



**Reliance Industries, LLC**

# User Instructions

for

# **Skyline™ HLL Shock Absorber**

**Model # 6000**



**Reliance Industries, LLC**

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**US Patent #6,338,399**

# User Instructions

## 6000 Skyline™ Shock Absorber



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### General Instructions

It is the responsibility of the employer, as part of a total fall arrest rescue and evacuation program, to retain the manufacturer's instructions and make them readily available to all users. The employer must provide adequate training in the proper use and care of this product prior to use.

### Manufacturer's Name and Address

Reliance Industries, LLC  
PO Box 140008  
Denver, CO 80214

Ph. (800) 488-5751  
Ph. (303) 424-8650  
Fax (303) 424-8670

### Part Number and Model Designation

Model type: Skyline™ HLL Shock Absorber  
Part number: Model # 6000

Proof Load: 10,000-lb.

Activation Force: 2,000-lb.

Initial Line Tension: 1,000-lb.

Material: Stainless Steel

Caution: For use ONLY with an approved Skyline™ horizontal lifeline system. The Skyline™ Shock Absorber MUST be inspected prior to each use to verify that it has not been deployed. Skyline™ Shock Absorbers are not re-usable!

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## 6000 Skyline™ Shock Absorber



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### Intended Use and Purpose of the Equipment

The Skyline™ Shock Absorber is designed specifically as a high pre-tension energy absorber, that not only adds energy absorbing capacity to the Horizontal Lifeline system on short spans but also allows the user to tune the Horizontal Lifeline to eliminate unrestricted freefall in long span and multi-span systems. For short spans, the energy absorber controllably (using a 2,000 lb extension force) elongates the Horizontal Lifeline sufficiently to reduce low sag angle load amplification.

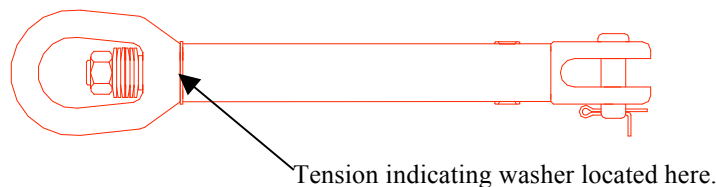
The Skyline™ HLL Shock Absorber is a single component of the Skyline™ Horizontal Lifeline System. All Horizontal Lifelines are considered “*Engineered*” systems and must be used under the supervision of a “*Qualified*” person trained and experienced in the use of such a system.

### Proper Method of Installation

The Skyline™ Shock Absorber is to be used only as the energy-absorbing component of an approved Horizontal Lifeline system. The shock absorber must only be installed in the manner outlined in the specific “Skyline™ Horizontal Lifeline Installation Guide” supplied with your system components.

Ensure that all bow shackle nuts and clevis pin fasteners are secured in place with cotter pins or other means which will prevent them from coming loose.

Once installed on the horizontal lifeline, the lifeline must be tensioned. Follow the instructions supplied with your particular lifeline system for tensioning. Proper tensioning (1000-lb. of line tension for MOST systems) is achieved when the washer located between the eye and the tube body of the shock absorber spins freely. As soon as the washer begins to spin freely, stop increasing the tension. Raising the tension beyond this point, may cause the shock absorber to deploy prematurely, forcing it to be replaced since shock absorber cannot be re-used.



At the beginning of each workday during the initial system inspection, and over the course of the day’s activity, the horizontal lifeline tension should be checked, by simply verifying that the washer is still spinning freely. The tension may need to be raised slightly as the system warms during the day. Follow the instruction supplied with your system to once again adjust the tension to the proper amount.

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### 6000 Skyline™ Shock Absorber



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### Caution!

- Do not use the Skyline™ Shock Absorber as a personal fall arrestor.
- Use only with the supplied components of your specific Skyline™ HLL system. DO NOT use the Skyline™ Shock Absorber with any other horizontal lifeline system except those designed and approved by Reliance Industries, or a Qualified Person.
- Use only with HLL systems in which the anticipated maximum line tension does not exceed 6250-lb. for stainless steel cable, and 7250-lb. for galvanized wire rope.
- Do not use Skyline™ Shock Absorber if internal slide bearing is exposed.
- Do not replace factory-supplied hardware with any substitutes.
- Use only in conjunction with approved Personal Fall Arrest Systems, including shock absorbing lanyards or retractables and a full body harness.
- Do not install in corrosive environments that will cause degradation or corrosion of stainless steel.
- Do not use when the danger of lightning strike exists.
- Do not install or use near electrical hazards.
- Do not use the Skyline™ Shock Absorber if the tension-indicating washer spins freely when there is no tension on the shock absorber.

This product should be used only according with these instructions, the Skyline™ Horizontal Lifeline Installation Instructions, and in accordance with all state, federal and local safety regulations. The worker must read, heed and understand all warnings and instructions called out in the labels and operating instructions prior to use. Any hazards to safe and proper operation must be eliminated prior to use.

The manufacturer is not responsible for damages resulting from an improper application or use of this product. Proper application also means considering the operating instructions, workplace geometry, workplace hazards and the conditions of inspection and maintenance.

The user must have a rescue plan, be trained in the use of this plan and the means at hand to implement it when using this equipment.

Damaged products and products having already been used for arresting a fall must be removed from service.



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Whenever the structure or general work area in which this horizontal lifeline system is installed is altered, the suitability of the lifeline must be re-certified by a qualified person who can determine if the lifeline will still function in an appropriate and safe manner. Periodic inspections should be conducted by this qualified person at least once yearly.

### Inspection, Maintenance and Storage

The user of this product is responsible for the inspection and maintenance of the Skyline™ Shock Absorber. The user shall inspect equipment before each use to ensure that the equipment is in good condition and operating correctly.

A yearly inspection of this product should be performed by a qualified person capable of determining its suitability for use.

In addition to this, the Skyline™ Horizontal Lifeline System must be removed from service immediately after any fall arrest load has been applied to the horizontal lifeline and must remain out of service until a new Skyline™ Shock Absorber is installed and the system components are inspected and re-certified for use.

When any inspection reveals defects in, damage to, or inadequate maintenance of equipment, the equipment shall be tagged as “UNUSABLE” and be permanently removed from service or undergo adequate corrective maintenance by means of an authorized inspection before being returned to service.

Most common defects are for example:

- An exposed slide bearing. This indicates the shock absorber has been exposed to a fall and must immediately be removed from service. Shock absorbers are **NOT RE-USABLE!**
- Dented or crushed shock absorber body.
- Absence of any elements affecting the equipment form, fit or function, such as clevis or cotter pins.
- Evidence of defects in or damage to hardware elements including cracks, sharp edges, deformation, corrosion, chemical attack, excessive heating, alteration and excessive wear
- Excessive wear of clevis or clevis pin
- A load indicating washer that spins freely when no tension is being applied to the shock absorber.

Prior to installation equipment shall be stored in a cool, dry and clean place away from direct sunlight in a manner as to preclude damage from environmental factors such as heat, light, excessive moisture, oil, chemicals and their vapors or other degrading elements.

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**Cleaning**

Product may be cleaned with soap and water or solvents that do not contain chlorine or chemicals corrosive to steel, zinc, polyethylene, Teflon, or stainless steel.

**Formal Inspection**

**Buyer/client:**

**Product description: Skyline™ HLL Shock Absorber**

**Model No. 6000**

**Year of manufacture:**

**Date of purchase:**

**Date of first use:**

**Name of user:**

This formal inspection grid and log has to be filed at the buyers department of occupational health and safety and is to be sent along with the product for the annual formal inspection through a competent person. Only completely inspected products are subject of the product warranty and liability of the distributor and manufacturer.

**Inspected according to specifications outlined by manufacturer:**

By:	Date:	By:	Date:
Stamp	Signature	Stamp	Signature

By:	Date:	By:	Date:
Stamp	Signature	Stamp	Signature

By:	Date:	By:	Date:
Stamp	Signature	Stamp	Signature

The inspector confirms with his signature the compliance of his inspection with all specifications as outlined by the manufacturer and as required by standards and regulations pertaining to occupational health and safety and fall protection.

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**Checklist**

**Skyline™ HLL Shock Absorber, Model No.: 6000**

	1. Year	2. Year	3. Year	4. Year	5. Year	6. Year
	Date	Date	Date	Date	Date	Date
By a qualified person:	Inspector	Inspector	Inspector	Inspector	Inspector	Inspector

**Shock Absorber:**

No missing parts						
No Corrosion						
No deformation						
Functioning condition						
No changes to attachment structure						

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