SPECIFICATIONS & USER MANUAL

Stableseat aerial rescue vest

Part Number: CRC-HRB-SS1.SER

Intended for specialized personnel or expert users



Please read these instructions carefully before installing, servicing, or operating the equipment. This manual may be modified without notice. In the event this manual is translated, the English version is definitive. For latest manual revision go to **cascade-rescue.com**

PLEASE SAVE THESE INSTRUCTIONS

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A. General Safety Precautions

This manual is intended for specialized personnel or expert users. These instructions should be referred to before and after use and kept on file for periodic reference and training.

Product

Cascade Rescue StableSeat Aerial Rescue Vest (ARV) - Part number CRC-HRB-SS1.SER

Safety Precautions

WARNING! Activities involving the use of this equipment are inherently dangerous. You are responsible for your own actions and decisions.

WARNING! This product must only be used by competent persons or expert users skilled in technical rescue.

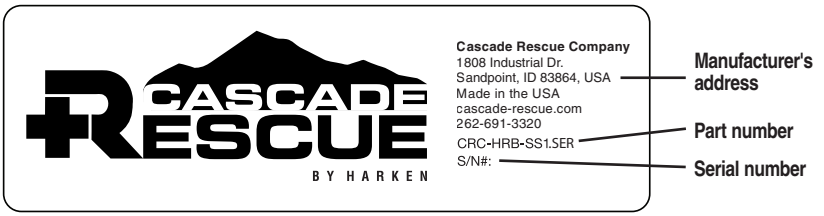
WARNING! Before using this equipment, you must:

1. **Read, understand, and follow all instructions for use.**
2. **Get specific training in its proper use.**
3. **Become acquainted with its capabilities and limitations.**
4. **Understand and accept the risks involved.**

WARNING! Failure to heed any of these warnings may result in severe injury or death.

B. Traceability and markings

Product label



C. Standards

Device

Berry Amendment compliance (10 U.S.C. 2533a)

Steel Rings

ANSI/ASSP Z359.12-2019 (steel rings only)ww

CSA Z259.12-16 (steel rings only)

D. Specifications

Weight	5 lbs	2.27 Kg
Storage size	18 in x 7 in	46 cm x 18 cm
Storage size circumference	22 in	56 cm
Strengths		
Safe working load (SWL) **Front and rear grab handles each**	350 lbs	155 kg
Minimum breaking strength **Steel lifting rings - each**	7600 lbs	3440 kg
Minimum breaking strength **ARV entire device**	3600 lbs	1631 kg
Acceptable load **ARV entire device**	500 lb	227 Kg
Materials		
Nylon webbing	Magnet closures	
Drop forged steel hardware	Cordura	
Velcro® brand hook and loop closures	Polyester and nylon assorted fabric	
Life Span		
ARV device lifespan -	10 years from date of manufacture	

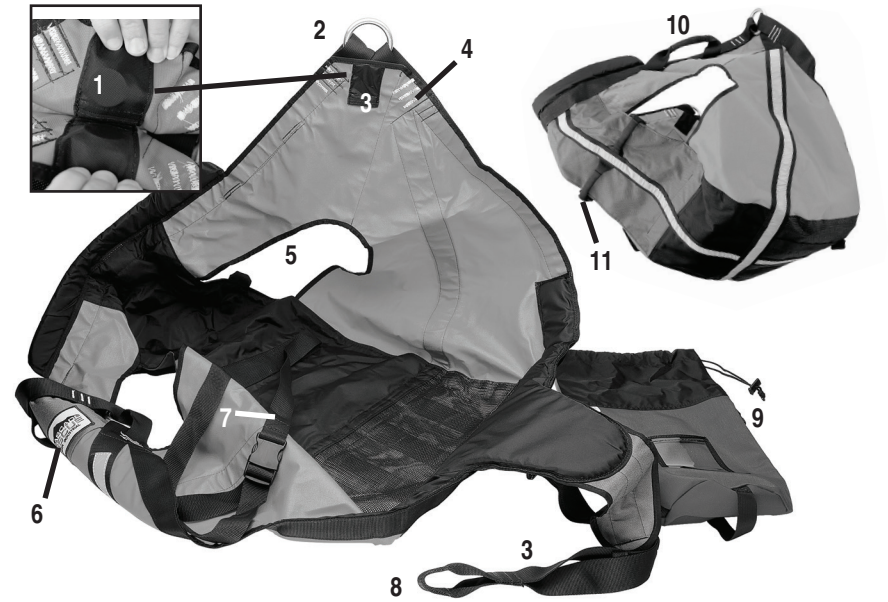
WARNING! If ARV is damaged, specifications no longer apply.
Return the product to the manufacturer for inspection and repairs.
If shock loaded in any way, remove product from service and discard.

Velcro is a registered trademark of Velcro IP holdings LLC

E. Application

The ARV is designed to be simple, functional and durable. Thoughtfully constructed of the highest quality materials, it's extremely easy to put on and will stand up to the most punishing use – time and again. Designed for helicopter hoist/short-haul and aerial evacuation rescue; it is equally capable for any technical rescue when a safe, secure
and comfortable extraction is required.

F. Terms



1	Magnets	5	Arm hole	9	Storage bag
2	Steel lifting rings	6	Product label	10	Front grab handle
3	Webbing straps	7	Restraint strap and buckle	11	Rear grab handle
4	Structural stitching	8	Tail loop		

G. Use

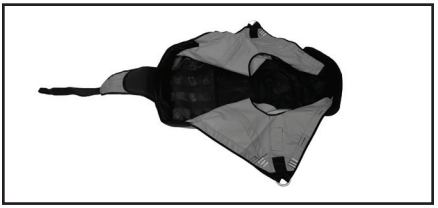
Before and after every use, inspect the ARV for traces of wear, damage, or breakage. The ARV must be used by a capable and knowledgeable rescuer, informed in both technical rescue and packaging of injured subjects. Misuse of the ARV may result in worsening injuries or even death. Should the ARV be subjected to the forces of a major shock loading, remove from service immediately and replace. Remove the ARV from service if it fails to pass the inspection, you don't know its full usage history, or you have any doubt as to its reliability.

WARNING! Do not continue to use this product after a major shock loading, even if no visible signs are present. Product must only be used by competent persons or expert users skilled in technical rescue.

G. Use - Rigging StableSeat to Subject

1. Remove the ARV from bag and open.





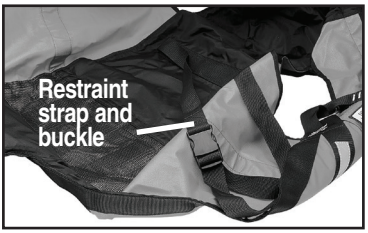
2. The ARV can be put on subject in any position: standing, seated, supine or prone.





3. Start by placing the ARV high around the subject's shoulders.

Secure the subject to the ARV by fastening the restraint strap and buckle.





4. The subject's arms can be either on the inside of the ARV or outside the armholes.

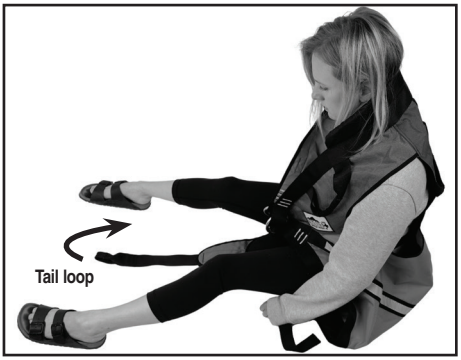


G. Use - Rigging StableSeat to Subject (Cont.)

5. To secure the connection point high strength magnets hold the steel lifting rings together.



6. Grab the ARV tail loop and pull it up between the subject's legs.



7. Place the tail loop in the middle between the two steel lifting rings. Secure to the two lifting rings and tail loop with carabiner(s) or directly onto the hoist hook.





8. Verify carabiner(s) or hoist hook are locked and all three connection points are properly preloaded before lift.



WARNING! The ARV does not provide spinal or cervical immobilization.

G. Use - Lifting and flight procedures

Single subject with or without a rescue attendant

Tag Lines

It may be necessary to use a tag line when lifting. The rear grab handles are suitable connection points for tag lines. When using an external hoist on a helicopter, tag lines should be connected to the ARV with an appropriately rated weak link for detachment.

Static Lift

Use a tagline (anti-rotation line) attached to a backside grab handle with an appropriate breakaway ("weak") link to prevent the subject from spinning.

Dynamic Lift – Hoist or Short-Haul

A tagline (anti-rotation line) is not required.



WARNING! Before lifting all anchoring between the ground and ARV (and attendant) must be released.



WARNING! Only properly trained and equipped personnel should attempt to use the ARV for an external hoist lifting operation with a helicopter.

IMPORTANT! On a fixed line / short-haul the maximum airspeed is 60 knots. On a hoist, consult hoist manufacturer specifications.

IMPORTANT!

1. Whenever possible a rescue attendant should accompany the ARV subject.

2. Always do a visual safety inspection before lifting to ensure tail loop is between legs and all three connection points are locked into a carabiner or hook.

3. Provide a helmet, eye and ear protection to the subject.

4. Preload the ARV before holding on and slightly pulling on the connection points to ensure the three points are evenly loaded.

5. Attaching a tether is not always needed. The tether – if used – must connect through both rings and tail strap.

6. Instruct subject to hold the front grab handles during the lift.

7. Use the internal subject restraint for additional subject security.

8. Hoist operator may clip an anchored safety tether upon reaching the helicopter.

9. To place a subject in a standing position upon landing, the rescue attendant must pull up on a rear grab handle just as the subject's feet touch the ground, otherwise the subject will land in a supine position.

H. Inspections

I. Inspect before and after every use to ensure the ARV is in serviceable condition.

2. Inspect product label for legibility of serial number, warnings and use instructions.

3. Inspect storage bag, webbing and straps for wear, tears, cuts, frayed edges, or other damage. Inspect for UV damage.

4. Inspect all structural stitching (different color thread) for abrasion, wear, cuts or UV damage.

5. Inspect steel lifting rings and buckles for wear, deformation, cracks, etc.

6. Inspect ARV after any period of storage greater than 30 days.

See inspection form on page 11.

IMPORTANT: Discontinue use of the ARV, remove from service, and contact Cascade Rescue if inspection reveals any doubt about the safety or serviceability of the device.

Contact Cascade Rescue: +1 208-263-2484 or SRsupport2@harken.com

I. Product Care

Cleaning and disinfection

1. Use a solution of 60 ml of household bleach for every 4 liters of tap water or 1/4 cup per gallon. Soak ARV for 10 minutes and then thoroughly rinse off. Alcohol can be used to speed drying.

IMPORTANT! Thoroughly rinse the ARV to ensure the bleach solution doesn't damage the material over long term contact.

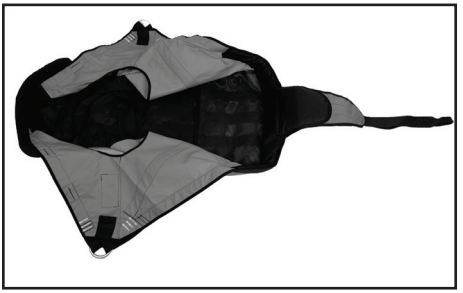
2. Quarantine the ARV for 72 hours.

IMPORTANT! Cleaning will reduce the risk of contamination but 100% disinfection cannot be guaranteed.

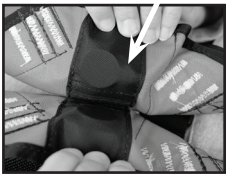
Loading into carrying bag

IMPORTANT! To ensure the ARV is always ready and configured correctly, it is crucial the ARB is stowed properly after every use.

1. Place the ARV on a clean flat surface and open it up as shown.



2. Fold the tail loop in. Pull the two steel lifting rings together so the magnets engage.

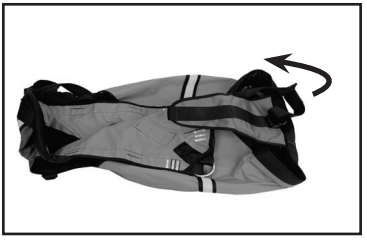




3. Fold in half again by bringing the fold toward the steel lifting rings.



4. Start at foot end and roll tightly toward head.





I. Product Care - Loading into Carrying Bag (cont.)

5. Slip the rolled ARV into the provided carrying bag so steel lifting rings are at the top.





6. Push steel lifting rings inside of carrying case.





I. Product Care - Storage

When ARV is not in use follow these storage procedures:

1. Store in a cool, dry place – out of reach of potentially harmful chemicals, moisture, heat, and direct sunlight.

2. Do not store wet.

3. Do not expose the ARV to high temperatures or to flames.

4. Keep the ARV far away from chemicals, especially acids.

5. If exposed to salt water, wash with soap and water and rinse thoroughly in fresh water. Allow to dry in a well ventilated space away from direct sunshine.

J. Warranty

Cascade Rescue warrants to the original purchaser that Cascade Rescue manufactured products will be free from defects in materials and workmanship for the life of the product.
This product is to be rigorously inspected annually by a qualified technician or the manufacturer.

Equipment Record

Product:

Model/type	Description	Serial number (Record from ARV label)
CRC-HRB-SS1.SER	Cascade Rescue StableSeat Aerial Rescue Vest (ARV)	
Manufacturer	**Address**	**Telephone/Website**
Harken, Inc.	N15W24983 Bluemound Rd Pewaukee, WI 53072-4974 USA	+ 1 262-691-3320 www.harken.com
Year of manufacture	**Purchase date**	**Date first put into use**
Other important information (i.e. document number):		

Inspection History - See Inspections - Page 8

Date	Reason for entry (Periodic exam or usage)	Defect notes and other important information	Name and signature of competent person	Date of next periodic examination

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Sandpoint, ID 83864 USA
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Web: www.cascade-rescue.com • Email: SRsupport2@harken.com

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