

MSA 3104L-00

MSA 3104L-00 Latchways Attachment Device User Manual

For Vertical Ladder Lifeline Kit, Harness to Cable System Connection

1. INTRODUCTION

This manual provides essential information for the safe and effective use of the MSA 3104L-00 Latchways Attachment Device. This device is designed to provide fall protection for individuals working on vertical ladder lifeline systems, ensuring hands-free operation and enhanced mobility.

It is crucial to read and understand all instructions and warnings contained within this manual before using the device. Failure to do so may result in serious injury or death.

2. PRODUCT OVERVIEW AND FEATURES

The MSA 3104L-00 Latchways Attachment Device is a critical component of a personal fall arrest system for vertical ladders. Its design focuses on ease of use, comprehensive safety features, and user mobility.

- **Easy-to-Use:** Designed for simple system and component installation, replacement, and inspection, which can be performed by the user with standard tools. This promotes correct usage and saves time.
- **Comprehensive Features:** Integrates hands-free operation, an anti-inversion device to prevent incorrect attachment, free range of motion along the lifeline, and a unique attachment device starwheel for improved mobility.
- **Instant Security:** In the event of a fall, the climbing device automatically engages the vertical lifeline and locks, arresting the fall rapidly and potentially saving a life.
- **Extended Mobility:** Allows continuous movement up and down the entire height of the vertical lifeline, eliminating the need to disconnect and find new tie-off points while ascending or descending a ladder.
- **Safety & Compliance:** Components of the Latchways product line meet stringent industry safety requirements, including ANSI Z359.1 certification, and are compliant with all relevant OSHA standards.





Figure 2.1: The MSA 3104L-00 Latchways Attachment Device, showing its main components including the carabiner and the Latchways mechanism.

3. WHAT'S IN THE BOX

Upon opening the packaging, verify that all components are present and undamaged.

- One (1) MSA LadderLatch attachment device for vertical lifeline kit, ANSI compliant.

If any components are missing or damaged, do not use the device. Contact your supplier or MSA customer service immediately.

4. SAFETY INFORMATION AND WARNINGS

WARNING: This device is part of a personal fall arrest system. Improper use or failure to follow instructions can result in serious injury or death. Only trained and competent persons should use this equipment.

- Always inspect the device, harness, and lifeline system before each use. Look for cuts, fraying, deformation, corrosion, or any other signs of wear or damage.
- Ensure the device is correctly attached to your full-body harness's dorsal D-ring and the vertical lifeline cable. The anti-inversion device prevents incorrect attachment.
- This device is designed for use with compatible MSA Latchways vertical lifeline systems. Do not use with incompatible systems or components.
- Ensure adequate fall clearance is maintained below the work area to prevent striking lower levels or obstructions in the event of a fall.
- Do not modify the device in any way. Repairs must only be performed by MSA or an authorized service center.
- The device must be removed from service immediately after a fall arrest event, even if no damage is visible.
- Refer to all applicable local, state, and federal regulations (e.g., OSHA, ANSI Z359.1) regarding fall protection equipment and practices.

5. SETUP AND INSTALLATION

The MSA 3104L-00 Latchways Attachment Device is designed for straightforward connection to a compatible vertical ladder lifeline system and a full-body harness.

1. **Connect to Harness:** Attach the carabiner end of the Latchways device to the dorsal D-ring of your full-body harness. Ensure the carabiner gate is fully closed and locked.
2. **Connect to Lifeline:** Open the Latchways mechanism by following the "UP" arrow indicator on the device. Position the device around the vertical lifeline cable. Ensure the cable is properly seated within the device's channel.
3. **Secure Device:** Close the Latchways mechanism, ensuring it clicks securely into place. The anti-inversion feature will prevent incorrect closure.
4. **Pre-Use Check:** Before ascending, gently pull on the device to confirm it is securely attached to both your harness and the lifeline cable. Verify that the device moves freely along the cable when ascending or descending, but locks instantly when subjected to a sudden downward force.



Figure 5.1: An individual demonstrating the use of the MSA Latchways Attachment Device on a vertical ladder, connected to a lifeline system.

6. OPERATING INSTRUCTIONS

Once properly installed, the MSA 3104L-00 Latchways Attachment Device allows for hands-free vertical movement along the lifeline.

- **Ascending:** As you climb the ladder, the device will slide smoothly upwards along the vertical lifeline cable. Maintain three points of contact with the ladder whenever possible.
- **Descending:** As you descend, the device will slide smoothly downwards. Control your descent rate.
- **Fall Arrest:** In the event of a fall, the internal mechanism of the device will instantly engage the lifeline cable, locking the device and arresting the fall.
- **Post-Fall Procedure:** After a fall, remain calm. If possible, attempt to self-rescue or await rescue. Once safely on the ground, the device must be immediately removed from service and inspected by a competent person or returned to MSA for evaluation. Do not reuse a device that has arrested a fall.

7. MAINTENANCE AND INSPECTION

Regular inspection and proper maintenance are vital for the continued safe operation of your MSA 3104L-00 Latchways Attachment Device.

7.1. Pre-Use Inspection

Before each use, perform a thorough visual and tactile inspection of the entire device, including:

- **Carabiner:** Check for proper gate operation, locking mechanism, deformation, cracks, or excessive wear.
- **Latchways Mechanism:** Ensure the mechanism opens and closes smoothly and locks securely. Check for any signs of damage, corrosion, or foreign material.
- **Housing:** Inspect the device housing for cracks, dents, or other physical damage.
- **Labels:** Verify that all labels are present and legible.

7.2. Periodic Inspection

In addition to pre-use inspections, the device must be periodically inspected by a competent person at intervals not exceeding six months, or more frequently if exposed to harsh conditions or heavy use. Maintain detailed inspection records.

7.3. Cleaning and Storage

- Clean the device with mild soap and water, then rinse thoroughly with clean water. Allow to air dry completely away from direct sunlight or heat.
- Store the device in a cool, dry place, away from direct sunlight, corrosive chemicals, extreme temperatures, and sharp objects.

8. TROUBLESHOOTING

This section addresses common issues you might encounter with the MSA 3104L-00 Latchways Attachment Device.

Problem	Possible Cause	Solution
Device does not slide smoothly on lifeline.	Debris in mechanism, damaged lifeline, or damaged device.	Inspect and clean the device and lifeline. If problem persists, remove from service and inspect for damage. Do not force movement.
Carabiner gate does not close/lock properly.	Debris, damage to gate or locking mechanism.	Clean the carabiner. If still faulty, remove device from service immediately.
Device does not engage/lock during a simulated fall (test).	Incorrect attachment, damaged internal mechanism, or incompatible lifeline.	Verify correct attachment. Remove device from service immediately. Do not use.

For any issues not listed here, or if troubleshooting steps do not resolve the problem, immediately remove the device from service and contact MSA customer support or an authorized service center.

9. SPECIFICATIONS

Attribute	Detail
Model Number	3104L-00
Product Dimensions	3.07 x 3.9 x 12.64 inches
Item Weight	3.09 Pounds
Manufacturer	MSA

Attribute	Detail
Date First Available	January 25, 2018
Compliance	ANSI Z359.1, OSHA standards

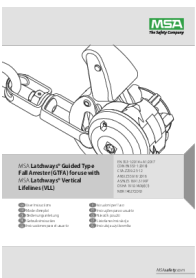


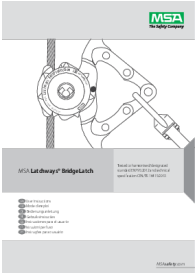
10. WARRANTY AND SUPPORT

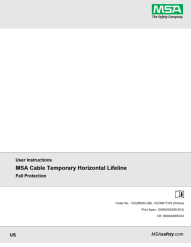

For detailed information regarding the product warranty, service, and technical support, please refer to the official documentation provided with your MSA 3104L-00 Latchways Attachment Device or visit the official MSA website. Contact information for customer service can typically be found on the manufacturer's website or product packaging.

It is recommended to register your product with MSA, if applicable, to receive important updates and support.

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Always refer to the latest official documentation for critical safety information.

Related Documents - 3104L-00

	<p>MSA Latchways GTFA & VLL User Instructions and Safety Guide</p> <p>Comprehensive user manual and safety guidelines for MSA Latchways Guided Type Fall Arrester (GTFA) and Vertical Lifelines (VLL) systems, detailing safe use, installation, maintenance, and warnings.</p>
	<p>MSA Latchways® Sealed SRL User Instructions and Safety Guide</p> <p>Detailed user instructions for the MSA Latchways® Sealed Self-Retracting Lifeline (SRL). Covers general information, warnings, intended use, installation, maintenance, inspection, and technical specifications. Essential safety information for fall protection equipment.</p>
	<p>MSA Latchways Constant Force Post System Technical Specifications</p> <p>Detailed technical specifications for the MSA Latchways Constant Force® post system, covering product quality, materials, standards compliance (AS/NZS, EN, CEN/TS), energy absorption, load control, user capacity, and system compatibility.</p>
	<p>MSA Latchways BridgeLatch: User Instructions and Safety Guide</p> <p>Comprehensive user instructions, safety guidelines, and specifications for the MSA Latchways BridgeLatch fall protection device. Covers intended use, pre-use checks, maintenance, and safe operation for work at height.</p>

	<p>MSA Cable Temporary Horizontal Lifeline: User Instructions and Safety Guide</p> <p>Comprehensive user instructions and safety guide for the MSA Cable Temporary Horizontal Lifeline (THLL) system. This document details installation, operation, maintenance, inspection procedures, product specifications, and critical safety regulations for fall protection in industrial and construction environments. Includes fall clearance charts and warranty information.</p>
	<p>MSA Aptura LT30 Self-Retracting Lanyard Conversion Guide</p> <p>Guide detailing the conversion of MSA's legacy Aptura LT30 Self-Retracting Lanyards to current product lines, including part number cross-references for updated fall protection solutions.</p>