

Reliance Industries, LLC

# Operating instructions

for

# In-Line Cable Clamp for ½-in. Cable

Model # 6051



Reliance Industries, LLC PO Box 140008 Denver, CO 80214 Ph. (800) 488-5751 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

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#### Part number and model designation

Model type: In-Line Cable Clamp

Part number: Model # 6051 – stainless steel

Capability: To be used with 1/2-in.-6 x 36 IPS or stainless steel wire rope **ONLY**.

Material: Steel with zinc plate and yellow chromate or stainless steel

Caution: Always certify, using a qualified person, that the cable to which the In-Line

Cable Clamp is being attached to is ½-in.-6x36 wire rope and that the Horizontal Lifeline System which it is a part of has been designed by a qualified engineer, and will carry the intended loads per OSHA and ANSI

standards.

#### Intended use and purpose of the equipment

The In-Line Cable Clamp is intended to be used as an end termination means to secure the ½-in. – 6 x 36 IPS wire rope component of tieback cables used to help strengthen the end anchorages of the Skyline<sup>TM</sup> Horizontal Lifeline Systems (**NOTE**: Not all horizontal lifeline designs require the use of tieback cables or 6051 Cable Clamps. If there is a question concerning the suitability of a horizontal lifeline design or a specific component for a particular application, please contact Reliance Industries Engineering at 303-424-8650). It allows for the rapid adjustment of the tieback cable length by attaching anywhere along the wire rope's length, providing a secure anchorage point without causing a permanent bending or deformation in the cable. Its' primary use is for tieback cables used in conjunction with temporary or portable horizontal lifeline systems where tieback cable lengths vary as systems are moved around the worksite. The In-Line Cable Clamps are proof load tested to 20,000 lbs.

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#### Proper method of use

• The In-Line Cable Clamp is designed as an adjustable end termination that can be installed anywhere along the length of a ½-in. - 6x36 wire rope to provide an anchorage point for one end of a tieback cable assembly.

This system consists of two steel cable clamp plates secured to one another with 8 bolts. These bolts are removed from the plates, the plates placed around the wire rope at the desired location, and then the bolts are reinserted back into the clamp. These 8 bolts MUST be re-torqued to a minimum of 70 ft-lbs. after re-assembly.

#### Caution!

- Use only with included hardware. NEVER replace bolts with bolts of lower strength.
- Use only with  $\frac{1}{2}$ -in 6x36 IPS or stainless steel wire rope.
- Use only with Skyline<sup>TM</sup> Horizontal Lifeline Systems, which have been approved or designed by a qualified engineer.
- Remove from service if clamp shows signs of wear or degradation. Some imprinting of the cable wires into the clamp after use is expected.
- Should the cable lays not exactly fit the lays in the clamp, slightly twist or untwist the cable until an exact fit is achieved.
- Torque all fasteners to a MINIMUM of 70 ft.-lbs.
- Always tighten bolts uniformly to assure even pressure and proper seating of the cable in the cable grooves.

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.

All HLL systems must be designed, installed, and used under the supervision of a qualified person.

All anchorages must be able to support the anticipated line tensions with a safety factor of at least 2 to 1.

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The geometry of a HLL system must not allow the worker to free-fall more than 6 ft. before his lanyard begins to pull on the horizontal lifeline.

The allowable drop height of the horizontal lifeline is unregulated by OSHA except that it must not allow the worker to contact any obstacle or a lower surface beneath him.

NEVER use horizontal lifelines with non-shock absorbing lanyards or retractables.

Always have a qualified engineer verify that the HLL anchorages will support at least 2 times the anticipated load. Never use HLL systems that will give line tensions above 6250 lbs. for stainless steel wire rope, or 7250 lbs. for IPS wire rope. This is one half the ultimate cable strength.

The manufacturer is not responsible for damages resulting from an improper application of the 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 re-certified by a qualified person. This qualified person should conduct periodic inspections at least once yearly.

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### Warnings

- ALWAYS consult a qualified person for anticipated line tension and minimum required clearances prior to designing, installing or using this system.
- Do not alter or attempt to repair the equipment.
- 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 HLL equipment around moving machinery and electrical hazards. Do not use HLL equipment near sharp edges and abrasive surfaces. Avoid exposure to physical and chemical hazards, which the product is not designed to withstand.
- Be aware of, and protect the workers from swing fall hazards and objects below the walking working surface that may become impact hazards in case of a fall.
- Only approved safety devices that comply with ANSI Z359.1 and OSHA regulations may be used with this product.
- Follow all limitations regarding the use of this In-Line Cable Clamp as outlined in the section "Proper Method of Use."

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Method of Installation for In-Line Cable Clamp Model # 6051

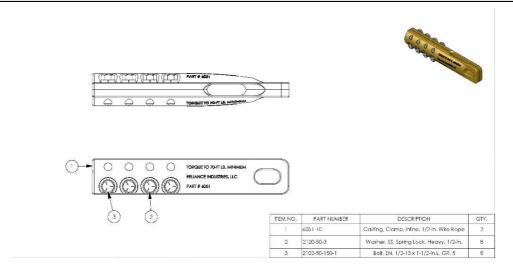


Figure 1

- 1. Remove the 4 bolts in the cap (top) plate (see Figure 1), and then remove the 4 bolts from the bottom plate. Lift the cap plate from the cable clamp.
- 2. Lay the cable into the clamp (bottom) plate. Slide the cable back and forth to align the cable lays with the grooves and then push the cable lays into the grooves in the bottom plate. Should the lays not align exactly, twist or untwist the cable slightly until a match is achieved.
- 3. Replace the cap plate over the cable and re-install the 4 clamp bolts and washers; tighten only finger tight. While holding the cap plate down, re-insert the bottom 4 bolts and washers and tighten finger tight to secure the plates together. The cap plate should set flat and square on top of the cable. Begin torqueing the clamp bolts alternately and evenly until a torque of 70 ft-lbs. is achieved. Prior to assemble of the bolts it is permissible to lubricate the bolts with a heavy grease or anti-seize compound prior to use.

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#### Inspection, Maintenance and Storage

The user of this product is responsible for conducting periodic inspection, maintenance and identification of possible repairs that must be made. 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 the above inspections, 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 repair before being returned to service.

The most common defects for example, are:

- Loose attachment hardware
- 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 cables that may create crushed ridges in the cable clamp, thus reducing clamp strength.
- Broken or missing clamp bolts.

When not in use, this equipment must be stored in a dry and clean place away from direct sunlight in a manner as to preclude damage from environmental factors such as heat, light, excessive moisture, chemicals and their vapors or other degrading elements.

#### Cleaning

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

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## **Formal Inspection**

Buyer/client:									
Product description: In-Line Cable Clamp Model No									
Year of manufacture:									
Date of purchase:									
Date of first use:									
Name of user:									
be sent along with the pr		al inspection through	ment of occupational health and safety and is to a competent person. Only completely inspected ator and manufacturer.						
Inspected according to	specifications outlined b	y manufacturer:							
By:	Date:	By:	Date:						
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## Checklist

In-Line Cable Clamp Model No.: 6051

_	•				1			
	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		
	_	-	•	-	-	-		
Cable Clamp:								
No missing parts								
No Corrosion								
No deformation								
Functioning condition								
No changes to attachment structure								

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