces, fine grain materials, or particulate solids (ex: sand or coal).
- Maximum arrest distance: 39 inches (1 meter).

Warnings For Vertical Lifelines

- Rigid Lifelines® Vertical Lifelines have a minimum tensile strength of 6,000 pounds (27 kilonewtons). **Note:** OSHA requires a minimum tensile strength of 5,000 pounds (22.2 kilonewtons).
- Lifelines must be attached independently of the working surface and anchored above the user to prevent a swing fall.
- Lifelines must be kept clean.
- Never allow the lifeline to become slack or to pass under or entwine around arms, legs, neck, or any other obstacle.
- Do not tie knots in lifelines.
- When evaluating your workspace for fall clearance, consider these lifeline elongation characteristics in your calculations:
  - Rope stretch = 5%
  - Wire rope stretch = 0.5%

Limitations For Use

- A Competent Person must ensure compatibility of all connections and all system elements.
- Do not use the system if the device does not lock onto the lifeline or if any component in the system does not operate properly.
- Install and use device and lifeline in a manner that reduces potential swing fall.
- Allow sufficient clearance in the event of a free fall. For synthetic rope lifelines, add 1 foot (0.3 meters) of fall clearance for every 20 feet (6 meters) of rope above the connection point. If a shock absorber is used, you must also allow for an additional 3.5 feet (1.06 meters) maximum elongation.
- Rig system to limit free fall distance to 6 feet (1.8 meters) or less.
- Do not expose this equipment to harmful chemicals or solutions. Contact Rigid Lifelines with questions.

- Use caution when working with this product near moving machinery, electrical hazards, sharp edges, or abrasive surfaces, as contact may cause equipment failure, personal injury, or death.
- Minors, pregnant women, and anyone with a history of back and/or neck problems should not use this equipment.
- Do not use or install equipment without proper training from a "Competent Person," as defined by OSHA 29 CFR 1926.32(f).
- Only Rigid Lifelines, or entities authorized in writing by Rigid Lifelines, shall make repairs or alterations to the equipment.

System Compatibility

Rigid Lifelines® Rope Grab (RL-3002) Assembly and Vertical Lifelines are designed for use with Rigid Lifelines-approved components. Substitution or replacement with non-approved component combinations, subsystems, or both may reduce the equipment function and endanger the system compatibility. This incompatibility may affect the reliability and safety of the total system.

WARNING

Always use Rigid Lifelines Rope Grab Assembly with specified Rigid Lifelines Vertical Lifelines. Vertical Lifelines must have a minimum tensile strength of 6,000 pounds (27 kilonewtons).

Connecting To The Anchorage

The vertical lifeline must be attached to an anchor point capable of supporting 5,000 pounds (22.2 kilonewtons) per worker or meet OSHA 1926.502 requirements for a safety factor of two. Anchorage requirements based on ANSI are as follows:

- For fall arrest systems: Anchorages must withstand a static load of 5,000 pounds (22.2 kilonewtons) for non-certified anchorages or two times the maximum arresting force for certified anchorages.
- When more than one personal fall arrest system is attached to an anchorage, the above anchorage strengths must be multiplied by the number of personal fall arrest systems attached to the anchorage.

Make sure connections are compatible in regards to size, strength, and shape. Never use an anchor point that will not allow snap hook or carabiner keeper to close and lock or that applies a load to the keeper.

Connection Compatibility Limitations

All Rigid Lifelines® equipment must be coupled to compatible connectors. OSHA 29 CFR 1926.502 prohibits snap hooks from being engaged to certain objects unless two requirements are met:

1. It must be a locking type snap hook.
2. It must be "designed for" making such a connection.
   a. "Designed for" means that the manufacturer of the snap hook specifically created the snap hook to be used to connect to the equipment in question.

The following conditions can result in rollout* when a non-locking snap hook is used. Avoid the following connections:

- Direct connection of a snap hook to horizontal lifeline.
- Two (or more) snap hooks connected to one D-ring.
- Two snap hooks connected to each other.
- A snap hook connected back on its integral lanyard.
- A snap hook connected to a webbing loop or webbing lanyard.
- Improper dimensions of the D-ring, rebar, or other connection point in relation to the snap hook dimensions that would allow the snap hook keeper to be depressed by a turning motion of the snap hook.

Figure 1.

* Rollout: A process by which a snap hook or carabiner unintentionally disengages from another connector or object to which it is coupled. (ANSI Z359.0-2007)

Connecting To The Body Wear

Rope Grab Assembly (RL-3002) should only be connected to the dorsal (back) D-ring of a full body harness; see Figure 2.

Figure 2.

Connecting Rope Grab To Rope

Rope Grab Assembly (RL-3002) includes a shock absorber. The energy absorbing end of the lanyard must be connected to the dorsal D-ring and the rope grab end of the lanyard must be connected to a Rigid Lifelines® Vertical Lifeline with a minimum tensile strength of 6,000 pounds (27 kilonewtons).

Installation

With the arrow pointing upward on the Rope Grab device, lift up the spring-loaded cam handle that connects the gripping cams.

Figure 3.

Slide the Rope Grab to the desired position on the lifeline and release the cam handle. The spring-loaded gripping cams will keep the Rope Grab in position. Connect device to full body harness (see section "Connecting To The Body Wear").

WARNING

NEVER attach the device on the lifeline with the arrow pointing downward; it will not lock onto the lifeline should a fall occur.

Inspection

Rigid Lifelines® Rope Grabs and Vertical Lifelines are designed for today's rugged work environments. To maintain their service life and high performance, system components should be inspected frequently. Inspect each product thoroughly before each use. Regular inspection by a Competent Person for wear, damage, or corrosion should be a part of your safety program.

Before each use, visually inspect for the following:

Inspection For Rope Grabs/Wire Rope Grabs

- Inspect for physical damage, cracks, wear, and corrosion.
- Check cam and/or springs for damage or loss of tension.
- Check pawl and locking mechanism.
- Be sure that all parts move freely without hesitation.
- Check rivets for damage, cracks, wear, or corrosion.
- Inspect for malfunctioning components, broken or missing springs.

Inspection For Vertical Lifelines

- **Rope Lifelines:** Rotate the rope lifeline while inspecting the entire length for any fuzzy, worn, broken, or cut fibers. Weakened areas from extreme loads will show a visible change in original diameter. The rope diameter should be uniform throughout the entire length following a short break-in period. See Figure 4.

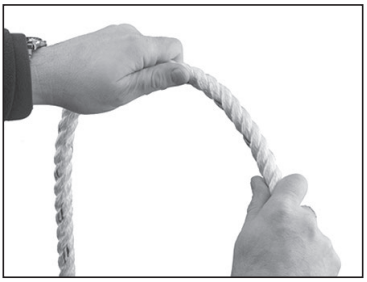

Figure 4: Inspecting the rope.

- **Snap Hooks / Carabiners:** Inspect device closely for hook and eye distortions, cracks, corrosion, or pitted surfaces. The keeper (latch) should seat into the nose without binding and should not be distorted or obstructed. The keeper spring should exert sufficient force to firmly close the keeper. Keeper locks must prevent the keeper from opening when the keeper closes. See Figure 5.

Figure 5: Inspecting the snap hooks and carabiners.

- **Thimbles:** The thimble must be firmly seated in the eye of the splice. The splice should have no loose or cut strands. The edges of the thimble must be free of sharp edges, distortion, or cracks. See Figure 6.

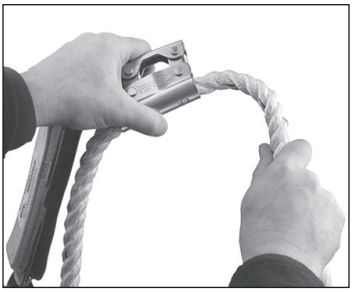

Figure 6: Inspecting the thimble.

If inspection reveals a defect in condition, remove the device from service immediately. Always remove any equipment subjected to a fall from service; see Figure 7. Products removed from service should be disposed of in a manner that prevents inadvertent further use.

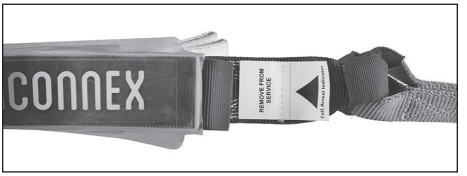

Figure 7: Deployed fall indicator.

Cleaning And Maintenance

Basic care of all Rigid Lifelines® equipment will prolong its durable life and will contribute toward the performance of its vital safety function. Clean the equipment to remove any dirt, corrosives, or contaminants.

Storage

Store equipment in a clean and dry area that is not exposed to fumes or corrosive elements. Avoid storing equipment in areas with excessive heat, steam, or long periods of sunlight.

Servicing

A record log of all inspection dates for this device **must** be maintained. Rigid Lifelines® Rope Grabs and Wire Rope Grabs cannot be repaired and **must** be replaced if damaged. This system and all components must be taken out of service if subjected to fall arrest forces. For questions, concerns, or assistance, contact Rigid Lifelines at: 844-467-4443.

Labeling

WARNING! Follow manufacturer's instructions provided with this lanyard at time of shipment. Fully read and understand these instructions before using. Improper use of this product could result in serious injury or death. Avoid contact with sharp edges and abrasive surfaces that can cut or damage the webbing or components. Make only safe, compatible connections. For use only with other OSHA and ANSI compliant equipment as part of a personal fall arrest system. Remove this lanyard from service if a fall has incurred. USER MUST INSPECT BEFORE EACH USE.

Attach shock absorber end of lanyard to fall arrest D-Ring on harness.
Shock Absorbing Lanyard: Meets ANSI Z359.13, A10.32 (2012) and OSHA requirements.

Serial Number :
Date of Manufacture :
Model Number : RL-3002
Max. Free Fall Limit : 6 Ft.

Capacity : 130-310 lbs. max including tools
Max. Elongation : 48"
Material : Polyester

DO NOT REMOVE THIS LABEL.

RIGID LIFELINES

Notes

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Service Policy

1. Obtain as much information as possible concerning the problem through personal observation by yourself or other authorized personnel familiar with the job and equipment: include model, serial and/or part numbers, voltages, speeds, and any other special identifying features. Be prepared to discuss the situation in detail.
2. All authorized labor charges will be based on straight time. Hourly rates, estimated man hours, and not to exceed total dollar amount required for corrections are to be agreed upon before authorization is given. There will be no allowances for overtime except in dire emergencies and then only with prior approval.
3. A verbal agreement may be reached immediately on both the method of correction and the approximate cost. A warranty authorization number will be assigned for the specific incident. A confirming written authorization will be forwarded to the distributor.
4. The distributor must send an itemized invoice, showing our release number or invoice number and warranty authorization number after authorized corrections have been made. A credit memo will be issued by accounting after the invoice has been received and approved. Warranty charges ARE NOT to be deducted from outstanding open account invoices under any circumstances.
5. Any field corrections made prior to an authorization by Rigid Lifelines will not be accepted as a warranty charge or the responsibility of Rigid Lifelines. Any modification to the equipment made without prior approval of the seller will void all warranties. A verbal authorization for modification may be obtained, in which event a warranty authorization number will be assigned for the specific modification. A confirming written authorization will be forwarded to the distributor.

One-Year Equipment Warranty

Rigid Lifelines warrants all Rigid Lifelines® fall protection soft goods, devices, connectors, and accessories to be free from defects in material and workmanship for a period of one (1) year, commencing on the date of shipment to the first retail purchaser ("Purchaser").

Rigid Lifelines is dedicated to offering superior service and quality products to all of our customers. If you would like to contact a customer service representative, please call the following number: 1 (844) 467-4443. We will be happy to assist you in any way that we can.

These warranties do not extend to equipment which has been subject to misuse, use in excess of rated capacity, negligent operation, use beyond Rigid Lifelines published service factors, improper installation or maintenance, adverse environments, and does not apply to any equipment which has been repaired or altered without Rigid Lifelines written authorization. This warranty is void for any product that is designed to deform or absorb energy during a fall event and needs to be replaced after a fall event has occurred.

Written notice of any claimed defect must be given to Rigid Lifelines within thirty (30) days after such defect is discovered. Rigid Lifelines obligation, and Purchaser's sole remedy under this warranty is limited to, at Rigid Lifelines discretion, the replacement or repair of the equipment at Rigid Lifelines factory or at a location approved by Rigid Lifelines. THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES WHATSOEVER WHETHER EXPRESS, IMPLIED, OR STATUTORY. SELLER MAKES NO WARRANTY AS TO THE MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF THE EQUIPMENT AND MAKES NO OTHER WARRANTY, EITHER EXPRESS OR IMPLIED.

Rigid Lifelines shall not be liable, under any circumstances, for any indirect, special, or consequential damages including (but not limited to): lost profits, increased operating costs, or loss of production. This warranty shall not extend to damages including (but not limited to): lost profits, increased operating costs, or loss of production. This warranty shall not extend to any components or accessories not manufactured by Rigid Lifelines (example: casters), with the exception of the components, systems, or accessories involved with XSPlatforms, and purchaser's remedy for such components and accessories shall be determined by the terms and conditions of any warranty provided by the manufacturer of such components and accessories.

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