



MAXSAFE[®]

USER INSTRUCTION MANUAL

**FALL
PROTECTION
4-PERSON ROPE
HORIZONTAL
LIFELINE (HLL)**

THESE INSTRUCTIONS APPLY TO THE FOLLOWING MODELS:

MHLL-4MN

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.

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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 fall protection training program 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, Fall Restraint System, and Work Positioning 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. 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® FALL PROTECTION 4-PERSON ROPE HLL 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.

INTRODUCTION

Thank you for purchasing a MAXSAFE Fall Protection 4-Person Rope HLL. This manual must be read and understood, and used as part of any training program as required.

This manual and any other included instructions must be made available to the user of this equipment. The user must understand how to safely and effectively use the 4-Person Rope HLL, and all fall safety equipment used in combination with the 4-Person Rope HLL.

APPLICABLE SAFETY STANDARDS

When used according to instruction specifications, this product meets or exceeds all applicable standards for fall protection including: EN 795:2012 Type C and CEN/TS 16415:2013 Type C, OSHA 1926 Subpart M, OSHA 1910, ANSI Z359.1-2007, and ANSI A10.32-2012

IMPORTANT INFORMATION:

The Horizontal Anchor Line and the anchor points need to be above the user's head.

Horizontal anchor line is intended for use on spans up to 25m. For a fall of 1 user, 2 users, 3 users and 4 users with anchor line fitted on spans of 5m to 25m, the typical peak line deflection from the original position are stated in table below.

DEFLECTION CHART:

Single Length / Users	1	2	3	4
1m	0.61	0.66	0.59	0.59
2m	0.75	0.82	0.74	0.74
3m	0.90	0.99	0.89	0.89
4m	1.04	1.15	1.03	1.03
5m	1.18	1.31	1.18	1.18
6m	1.32	1.47	1.33	1.33
7m	1.47	1.64	1.47	1.47
8m	1.61	1.80	1.62	1.62
9m	1.75	1.96	1.77	1.77
10m	1.89	2.12	1.92	1.92
11m	2.04	2.29	2.06	2.06
12m	2.18	2.45	2.21	2.21
13m	2.32	2.61	2.36	2.36
14m	2.46	2.77	2.50	2.50
15m	2.61	2.94	2.65	2.65
16m	2.75	3.10	2.80	2.80
17m	2.89	3.26	2.94	2.94
18m	3.03	3.42	3.09	3.09
19m	3.18	3.59	3.24	3.24
20m	3.22	3.75	3.39	3.39
21m	3.46	3.91	3.53	3.53
22m	3.60	4.07	3.68	3.68
23m	3.75	4.24	3.83	3.83
24m	3.89	4.40	3.97	3.97
25m	4.03	4.56	4.12	4.12

PRODUCT SPECIFIC APPLICATIONS

WARNING:

Use of equipment in unintended applications may result in serious injury or death. Maximum of one (1) attachment per connection point.

Personal Fall Arrest: 4-Person Rope HLL may be used to support a MAXIMUM 4 Personal Fall Arrest Systems (PFAS) for use in Fall Arrest applications. Maximum free fall is 2m. Applicable D-ring: Dorsal.

Fall Clearance: There must be sufficient clearance below the anchorage connector to arrest a fall before the user strikes the ground or an obstruction. When calculating fall clearance, account for a MINIMUM 1m safety factor, deceleration distance, user height, length of lanyard/SRL, and all other applicable factors.

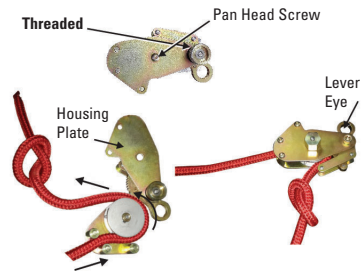
Swing Falls: Prior to installation or use, make considerations for eliminating or minimizing all swing fall hazards. Swing falls occur when the anchor is not directly above the location where a fall occurs. Always work as close to in line with the anchor point as possible. Swing falls significantly increase the likelihood of serious injury or death in the event of a fall.

INSTALLATION:

Users: 2 / Maximum Users: 4

Prior to use, plan your system:

1. Ensure all PFAS equipment is selected and deemed compatible by a Competent Person.
2. Eliminate or minimize all risk of swing fall.
3. Determine desired location for HLL; ensure location is free from debris, rot, decay, cracking, and hazardous materials.
4. Installation, set-up, and use of the the HLL system must be done under the supervision of a Qualified Competent Person.



HOW TO USE:

1. Loosen and remove pan head screw with appropriate Allen key on end plate nut and slide open housing plates.
2. Pull back the cam and lever, and wrap rope around drum of the tensioner. Feed rope as shown above.
3. Reposition the housing plates, and ensure the top plate sits squarely on the pins. Once aligned, re-tighten pan head, screw nut securely to hold the plates in position.
4. With a Karabiner, attach lever eye to an anchorage connector. Connect a second Karabiner on the cam of the tensioner, and secure to a second anchorage connector.
5. If the tensioner is installed as shown, the tail of the rope will hang down.
6. Pull initial slack through the tensioner by hand, and ensure the rope is sitting in the groove of the drum. If rope is trapped between the cam and the side of the drum, release the cam and pull on the rope until it slips back into the center of the drum. It is not necessary to pull the rope until it is fully taut; this is achieved by tightening the tensioner with a lever.
7. Tighten the rope until fully taut. Sag must not exceed 100mm. NEVER attempt to reverse-wind the tensioner, the cam will lock and resist rotation in this direction.
8. To uninstall HLL, loosen wing nut, then pull back cam lever. Use tommy bar to pry the lever back against the cam. Cam will release from drum, allowing rope to be pulled back through the tensioner, and the lifeline to be taken down from its anchorage. After releasing lifeline, inspect where it contacted tensioner and ensure there is no evidence of damage, including wear, corrosion, or separation of rope fibers.

Note: MHLL-4MN is provided with steel O-Rings to be used as mobile anchor for the workers to get connected to the lifeline permanently.

INSPECTION:

- KEEP INSTRUCTIONS AVAILABLE FOR REFERENCE. Record Date of First Use
- Prior to EACH use, inspect 4-Person Rope HLL for deficiencies, including, but not limited to, corrosion, deformation, pits, burrs, rough surfaces, sharp edges, cracking, rust, paint buildup, excessive heating, alteration, broken stitching, fraying, bird-caging, and missing or illegible labels. IMMEDIATELY remove the 4-Person Rope HLL from service if defects or damage are found, or if exposed to forces of fall arrest.
- Ensure that applicable work area is free of all potential hazards, including, but not limited to, debris, and hazardous materials. Ensure that selected work area will support the application-specific minimum loads set forth in this instruction manual. Work area MUST be stable.
- At least every 12 months, a Competent Person other than the user must inspect the 4-Person Rope HLL.
Competent Person inspections MUST be recorded in inspection log in instruction manual and on equipment inspection grid label. The Competent Person must sign their initials in the box corresponding to the month and year the inspection took place.
- During inspection, consider all applications and hazards the 4-Person Rope HLL has been subjected to.

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 earmuffs. 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).

