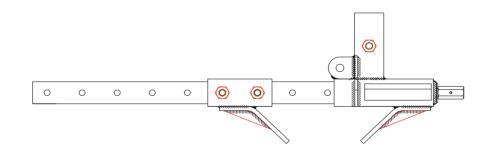


Reliance Industries, LLC

Operating instructions

for

HLL Large Beam Clamp Stanchion Receiver



Reliance Industries, LLC Deer Park, TX 77536 Ph. (888) 362-2826 Ph. (281) 930-8000 Fax (281) 930-8666

US Patent #6,338,399, #6,581,725 and #6,779,630



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 Ph. (888) 362-2826 PO BOX 2046 Ph. (281) 930-8000 Deer Park, TX 77536 Fax (281) 930-8666

Part number and model designation

Model type: HLL Beam Clamp Stanchion Receiver

Part numbers: Model # 6230, 6231 & 6233

Proof Load: 14,000-lb. in-line pull on anchor lug

Rated capacity: 7,000-lb. load for horizontal lifeline loading

Range:

		Max.		Max.
Model	Min. Flange	Flange	Min. Flange	Flange
#	Width	Width	Thinkness	Thinkness
6230	6-Inch	28-Inch	0.5-inch	2.0-Inch
6231	12-Inch	38-Inch	0.5-inch	2.5-Inch
6233	12-Inch	38-Inch	0.5-inch	4.0-Inch

Do not use on beams with a flange thickness or of a width and thickness insufficient to hold the intended load. Consult a qualified person prior to use.

Material: High strength steel. Zinc plated with yellow chromate

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Caution:

Always certify, using a qualified person, that the beam to which the HLL Beam Clamp Stanchion Receiver is being attached will carry the intended loads per OSHA and ANSI standards. For use ONLY with an approved Skyline horizontal lifeline system. The I-beam used as an end anchor must be capable of sustaining a load of 14,000 lb. or at least 2 times the anticipated load.

When using as an HLL anchorage, always insure that the beam it is attached to will support the 7,000 lb. maximum anticipated load with a 2 to 1 safety factor (which is 14,000 lb. or greater).

Intended use and purpose of the equipment

The HLL Beam Clamp Stanchion Receiver is a portable anchorage connector intended for use as a receiver for approved SkylineTM horizontal lifeline stanchions (end stanchions and bypass stanchions) for connection to I-beams with rigid flanges, and as a method of securing lifeline tieback cables. An anchorage is a secure means of attachment to which the horizontal lifeline components are connected. Anchorage connectors are components with means specifically intended for coupling a personal fall arrest system to an approved anchorage structure.

Proper method of use

The HLL Beam Clamp Anchor Receiver is designed as a portable anchorage that can be temporarily installed to a structural I-beam to provide a rigid anchorage for SkylineTM horizontal lifeline systems. It can be attached to the top or bottom flanges of horizontal or vertical I-beams when properly torqued.

This system consists of a Beam Clamp with an integral stanchion tube receiver for use with approved SkylineTM HLL stanchions. The stanchion slips into the receiver and is held in place with a ½" bolt and nut. The Receiver is cross-drilled so that the stanchion may be rotated for use with lifelines that are running either parallel or perpendicular to the I-beam the receiver is attached to.

The anchor lugs that are attached to the beam clamp (see Figure 2) may be used as attachment points for either horizontal lifelines or tie-back cables for horizontal lifelines. Cables may be attached to the lugs through the use of 1/2-in bow shackles that are secured in place with nuts and cotter pins. The anchor lugs must only be loaded at a 90° (perpendicular) to the through hole of the anchor lug.

The adjustable beam grips have a gate opening to fit onto I-beams with a width from 6" minimum to 38" maximum and a flange thickness of 0.5- to 4-in, see chart.

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Proper Method of Installation

- 1. Loosen clamp nut and spread jaws of Beam Clamp apart.
- 2. Position Beam Clamp in desired location and slip one jaw over the flange of the I-beam. If the Beam Clamp is to be used with other Beam Clamp Receivers, turn it such that the tightening nuts are all located on the same side of the I-Beam
- 3. Place other jaw over I-beam flange and tighten nut to a minimum of 35 ft-lb. (See Figure 7)
- 4. Insert Stanchion into receiver tube, and bolt in place.

Caution!

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- Do not use clamp nut as a fall arrest anchorage.
- When used for horizontal lifeline anchorages, use only with the Skyline[™] HLL system-using 3/8-7 x 19 steel wire rope and the Skyline Shock Absorber pretensioned to 1000 lb.
- When using to anchor HLL stanchions for HLL systems, always use additional clamps for tie-back anchors. If the horizontal lifeline will be side loaded, then use double tie-backs separated by at least 10° (see Figure 8).
- Use only with HLL systems in which the anticipated maximum line tension does not exceed 7000 lbf.
- Do not use tightening nut as a footrest.
- Do not replace factory-supplied hardware with any substitutes.
- Use only in the supplied configuration as shown in Fig. 1.
- Do not install on open-ended I-beam or structure that might tilt or move prior to torqueing.
- 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 steel or zinc plated components.
- Do not use when the danger of lightning strike exists.

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- Do not install or use near electrical hazards.
- Do not install this anchor clamp at elevations that will allow the worker to strike a lower level or objects that are below him in case of a fall.
- Beware of swing fall hazards.

This product should be used only according with these 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.

Whenever the structure to which this Beam Clamp Receiver is attached is altered, the suitability of the Beam Clamp as an anchorage must be re-certified by a qualified person. Periodic inspections should be conducted by this qualified person at least once yearly.

Always use a qualified person or trained engineer to determine if the structure to which the anchor clamp is attached, is of sufficient strength to support the anticipated loads. Always use this product only with shock absorbing lanyards or SRLs attached only to the dorsal d-ring of the workers harness.

This product is qualified for use as a personal fall arrest anchorage only with Force Factor I shock absorbers, and only when the free-fall is limited to 6 ft. or less. Use only with locking snap hooks.

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Warnings

- Do not alter or attempt to repair the equipment.
- Do not replace bolts with any substitute.
- Use equipment for intended purpose only.
- Do not use combinations of components or subsystems, or both, which may affect or interfere with the safe function of each other.
- Do not expose equipment to chemicals that may produce a harmful effect. Consult the manufacturer in cases of doubt.
- Do not use equipment around electrical hazards.
- Avoid exposure to physical and chemical hazards for which the product is not designed to withstand.
- Make only compatible connections. This product may only be used with approved horizontal lifeline stanchions and tie-back cables as components in a Qualified Person designed lifeline configuration.
- Attachment shall only be made to I-beams that have been certified capable of sustaining a load of 14,000-lbs. or at least 2 times the anticipated load that will be imposed by the horizontal lifeline system.
- Follow all limitations to the use of this anchor clamp as outlined in the section "Proper Method of Use."

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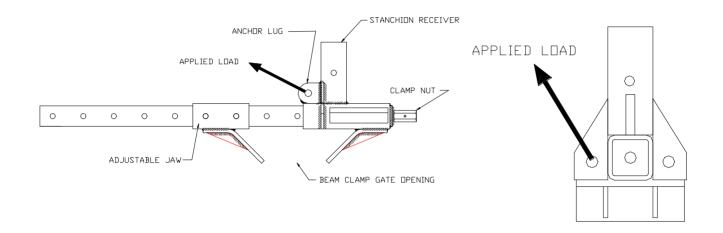
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HLL Beam Clamp Stanchion Receiver

Model # 6230

Permissible installation configurations when used as a tie-back anchorage.

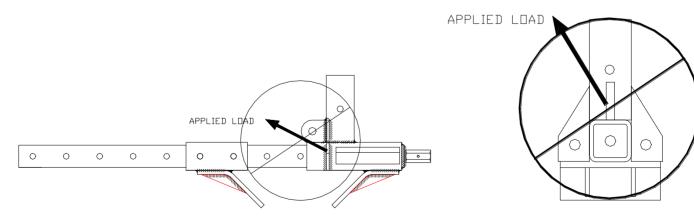


Permissible loading.

Figure 1

Permissible loading.

Figure 2



DO NOT side load anchor lug.

Figure 3

DO NOT side load anchor lug.

Figure 4

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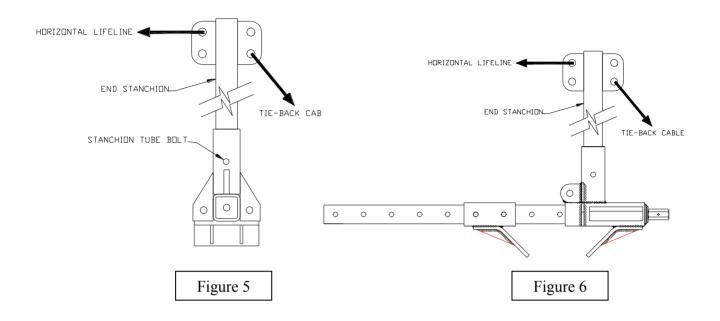
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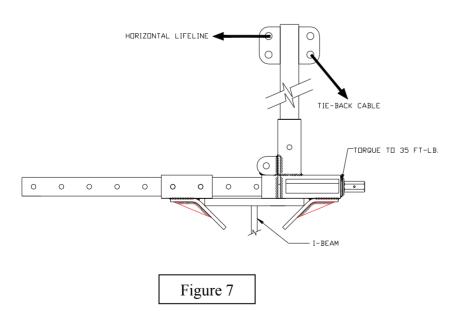


HLL Beam Clamp Stanchion Receiver

Model # 6230

Permissible methods of attachment when used as a horizontal lifeline stanchion receiver.





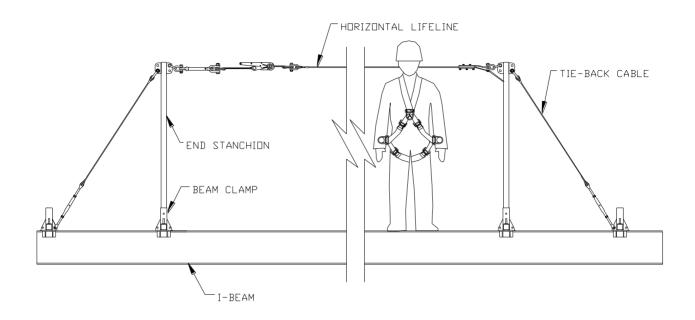
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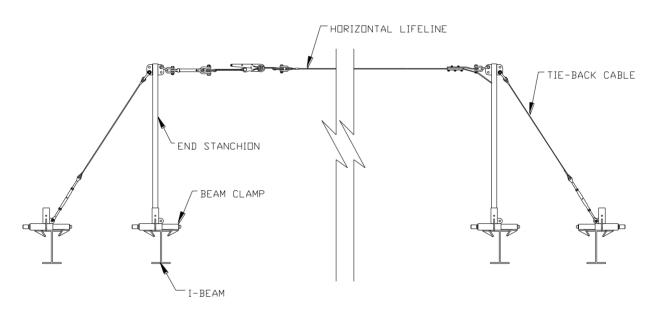
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Possible horizontal lifeline designs using the Beam Clamp Stanchion Receiver

Figure 8

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Inspection, Maintenance and Storage

The user of this product is responsible for the execution of inspection and maintenance of the Beam Clamp Stanchion Receiver. The user shall inspect equipment before each use to ensure that the equipment is in useable condition and operating correctly.

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

In addition to this, the product must be checked for possible damages after any fall arrest load has been applied and is to be examined by an expert who must then decide if the product is suitable for further use.

The user must tag and remove equipment from field service that has been subjected to a fall arrest. An authorized inspection is then required to determine if the product is suitable for further 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 and repair by an authorized Qualified Person before being returned to service.

Most common defects are for example:

• Loose clamp nut.

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- Absence of any elements affecting the equipment form, fit or function
- Evidence of defects in or damage to hardware elements including cracks, sharp edges, deformation, corrosion, chemical attack, excessive heating, alteration and excessive wear
- Improper attachment to beam for intended use

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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Formal Inspection

Date of first use:

Name of user:

Product may be cleaned with soap and water or solvents that do not contain chlorine or chemicals corrosive to steel or zinc. Dry thoroughly after cleaning. Always store in a clean and dry environment.

Buyer/client: Product description: HLL Beam Clamp Stanchion Receiver Model No. 623__ Date of manufacture: Date of purchase:

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
	I		
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

HLL Beam Clamp Stanchion Receiver Model No		:6230	6231	6233		
	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
Stanchion Receiver:						
No missing parts						
No Corrosion						
No deformation						
Functioning condition						
No changes to attachment structure						

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