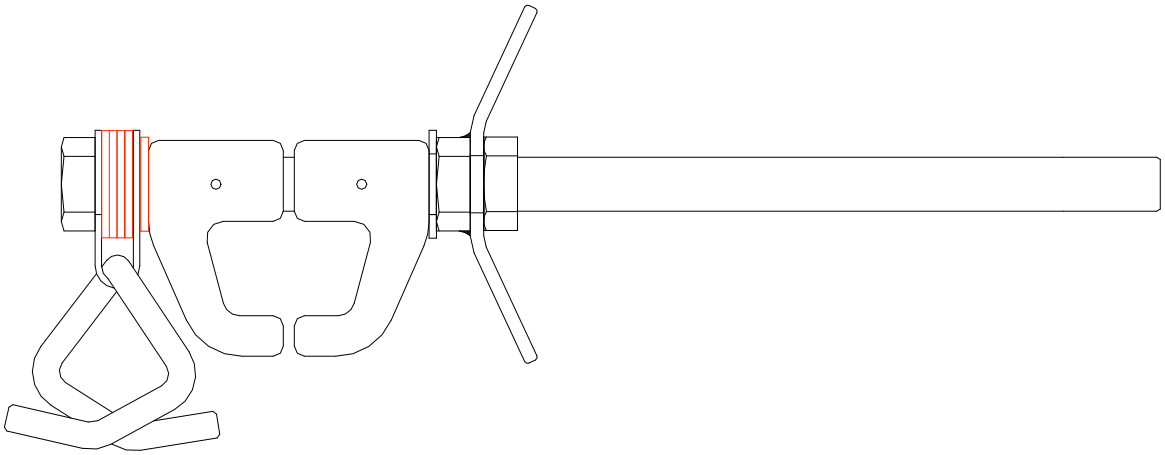
Operating instructions

for

Skyline™ Beam Clamp Bypass

Model # 3091



Reliance Industries, LLC
PO Box 140008
Denver, CO 80214
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Ph. (303) 424-8650
Fax (303) 424-8670

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
USA

Tel.: (303) 424-8650
Fax: (303) 424-8670

Part Number and Model Designation

Model type:	Skyline™ Beam Clamp Bypass
Part number:	Model # 3091 for 4.00" to 16.625" range
Maximum Load:	3,600 lb. Minimum Breaking Strength
Rated capacity:	Approved for use as a bypass support for Skyline™ Horizontal Lifelines that reach a maximum vertical fall arrest force of no more than 3,600-lb.
Range of beam sizes:	I-beam flange width range 4.00-in. min. to 16-5/8-in. maximum with beam flange thickness from to .5-in. to 1.75-in.
Material:	6061-T6 Aluminum High strength steel. Zinc plated with yellow chromate
Caution:	Always certify, using a qualified person, that the beam to which the Skyline™ Beam Clamp Bypass is being attached will support the intended loads per OSHA and ANSI standards with a minimum 2 to 1 Safety Factor. This clamp is to be used as a bypass support for approved horizontal lifelines. It is not to be used as either an end anchorage for horizontal lifelines, or as an anchorage point for personal fall arrest systems.

Intended use and purpose of the equipment

The Skyline™ Beam Clamp Bypass is a bypass support connector only for use with approved Skyline™ Horizontal Lifelines as a mid-span support when connecting to I-beams with rigid flanges with thicknesses of ½-in. to 1.75-in. The unique jaws allow the Beam Clamp Bypass to be attached to both vertical and horizontal I-beams, and with the specially designed bypass fitting, will support lifelines that run either perpendicular or parallel to the I-beam that the clamp is attached to. A hand-knob with its' integral torqueing nut is used for easy attachment and removal. The handle must not be side-loaded, used as a fall arrest attachment point, or used as a footrest.

Proper method of use

The Skyline™ Beam Clamp Bypass is designed as a portable mid-span support for approved Skyline™ Horizontal Lifelines that can be temporarily installed to a structural I-beam. Once attached and supporting a lifeline, the lifeline provides a method where the worker can remain constantly attached while walking down its' length. Upon reaching the Bypass, the worker simply twists the snaphook (or carabiner) of his personal fall arrest system (PFAS) through the fitting, without disconnecting, to continue down the line. It can be attached to any rigid flange I-beam with a width of 4- to 16-5/8-in. The Bypass Clamp must be torqued to a minimum of
40-ft-lb. It may also be installed on both vertical or horizontal I-beams.

CAUTION: The Skyline™ Beam Clamp Bypass is meant as a means of mid-span support for horizontal lifelines, **NOT** as a means of anchoring the end of a horizontal lifeline or as a direct attachment point for a personal fall arrest system. For applications where the lifeline itself needs to connect to an I-beam, or for personal fall arrest anchor clamps, please contact Reliance Engineering at (303) 424-8650 for help in selecting the proper equipment. The anchor clamp has a gate opening to fit onto I-beam flange widths that range from:

- 4.00 inch (10.16 cm) minimum to
- 16.625 inch (42.23 cm) maximum
- max. flange thickness of ½-in. (1.27 cm) to 1.75-in. (4.45 cm)

To attach the Beam Clamp Bypass, loosen the hand-knob to desired width, slip over the I-beam flange as shown in Figure 1 and tighten the hand-knob to a minimum of 40-ft-lb., then tighten jam nut to prevent loosening of handknob. Check tightness again prior to each use. **DO NOT** stand on either the nut or the threaded rod or the handknob. DO NOT use if the clamp does not grip the beam securely enough to prevent any side movement up or down the beam. **DO NOT** use on open-ended beams. The Beam Clamp Bypass may be used to support only one horizontal lifeline at a time.

Caution !

- Do not replace factory supplied bolt with any substitute.
- The bypass fitting will support one horizontal lifeline running either parallel or perpendicular to the threaded rod of the Bypass Clamp.
- Do not install on open-ended I-beam or structure.
- Do not use with non-locking snaphooks. Use only in conjunction with 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.
- 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.
- Do not use as a Personal Fall Arrest (PFA) equipment anchorage.
- Do not use Bypass Clamp to support more than one horizontal lifeline at a time.
- Do not use to enable HLLs to change direction or elevation.
- Do not use as an HLL end support or anchorage.

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 anchor clamp is attached is altered the suitability of the anchor clamp as an anchorage must be recertified 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 load.

Always use this product only with shock absorbing lanyards or SRLs that are attached to the dorsal d-ring of the workers harness.

Warnings

- **Do not alter or attempt to repair the equipment.**
- **Do not replace bolts or other components 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, which may produce a harmful effect. Consult the manufacturer in cases of doubt.**
- **Do not use equipment around moving machinery and electrical hazards. Do not use equipment near sharp edges and abrasive surfaces. Avoid exposure to physical and chemical hazards, which the product is not designed to withstand.**
- **Make only compatible connections. This product may only be used in connection with a safety harness as per ANSI Z359.1 and ANSI A1014. This product is designed for single person usage in conjunction with a full body harness and compatible anchorage devices. Only approved safety devices that comply with ANSI Z359.1 and OSHA regulations may be used with this product.**
- **Only suitable anchorage devices in accordance with ANSI Z359.1 may be used. Anchorages selected for personal fall arrest systems (PFAS) shall have a strength capable of sustaining static loads, applied in the directions permitted by the PFAS, of at least:**
  (a) 3,600 pounds (16 kN) when certification exists, or (b) 5,000 pounds (22.2 kN) in the absence of certification.
- **Follow all limitations to the use of this anchor clamp as outlined in the section "Proper Method of Use."**

Skyline™ Beam Clamp Bypass Model # 3091

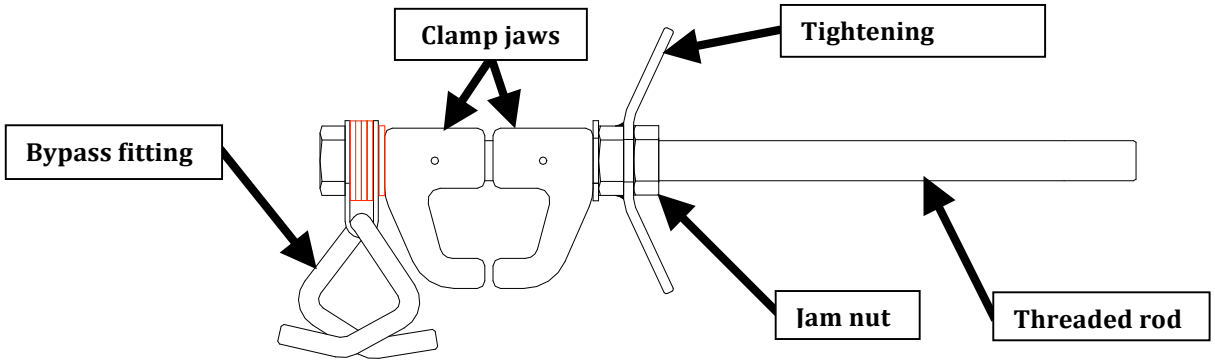

Figure 1 – Parts of the 3091 Beam Clamp

Permissible installation configurations.

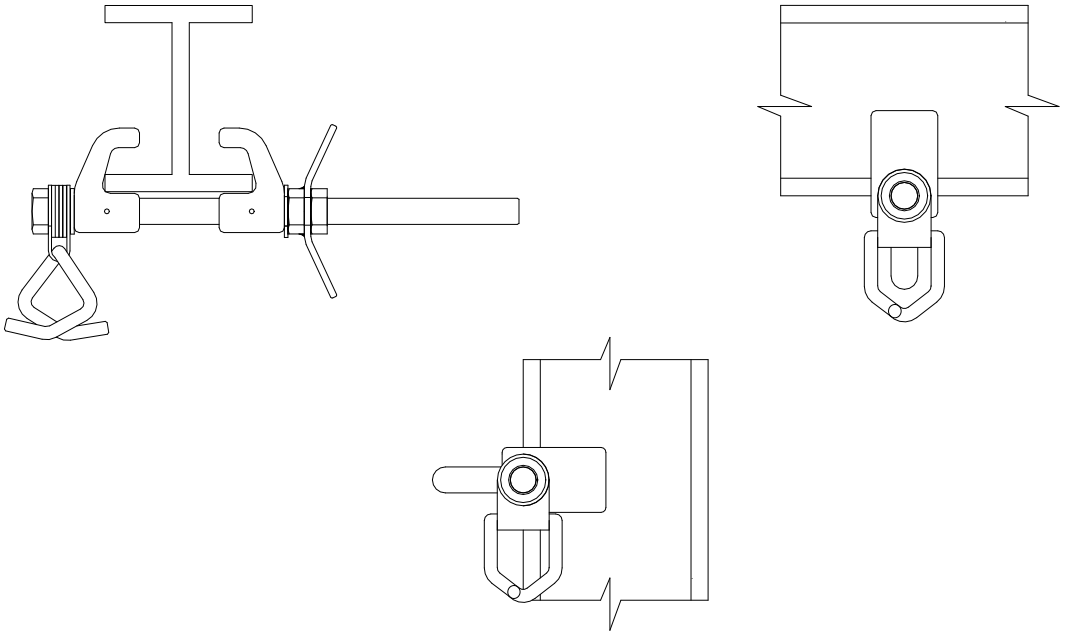

Figure 2 – Acceptable Methods of I-beam

WARNING: Always insure that the beam clamp is installed perfectly square to the I-beam to which it is attached, and that it is torqued properly.

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Permissible methods of supporting a horizontal lifeline.

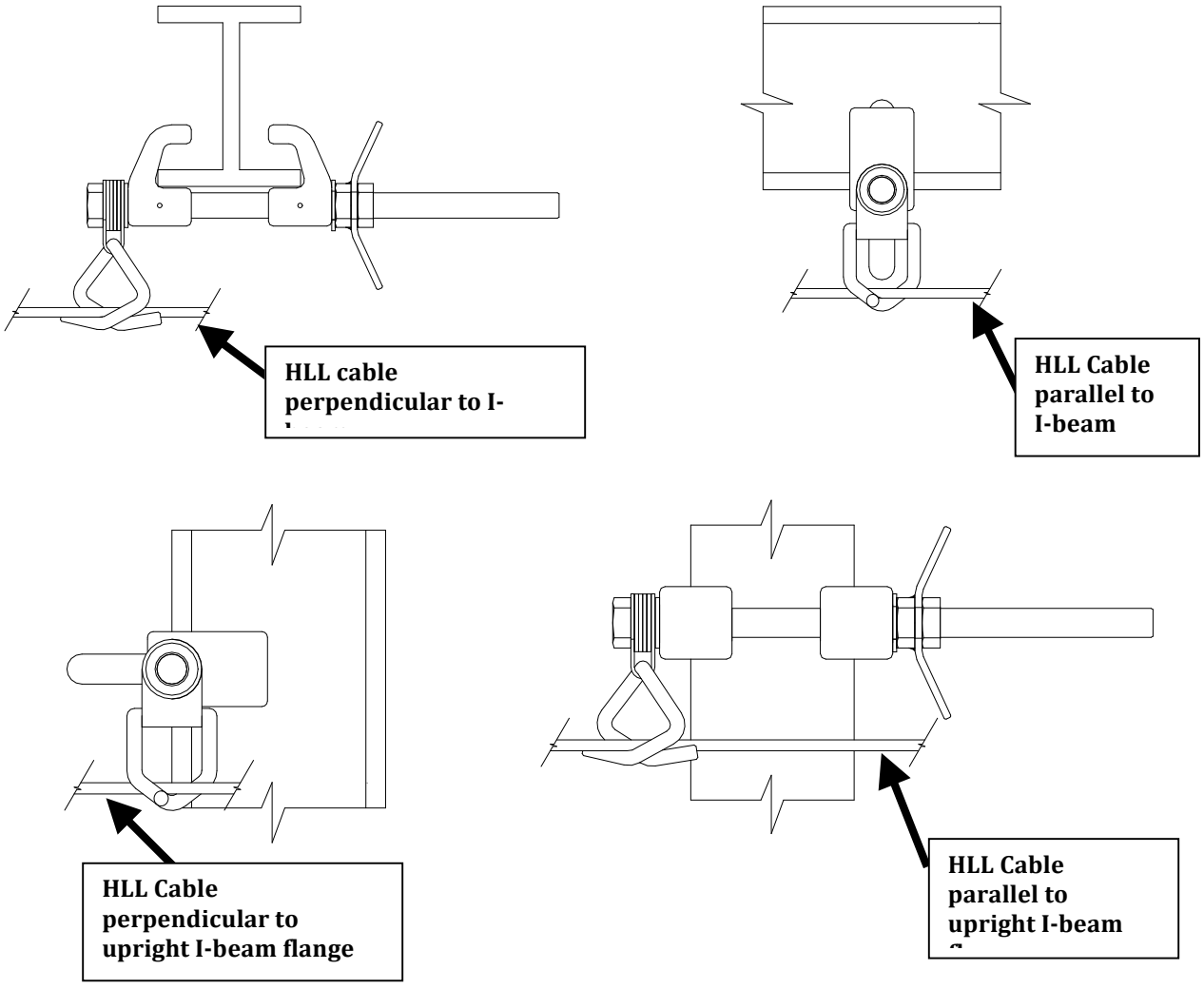

Figure 3 – Acceptable Methods of Supporting an HLL Cable

CAUTION: The Bypass Clamp must be installed square to the beam so that movement of the support end does not loosen the clamp.

Inspection, Maintenance and Storage

The user of this product is responsible for the execution of inspection, maintenance and possible repairs. The user shall inspect equipment before each use to ensure that the equipment is in serviceable 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 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 by means of an authorized inspection before being returned to service.

Most common defects are for example:
- Loose locking nut
- 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
- Missing or unreadable labels and warnings
- 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.

Cleaning

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.

Formal Inspection

Buyer/client:

Product description: Skyline™ Beam Clamp Bypass **Model No. 3091**

Year of manufacture: **Apr-10**

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.

Checklist

Skyline™ Beam Clamp Bypass Model No.: 3091

	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
Skyline™ Beam Clamp:						
No missing parts						
No Corrosion						
No deformation						
Functioning condition						
No changes to attachment structure						