



# OWNER'S Manual

AND INSTRUCTIONS  
FOR

## CONTINUED AIRWORTHINESS

Part #490-H(Size)Q  
with  
#930-(Series)

(Manual Revision Date: 12/23/2020)



## WARNINGS AND CAUTIONS

The products offered for sale by LSC are of a rescue and survival equipment nature. Inherent to all rescue and survival environments is an increased risk of injury and/or possible death to an individual or group of individuals. The equipment offered by LSC is intended to aid the professional rescuer(s) and/or survival victim(s). However, the risk of injury or death cannot be completely eliminated or foreseen. Equipment training, including continued proficiency reviews and maintenance, is vital to the proper and safe use of all rescue and survival equipment. It is the responsibility of the purchasing and end-user organization or individual to:

- » Determine the suitability of equipment for the selected application.
- » Define the operational procedures and safety guidelines associated with the proper utilization, maintenance (including service life) and storage of the rescue and survival equipment. All individuals must be thoroughly trained and familiarized with the intended purpose, correct use and function of the equipment. **Failure to do so may result in serious injury or death.**

Additionally:

- » The TRITON vest must be visually inspected prior to use per post use inspection procedures contained in this manual.
- » DO NOT allow the harness to become excessively soiled. Rinse with fresh tap water after exposure to salt or chlorinated water.

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## PRODUCT DESCRIPTION



The Triton harness with Quad-LOK release device is the latest version of the Triton rescue harness series. The Quad-LOK is the first purpose-built device intended for helicopter hoisting operations that is designed to release under loads over 200 kilograms - and is complete ambidextrous in operation. The device is integrated on the riser hoist strap, which is easily accessible to the user, and allows for quick egress from the harness in the event of an emergency. Made of titanium and stainless-steel components, the device can withstand the harshest environments. A MOLLE panel system is sewn on each side to allow the user to customize the needed configuration for the mission. Webbing loops are located on each side for tether attachment points while carrying out duties inside the aircraft.

The harness is constructed of Mil-Spec webbing and low profile, quick adjusting, stainless steel hardware. When hoisted the upright, slightly reclined, and seated position allows total use of operator hands. Ideal for rapid deployment in swift/cold water or cliff type rescues. Wide leg and waist straps optimally distribute weight for superior comfort and support. All components and materials are corrosion resistant for the marine environment.

## RESCUE HARNESS LIMITATIONS

Rescue harnesses and load bearing webbing products manufactured by LSC for use in Human External Cargo (HEC) operations have a recommended service life limit of fifteen (15) years from Date of Manufacture or twelve (12) years from the date placed in service—whichever shall occur first. The date of manufacturer can be found on the label.

The maximum weight limit for this harness is 450 pounds. The maximum operating weight is the total weight of the individual and all equipment or rescue personnel supported by the harness in an operation.

Proper harness sizing is based on height as follows:

490-HMQ (Medium) fits 64"-69" tall (162-175cm)

490-HLQ (Large) fits 68"-73" tall (173-185 cm)

490-HXLQ (Extra-Large) fits 72"-78" tall (183-198 cm)

490-HXXQ (Double Extra-Large) fits 74"-80" tall (188-203 cm)

This rescue harness does not have any unique aspects of installation for the user.

Do not expose the harness to flame or high temperature. Carry the harness where it will be protected as the harness could melt or burn and fail if exposed to flame or high temperature.

Keep these instructions/manual - after it is separated from the harness - and retain it as a permanent record. A copy of these instructions should be kept with the harness.

Refer to this information before and after each use.

The conditions and tests for TSO approval of this article are minimum performance standards. Those installing this article, on or in a specific type or class of aircraft, must determine that the aircraft installation conditions are within the TSO standards. TSO articles must have separate approval for installation in an aircraft.


Non-TSO Function: Quad-LOK release device #930-(series)

The quick-release attachment device on the end of the hoist strap is not a requirement per FAA TSO-C167. Considerations for all mechanical functioning of the device show no adverse effects that would interfere with the TSO performance standards. The quick-release device does not alter the functional use of the harness for the user and provides an equal level of safety.

The Quad-LOK release device can release under a load of up to 1,000lbs (453 kg) under most conditions using just one hand of the operator. Multiple icing tests have determined that even severe icing does not damage the device. However, if icing of the cover latches occurs the release functionality is impaired.

## LABELING INFORMATION

The TRITON product label is located on the inside of waist belt.

TRITON HARNESS WITH QUAD-LOK	
P/N: (SEE NOTES)	Height Size: (SEE NOTES)
S/N: (SEE NOTES)	Waist Size: (SEE NOTES)
DOM: MM/YYYY	AUTH Load: 450lbs (182kg)
	AUTH number of persons: 1
In-Service Date: _____	
Life Limit Date: 15 years from DOM or 12 years from date placed in service, whichever shall occur first, when inspected in accordance with manufacturing instructions.	
This life safety harness meets the requirements of NFPA 1983, Standard on Life Safety Rope and Equipment for Emergency Service, 2001 Edition; Class III. This harness is not flame-resistant! Do not remove this label!	
This is one part of a multiple-piece harness and must be used in conjunction with component #930-(series) in order to fully meet the criteria of Class III Harness.	
FAA TSO-C167	
	LIFESAVING SYSTEMS CORP. 220 ELSBERRY ROAD APOLLO BEACH, FL 33572 <a href="http://www.lifesavingsystems.com">www.lifesavingsystems.com</a> MADE IN USA

## POST-USE INSPECTION

### WARNING

Avoid eye and skin contact with corrosion preventive, fluid film. Avoid inhalation or ingestion. Use in a well-ventilated area. Wash thoroughly with soap and water after handling or exposure. Remove contaminated clothing immediately.

Perform this inspection after the last deployment of the day. Documentation is not required but recommended.

### Tools / Test Equipment

» None.

### Expendables

» Paper towels.

### Consumables

» Corrosion Preventive, Fluid Film (MSDS).

### Post-Use Inspection Procedures

**Step 1:** Remove all survival equipment from the pockets.

**Step 2:** Rinse the harness and survival items with fresh water.

**Step 3:** Dry the survival items with paper towels.

**(a)** Chest and leg bayonet fittings and buckles

**(b)** Any appropriate survival items in need of protection (knives, clips, etc.)

**Step 4:** Hang the harness on a wooden hanger until dry.

**Step 5:** Stow the survival items in the equipment pockets.

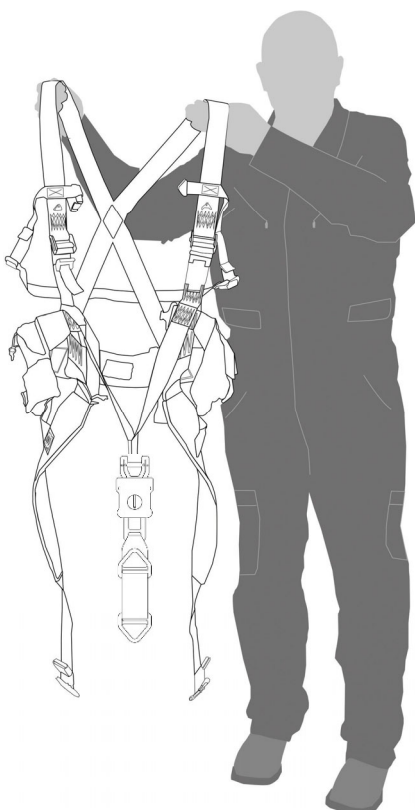
**Step 7:** Inspect harness webbing and all stitching for wear or defects. If any are noted - remove harness from service.

**NOTE:** Refer to Quad-LOK care and use listed on page 13 of this manual.

## USING YOUR TRITON HARNESS

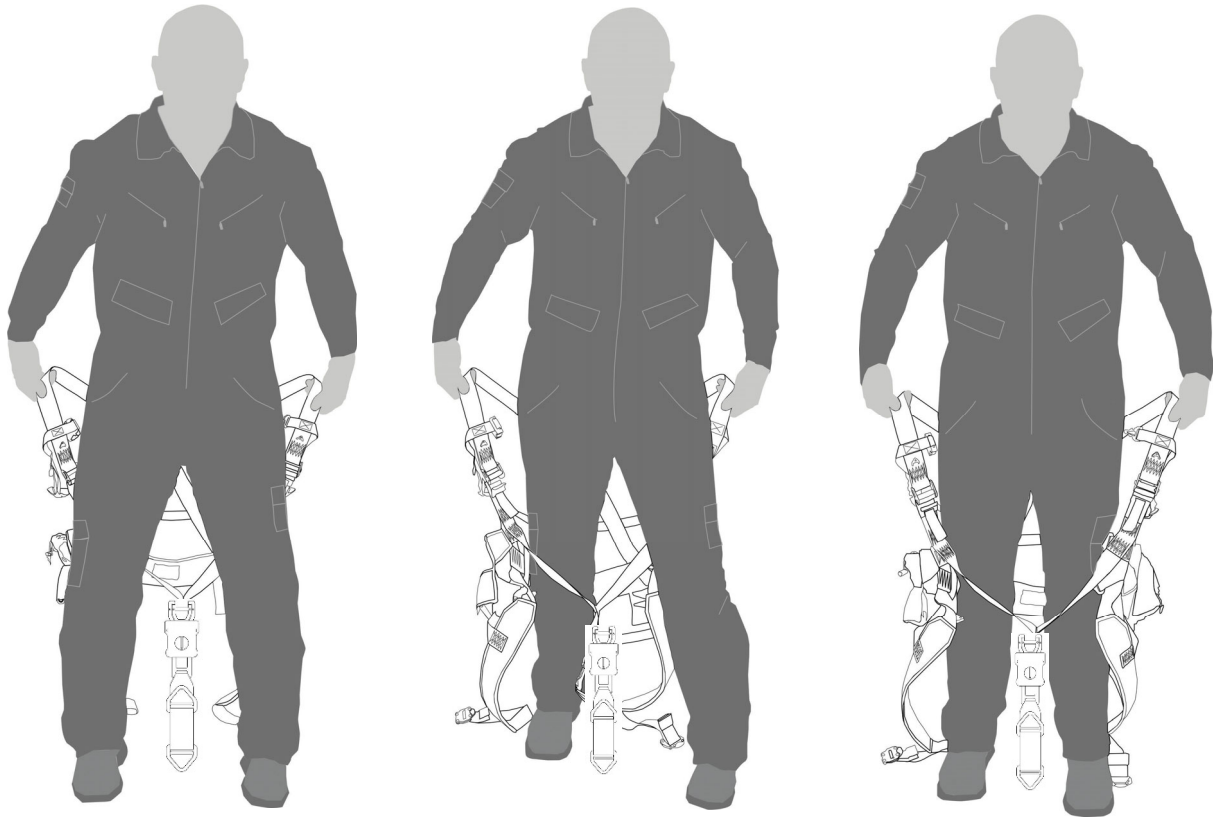
Position the TRITON with the front up.

Open the chest and leg buckles, remove v-ring/lifting strap from stowage pocket, and fully extend the waist and shoulder straps.



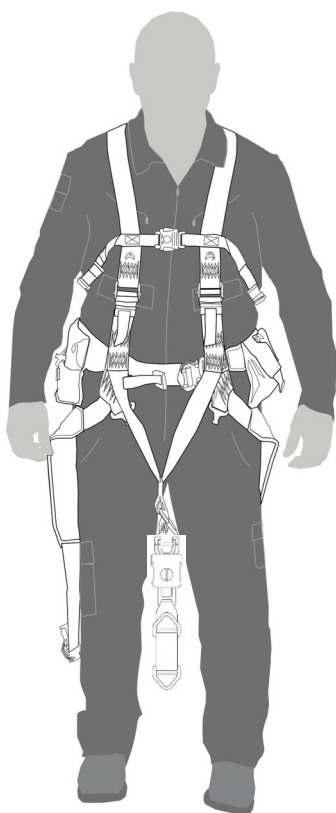
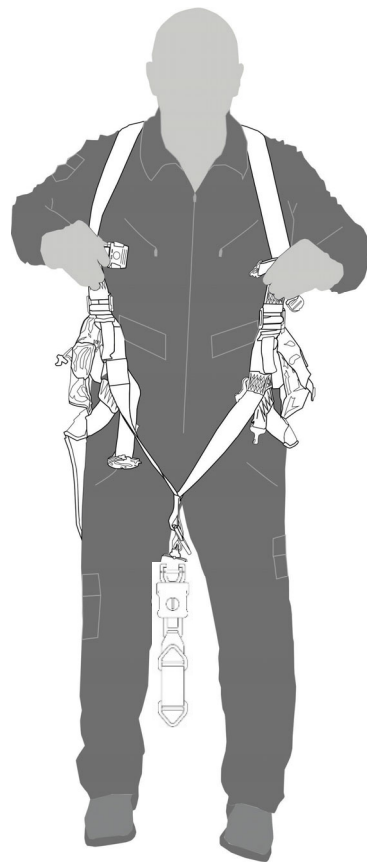
Hold the vest open behind you with both hands. Step through the waist strap with one foot then the other.



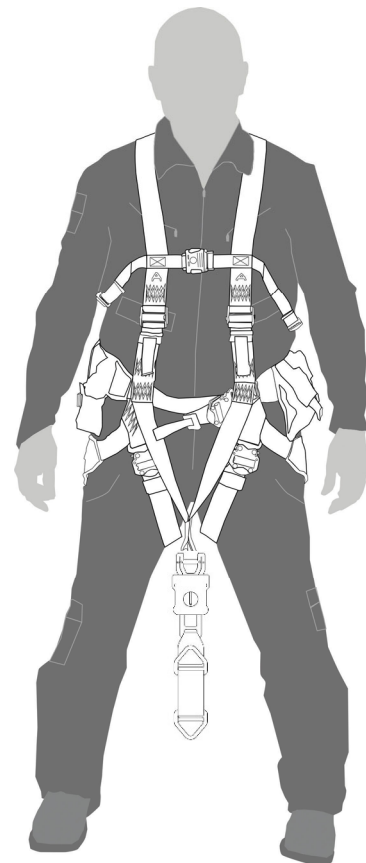


Pull the vest and harness into position and put your arms through the shoulder straps.

Secure the chest  
buckle and waist  
straps.

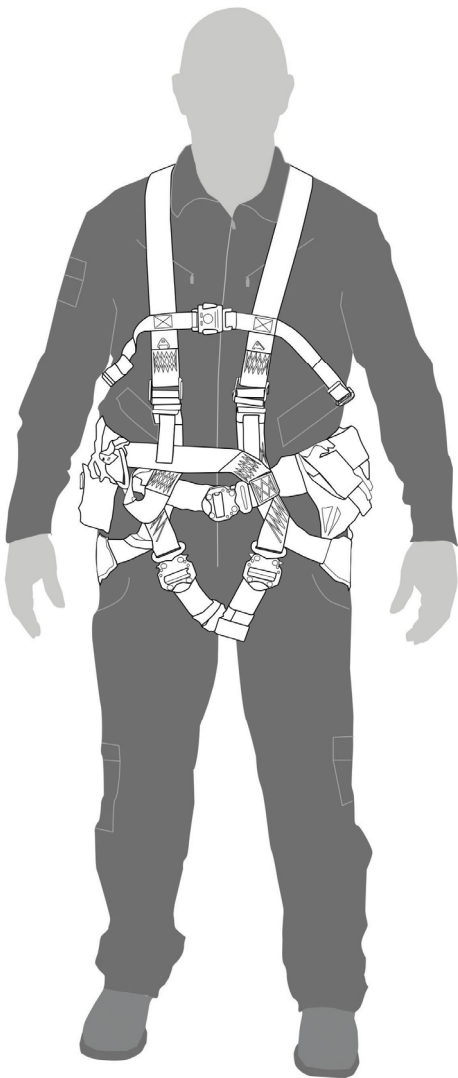


Secure the leg  
buckles.



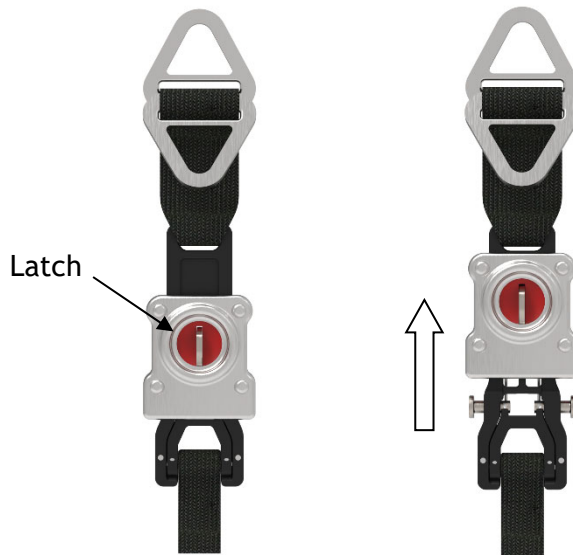
Re-stow the v-ring and  
lifting strap in the correct  
storage pocket (right  
side, upper).

Make final adjustments  
to suit comfort and  
security.

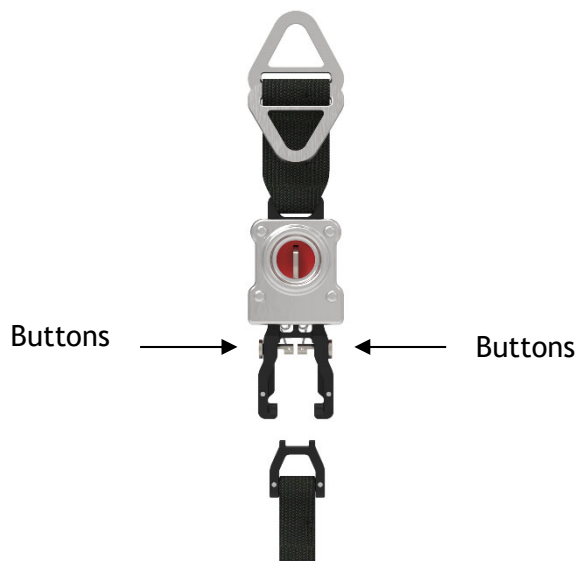


## USING YOUR QUAD-LOK RELEASE DEVICE

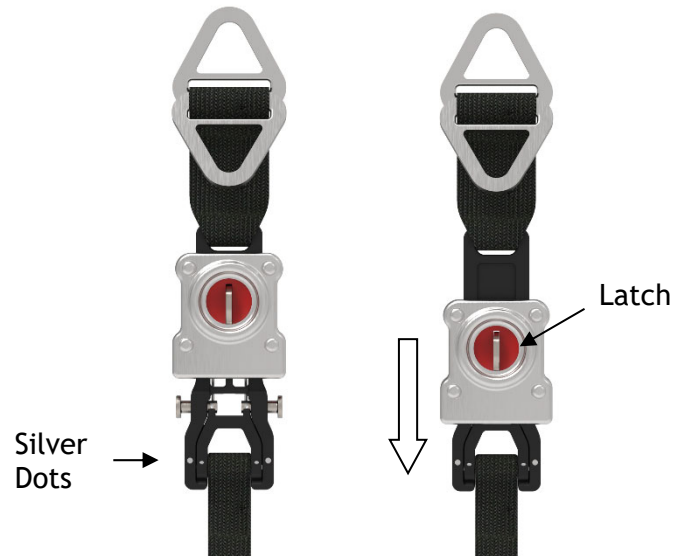
1. The safety cover is opened by depressing the two recessed cover latches simultaneously which release the cover and allows the operator to slide the cover up and into the ready position. This action exposes the primary release buttons. The operator may simply depress the cover latches again and reset the device to its fully secure state if release is unnecessary.



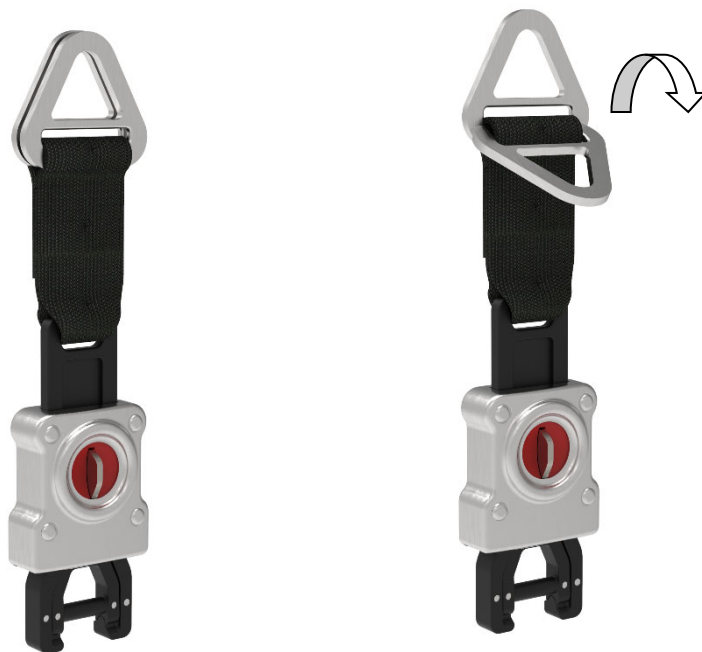
2. To release the harness, both primary release buttons must be depressed simultaneously.



3. To reset the device, simply depress the primary release buttons and lay the tumbler into the frame - aligning the silver dots on the tumbler with those on the main frame and release the buttons. Depress the cover latches and slide the cover securely into position.



4. Some release device tethers are equipped with two separate V-rings. Both V-rings may be used together for primary hoisting operations or one can be reversed for secondary equipment hookups.



## *Limitations*

- The working load limit of the Quad-LOK Release is 600lbs (272 kg) and has been tested to 7,000lbs (3,175 kg) without failure or deformity giving the device a safety factor of at least 11.
- The device can release under a load of up to 1,000lbs (453 kg) under most conditions using just one hand of the operator.
- Icing Limitations: Multiple icing tests have determined that even severe icing does not damage the device. However, if icing of the cover latches occurs the release functionality is impaired. LSC makes an Ice Cover (a neoprene sleeve) for use in extreme icing conditions.
- Life Limit: The recommended service life limit of the Quad-LOK is ten (10) years with one required (no cost) factory servicing at five years. The life limit can be extended at the ten-year mark to 15 contingent on full and inspection and re-certification of the device at the factory.

## *Pre-Flight Checks*

The 930 Quad-LOK should be inspected by the user prior to each flight for condition and security as follows:

1. Inspect the condition of the webbing attachment and the metallic surface of the Quad-LOK for damage.
2. Inspect the cover rivets for security.
3. Depress the cover latches to unlock the cover and move the cover to the up and locked position. (see figure 2 below)
4. Look up into the cover and turn the Quad-LOK over to inspect the main spring as much as possible to check for any signs of corrosion or damage.
5. Pulling straight up slightly on the Quad-LOK with one hand, depress the main release buttons with the other hand. The tumbler should release from the main frame.
6. Inspect the tumbler for damage. Inspect the lower base of the main frame (where the tumbler sits) for damage or excessive wear.
7. To reset the device, simply depress the primary release buttons and lay the tumbler into the frame - aligning the silver dots on the tumbler with those on the main frame and release the buttons. Depress the cover latches and slide the cover securely into position.

8. Check for the cover security by trying to force the cover open without depressing the cover latches - the cover should stay locked into place.

Note: The Quad-LOK cover has been tested to hold securely over the main release pins at forces equal to 1,000lbs of pull.

Note: If damage of any kind is suspected, remove the Quad-LOK from service and contact LSC for a consultation.

### *Pre-Hoist / Pre-Load Checks*

1. Check to verify that the cover of the Quad-LOK is down and locked and covering the main release buttons.

### *Post Use - Salt Water Exposure*

1. Thoroughly rinse the Quad-LOK with fresh water (under a sink or water hose) for 60 seconds while actuating the cover latches, removing, and replacing the Tumbler until all salt deposits are removed.
2. Allow Quad-LOK to dry.
3. Perform a Pre-Flight Check to ensure proper operation of the Quad-LOK. Light machine oil or fluid film may be applied to the main release pins and the main spring holes in the release pins.

### *Post Release-Under-Load*

Perform this inspection should the device be released during a hoisting emergency.

1. Perform all steps of a Pre-Flight Inspection.
2. Inspect the top surface of the tumbler (where the release pins slide across the surface for chips / cracks. None should be present.
3. Check the primary release pins for proper functioning.
4. If any discrepancies exist - remove the Quad-LOK and associated equipment (harness or wander lead) from service and send to LSC for NDI and overhaul. (Customer responsible for shipping costs only.)



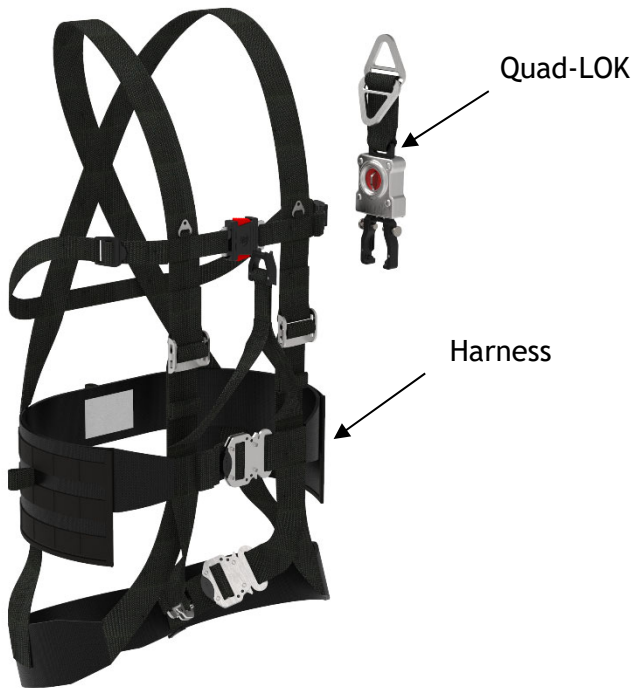
## *Quinquennial Inspection*

1. Every five years send the main section of the Quad-LOK to LSC for dis-assembly, spring replacement, and reconditioning. (Customer responsible for shipping costs only.)

## TRITON #490-H(Size)Q IPB AND PARTS LISTING

1 - Quad-LOK: 930-(Series)

1 - Harness: 490-H(SIZE)Q



## SPECIFICATIONS

Weight	Harness with Quad-LOK 5lbs (2.26 kg)
Quad-LOK	Release Limit: up to 1,000lbs (453kg)
MOLLE System:	6-Panel Configuration (each side)
Harness Webbing:	Mil-Spec webbing: Breaking Strength 7,000lbs (Min) (3175kg)
Harness Service Life:	12 years from date placed in service or 15 years from date of manufacture, whichever occurs first.
Quad-LOK Life Limit:	The recommended service life limit is ten (10) years with one required (no cost) factory servicing at five years. The life limit can be extended at the ten-year mark to 15 contingent on full and inspection and re-certification of the device at the factory.
Service Life Conditions	Documented positive in-service and monthly inspections.
Disqualifying Events	Any bending of any metal part, 3 or more consecutively loose or broken stitches or significant fraying of webbing.
Load Limit	450lb - 182 kg. MAX
Required Maintenance	Acceptance in-service inspection, post-use inspection, pre-flight/use inspection.



Owner's Manual and Instructions for Continued Airworthiness, Part #490-H(Size)Q Copyright  
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