

USER INSTRUCTION MANUAL

ROPE ACCESS AND RESCUE

THESE INSTRUCTIONS APPLY TO THE FOLLOWING MODELS: MSRAR3 (3:1), MSRAR5 (5:1)

USER MUST READ AND UNDERSTAND INSTRUCTIONS PRIOR TO USE

INTRODUCTION

MAXSAFE[®] are the producers and suppliers of Products, Training and Services for the height safety industry and working at heights. This instruction manual has been designed to assist all users in the prevention of accidents and to make good, informed choices.

The registered offices of Maximum Safety NZ Ltd are located at: 46 Vickerman Street, Port Nelson, Nelson 7010, New Zealand. PO Box 697, Nelson 7040, New Zealand. Telephone: 0800 262 972. Email: sales@maxsafe.co.nz

CONTENTS

Section	Subject	Page
-	General User Warning	1
1	General Requirements, Warnings and Limitations	2
2	Introduction	2
2	Important Features	2
4	Product Variants	3
5	Compatible Accessories	3
6	Marking	3
7	Visual Inspection	3
8	Functional Inspection	3
9	General Instructions - How to Use	4
10	Others - Inspection, Cleaning, Compatibility, Storage, Damaged Product & Withdrawal from Use, Periodic Examination	ı 5
11	Inspection & Maintenance Log	6

www.maxsafe.co.nz



WARNING

DO NOT SKIP THIS INSTRUCTION MANUAL. READ THE INSTRUCTION MANUAL CAREFULLY BEFORE USING THE EQUIPMENT. FAILURE TO DO SO MAY CAUSE SERIOUS INJURY OR DEATH.

This manual must be read and understood in its entirety and used as part of the User's rescue system as required by AS/NZS. These instructions are intended to meet the manufacturer's instructions as required by AS/NZS 1891. The user must fully understand the proper equipment use and limitations.

This product is part of a Personal Fall Arrest System, work positioning, suspension, or rescue system. The user must read and follow the manufacturer's instructions for each component or part of a complete system. These instructions must be provided to the user of this equipment. The user must read and understand these instructions or have them explained to them before using this equipment. Manufacturer's instructions must be followed for proper use and maintenance of this product. Alterations or misuse of this product or failure to follow instructions may result in serious injury or death.

1



1. GENERAL REQUIREMENTS, WARNINGS AND LIMITATIONS:

- This equipment is designed for use as a part of a personal fall protection system. Components must not be used for
 any other operation other than that for which it has been designed and approved. Fall Arrest Systems are designed
 to comply with AS/NZS standards. Fall Restraint Systems must be designed by a Qualified Competent Person, and
 must be installed and used under the supervision of a Competent Person.
- All authorized persons/users must refer to the regulations governing occupational safety, as well as applicable AS/NZS standards. Please refer to product labeling for information on specific regulations, and AS/NZS standards met by the product.
- Proper precautions should always be taken to remove any obstructions, debris, material, or other recognized hazards
 from the work area that could cause injuries or interfere with the operation of the system. All equipment must be
 inspected before each use according to the manufacturer's instructions. All equipment should be inspected by a
 Qualified Competent Person on a regular basis as required by legislative controls.
- To minimize the potential for accidental disengagement, a competent person must ensure system compatibility.
- Equipment must not be altered in any way. Repairs must be performed only by the Manufacturer, or persons or entities authorized in writing by the Manufacturer.
- Any product exhibiting deformities, unusual wear, or deterioration must be immediately discarded. Any equipment subject to a fall must be removed from service.
- The authorized person/user shall have a rescue plan and the means at hand to implement it when using this equipment.
- 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.
- All synthetic material must be protected from slag, hot sparks, open flames, or other heat sources. The use of heat resistant materials is recommended in these applications.
- Never use natural materials (manila, cotton, etc.) as part of a fall protection system.
- Do not expose this equipment to chemicals which may have a harmful effect on the materials used to construct it. Be especially aware of caustic environments, or those that contain high levels of organic acids or bases. If you are uncertain about the safe operation of this equipment in any environment, contact MAXSAFE® for further instructions.
- Do not use this equipment near sharp edges and abrasive surfaces.
- Do not use this equipment around moving machinery or electrical hazards.

MAXSAFE® ROPE ACCESS AND RESCUE should be used only with the combinations of components, sub-systems or both which will not affect or interfere with the safe function of one another. Be certain that connecting devices and other elements of the PFAS are safe to use and compatible before use. Contact MAXSAFE® for further instructions.

2. INTRODUCTION:

The MAXSAFE® MSRAR3 (3:1) and MSRAR5 (5:1) are classed as Personal Protective Equipment (PPE) by the European PPE Directive 89/686/ EEC and has been shown to comply with this Directive through the Harmonized European Standard EN 341:2012 and ENI 496:2006. The MSRAR3 (3:1) and MSRAR5 (5:1) are designed to minimize the risk of/ provide protection against the danger of falling from heights. However, always remember that no item of PPE can provide full protection and care must always be taken while carrying out the risk relation activity.

3. IMPORTANT FEATURES:

This MAXSAFE® Descending and Ascending equipment operates in accordance with the principle of winding contact friction. The friction results from the rope being wound round the rope roller two and half times. The rope roller can be turned freely counter clockwise and locks in the clockwise direction. Locking is produced by a return movement lock. The rope roller runs freely during ascent, the return lock is effective when descending.

Maximum Personal Load: 150kg Maximum Descending Height: 150 metres. Rope Diameter: 9-11mm

The MSRAR3 (3:1) and MSRAR5 (5:1) also has a swivel-enabled ring at its Anchorage termination. This special feature allows to easily rotate about its axis in case the rope twists causing unwanted rotation of the user.



4. PRODUCT VARIANTS:

Note: Variants 1 to 2 show the rope displacement and load conditions for modes of ascent and descent of the MAXSAFE® Rescue Roll MSRAR3 (3:1) and MSRAR5 (5:1)

IMPORTANT: The same procedure applies for all configurations of The MSRAR3 (3:1) and MSRAR5 (5:1)

5. COMPATIBLE ACCESSORIES TO MAKE A RESCUE SYSTEM:

- (1) Rescue Roll MSRAR3 (3:1) and MSRAR5 (5:1)
- (2) Ascender Handle MSRC1 with Safety Sling
- (3) Single Alu Pulley with single side attachment MSRP012
- (4) Double Alu Pulley with double side attachments MSRP013
- (5) Single Alu Pulley with double side attachments MSRP014
- (6) Full Body Harness
- (7) Karabiners MSK111(C)
- (8) 11mm Kernmantle Rope with AS/NZS Tracer Thread

6. MARKING

- The CE mark showing that product meet the requirements of the PPE Directive 89/686/ EEC.
- (2) Identification of the Manufacturer.
- (3) Type of Product Code.
- (4) Serial Number.
- (5) Month/Year of Manufacture.

7. VISUAL INSPECTION:

Make sure that:

- The rope roller is clean and free from grease.
- · The rope roller does not have any grooves worn into it.
- The three screws of the rope roller cover are tightened.
- The rope guides are not distorted.
- The rope guides are not damaged.
- The cap nuts on the back are tightened.
- The rivet on anchorage point is not damaged.

8. FUNCTIONAL INSPECTION

Make sure that:

- · The rope roller locks in the clockwise direction.
- The rope roller turns freely in the counter clockwise direction.

The following conditions may be hazardous and may affect the performance of the Rescue Roll:

- (A) Extreme temperatures
- (B) Trailing or looping of lanyards over sharp edges.
- (C) Extreme acidic or basic environments.
- (D) Abrasive or sharp edge structures which can damage the equipment.
- (E) Grease, oil and harmful chemical reagents.
- (F) Direct exposure to rain and moisture.
- (G) Ultra-violet radiation.







WARNING:

- Ensure the medical condition of the user does not affect his/her safety in normal and emergency use.
- The Rescue Roll shall only be used by a person trained and competent in its safe use.
- A rescue plan shall be in place to deal with any emergencies that could arise during the work.
- Do not make any alterations or additions to the Rescue Roll without the manufacturer's prior written consent.
- The Rescue Roll shall not be used outside its limitation, or for any purpose other than that for which it is intended.
- Use Karabiner conforming to EN 362 or ANSI/OSHA standards for all connections.

9. GENERAL INSTRUCTIONS FOR USE OF RESCUE ROLL:

- The Rescue Roll shall be used only for vertical movement, up or down .
- Always anchor the Rescue Roll vertically above the User, and the Anchor Point used should be able to sustain a load
 of more than 12kN as per EN 795.
- Do not operate at an angle greater than 15 degrees, to avoid the pendulum effect.
- Suitable for use only for up to a weight of 150kg.
- Ensure that the harness complies with EN 361, is adjusted to the User's size, is free from damage and is in good condition.

Also ensure that the date on which the equipment must be returned to the manufacturer for yearly inspection does not exceeds the due date.

HOW TO USE:

The following figures show how the rope is fitted. However, this operation may only be carried out by an authorized specialist. MAXSAFE® does not accept any liability for improper fitting of the rope.



- Step 1: Connect the swivel eye at the top to a suitable anchorage point situated above the user's head using Karabiners as per EN 362 & ensure that Karabiner is locked as shown in Fig 2.
- Step 2: Insert one end of the rope inside the rope guide and wrap it twice around the rope roller as shown in Fig 3.
- Step 3: Pass the rope from the right side fencing guide and secure with a knot as shown in Fig 4. Rescue Roll is now ready for use as shown in Fig 5.

ASCENDING USAGE:

The person is moved from lower level to higher level. Hold the ascender with one hand and the running end a little below the ascender with other hand.

- 1. Hold the running end under tension with one hand and push the ascender upwards.
- 2. Pull the ascender down using your body weight to raise the person up.

DESCENDING USAGE:

The person is moved from a higher level to a lower level.

- 1. Hold the ascender with one hand and the running end a little below the ascender with other hand.
- 2. Pull the locking lever back with the thumb and let the running end slide under control.

IMPORTANT:

- Ensure that manufacturer's packing is used during transportation to prevent damage. In case original packing is not
 available, use a poly bag which is sealed to prevent moisture.
- Ensure that the Rescue Roll is compatible with other items when assembled into a system. Usage with other
 incompatible items may be dangerous and hazardous as the safe function of one item may be affected or interferes
 with the safe function of another.
- If used properly, the Rescue Roll has a life of 10 years from the Date of Manufacture unless subjected to severe abrasions or extreme temperature/ climatic conditions.

10. OTHERS:

INSPECTION

Visually inspect the system before each use to ensure that it is in a serviceable condition and is operating correctly. If during inspection, doubts are raised about the safety of the system or a component, these should be replaced either by the manufacturer or a competent person.

CLEANING

Cleaning after use is important for maintaining the safety and longevity of the product. Remove all dirt, corrosives, and contaminants from the product before and after each use. If the product cannot be cleaned with plain water, use mild soap and water, then rinse and wipe dry. NEVER clean the product with corrosive substances.

COMPATIBILITY

To optimize protection, in some instance it may be necessary to use the product with suitable boots/gloves/helmet or earnuffs. In this case, before carrying out the risk-related activity, consult your supplier to ensure that all your protective products are compatible and suitable for your application.

STORAGE

When not in use, store the product away where it will not be affected by heat, light, excessive moisture, or other degrading elements and away from heavily acidic or chemically hazardous environments. Never place heavy items on top of it.

DAMAGED PRODUCT & WITHDRAWAL FROM USE

- If the product becomes damaged it will not provide the optimum protection and therefore should be immediately replaced. Withdraw it from use. Never use damaged products.
- If the system has been used to arrest a fall, it should be removed from service immediately and destroyed.

PERIODIC EXAMINATION

- It is important to conduct regular periodic examination of the product because the safety of the user depends upon the continued efficiency and durability of the product.
- The frequency of examination should be at least once in a year. However, it can be more than once if legislation
 requires, or frequency of use is high or environmental conditions have an adverse affect on it (eg. excessive rain, sea
 side environment, excessive heat etc).
- It is emphasized that the examination be conducted only by a competent person and strictly in accordance with the manufacturer's periodic examination procedures.
- It is also advised the competent person be correctly trained and authorized by the manufacturer.
- Ensure that all markings on the product are legible and can be clearly read.
- It is the responsibility of the User to keep the Inspection & Maintenance Log up-to-date (refer to Back Cover).



11. INSPECTION AND MAINTENANCE LOG

SERIAL NUMBER:					
MODEL NUMBER:					
DATE PURCHASED:		DATE OF FIRST USE:			
	1		-		
INSPECTION DATE	INSPECTIONS	CORRECTIVE	MAINTENANCE		
	ITEMS NOTED	ACTION	PERFORMED		
Approved by:					
Approved by:					
Approved by:					
Americand Inc.					
Approved by:					
Approved by:					
Approved by.					
Approved by:					
Approved by.					
Annroved by:					
Approved by:					
Approved by:					
Approved by:					
Approved by:					
Approved by:					
Approved by:					
Approved by:					
Assessed by a					
Approved by:					
Approved by:					
Approved by.					



Maximum Safety NZ Ltd - PO Box 697, Nelson 7040, New Zealand Phone: 0800 262 972 www.maxsafe.co.nz