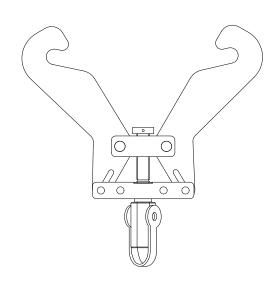


Reliance Industries, LLC

Installation, Operation, Inspection and Maintenance Instructions for the LockjawTM Temporary Personal Fall Arrest Anchor



Model # 3040

Reliance Industries, LLC PO Box 140008 Denver, CO 80214 Ph. (800) 488-5751 Ph. (303) 424-8650 Fax (303) 424-8670



Important Instructions!

These instructions must be kept on file and available for the users reference at all times. The users must read and fully understand these instructions or have the instructions explained in detail before using this equipment. Failure to observe these instructions could result in serious injury or death.

Prior to use, the user must be trained in the proper use of this equipment and the process or system in which it is used.

A review of the instructions and re-training should be repeated at regular intervals or whenever the review shows that additional instruction or training is needed.

A rescue plan must be prepared; the workers must be trained in its use, and rescue equipment must be on hand prior to any use of this or any other Personal Fall Protection Equipment.

Any questions regarding these instructions should be directed to:

Reliance Industries, LLC PO Box 140008 Denver, CO 80214 USA

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Date: 05/01/03

User Instructions 3040 Lockjaw™ Personal Fall Arrest Anchor



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Important OSHA Regulations Covering the Use of Personal Fall Arrest Anchorages

OSHA 1926.502 (d)(15):

Anchorages used for attachment of personal fall arrest equipment shall be independent of any anchorage being used to support or suspend platforms and capable of supporting at least 5,000-lb (22 kN) per employee attached, or shall be designed, installed, and used as follows:

(d)(15)(i):

as part of a complete personal fall arrest system which maintains a safety factor of at least two; and

(d)(15)(ii):

under the supervision of a qualified person.

OSHA 1926.502 (d)(16)(iii):

Personal fall arrest systems shall be rigged such that an employee can neither free-fall more than 6-ft. nor contact any lower surface.

OSHA 1926.502 (d)(21):

Personal fall arrest systems shall be inspected prior to each use for wear, damage and other deterioration, and defective components shall be removed from service.

OSHA 1926.502 (d)(19):

Personal fall arrest systems and components subjected to impact loading shall be immediately removed from service and shall not be used again for employee protection until inspected and determined by a competent person to be undamaged and suitable for reuse.

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System Description

The SkyclampTM Personal Fall Arrest Anchor Clamp, P/N 3040 is a lightweight adjustable Anchor Clamp that attaches to the bottom flanges of horizontal I-beams using an installation pole. The swiveling d-ring allows the attachment of a personal fall arrest device for either one or two individual workers without tangling the attachment cables. Through the use of an adjustable length pole, the Skyclamp may be prepositioned onto an overhead I-beam to create an approved fall arrest anchorage point prior to any potential fall exposure.

Specifications

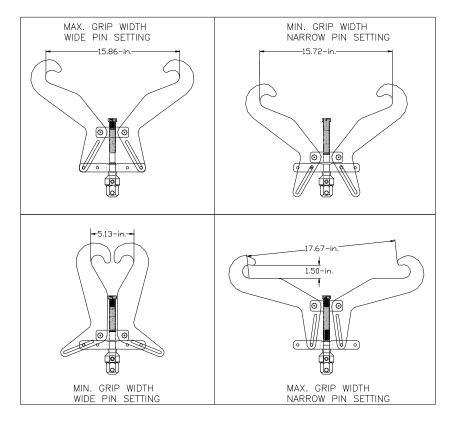
Beam Size Range: Outer pin setting: 15.86-in. maximum

5.13-in. minimum

Inner pin setting: 17.67-in. maximum

15.72-in. minimum

Flange Thickness: 1.5-in. maximum



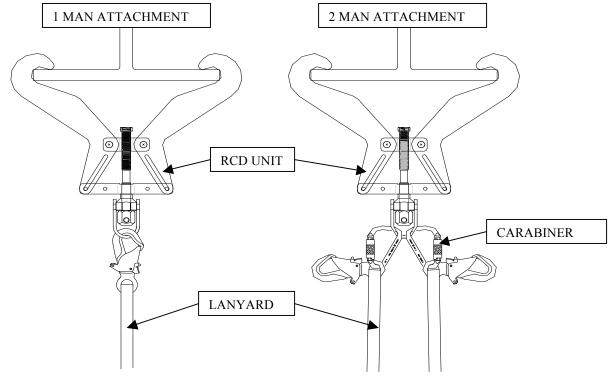
CAUTION: While it is possible for the LockjawTM Anchor Clamp to fit an I-beam with a 5-in. wide flange, the End User **MUST** certify that the I-beam structure is capable of withstanding a 10,000-lb. load (or 5,000-lb. if the clamp is to be used by one worker only) at the location where the LockjawTM is to be attached.

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Designed for use as an attachment point for up to 2 persons weighing a maximum of 310-lb. (tools and clothing included) each. When 2 persons are connected to the Skyclamp at one time, care must be taken to ensure that the connectors used cannot rollout, or in any way become entangeled and cause disengagement or failure of the connectors. For this reason, when connecting 2 people to the yoke, carabiners should be used; a separate carabiner for each person. When used with snaphooks that terminate at the end of a lanyard, the locking carabiner can be passed through the eye of the snap body forging (not the gated hook body area) and then attached to the Skyclamp Yoke. See illustration below.



Material of construction: Skyclamp Jaw: high strength aluminum, anodized All other components: zinc-plated steel

Maximum Load: 10,000-lb. (5,000-lb. per person with a MAXIMUM of 2 persons attached at any one time.)

NOTE: The Skyclamp is designed to be used as a personal fall arrest anchor point only. Any attempt to use the Skyclamp as an anchor point for any other device or purpose could result in serious injury or death.

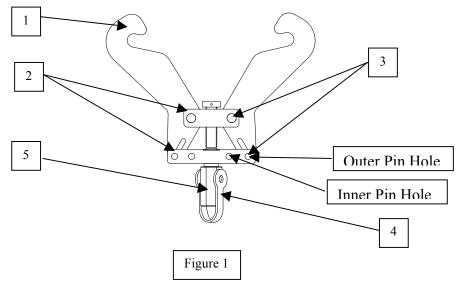
WARNING: The Skyclamp will not tighten properly and could be dislodged if one jaw is pinned in the inner hole while the second jaw is pinned in the outer hole. Both jaws must be pinned in either the inner hole or outer hole at the same time.

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SkyclampTM Personal Fall Arrest Anchor Clamp Components



The SkyclampTM Personal Fall Arrest Anchor Clamp consists of the following components:

- 1. Skyclamp jaws, 2 ea.
- 2. Pivot bars, 2 ea.
- 3. Pivot pins, 4 ea.

- 4. Anchor-ring Yoke
- 5. Hex tightening nut

Installation Considerations

CAUTION: Because it is possible for the Skyclamp to slide along a beam during use, it **CANNOT** be used on open-ended beams, sloped beams, or vertical beams.

Care must also be taken to recognize the possibility of swing falls that may occur when the clamp is located above the worker, but not DIRECTLY overhead. If the worker falls in such a situation, there is a possibility of a swing fall that may bring him into contact with objects below or to the side of him, possibly causing serious injury or death. These objects must be removed or the Clamp repositioned directly over the worker to help reduce the risk of a swing fall. **Never** use the SkyclampTM Personal Fall Arrest Anchor Clamp on slanting or open ended beams.

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Installation Procedures

NOTE: Approved fall protection must be worn at all times during installation of the SkyclampTM Personal Fall Arrest Anchor Clamp, or installation must only be undertaken from an area where there exists no possibility of a fall. Do not use the Skyclamp Fall Arrest Anchor Clamp as a personal fall protection anchorage until it has been completely installed using the following instructions. **DO NOT** use on open ended beams or beams that may tilt if a fall occurs.

- 1. Spread Skyclamp jaws open to the widest position by rotating the Hex Tightening Nut counter-clockwise. Note: If the clamp will not open wide enough to fit onto the I-beam with the pivot pins inserted into the outer pin holes as pictured in Figure 1, remove the locking rings and insert the pins into the inner pin hole allowing the clamp to open wider. Make sure the lock rings are replaced and verify that both pivot pins are in the inner hole.
- 2. Slide the Hex Tightening Nut into the connection socket.
- 3. Mount the connection socket to the end of the Remote Connect Pole (RCP).
- 4. Attach the snaphook of an approved self-retracting lanyard or shock-absorbing lanyard to the Anchor Ring. Note: The self-retracting lanyard or shock-absorbing lanyard MUST limit the Maximum Arrest Forces (MAF) to 900-lb. or less.
- 5. Extend the Remote Connect Pole to position the Skyclamp next to the I-beam where it is to be installed.
- 6. Raise the Skyclamp until one side of the Skyclamp Anchor jaw is on one side of the I-beam, and the other jaw is on the opposite side of the I-beam.
- 7. Begin rotating the Remote Connect Pole clockwise to tighten the jaws of the Skyclamp. Note: To help steady the Skyclamp as it is being tightened, it is sometimes helpful to pull downward on the self-retracting lanyard or shock-absorbing lanyard until it is tight.
- 8. As the jaws tighten, push upward on the pole and shake the Skyclamp lightly to force it to align straight across the I-beam and have the jaws fully rest on the flanges of the I-beam.
- 9. Continue to tighten until it is not possible to push up on the Skyclamp with the pole or pull downward on the lanyard straps and have the Skyclamp move.
- 10. Verify that the Skyclamp is installed square to the I-beam. If necessary, loosen the Skyclamp slightly by rotating the Remote Connect Pole counter clockwise until the Skyclamp just becomes loose on the I-beam. While pulling downward on the lanyard straps lift up the pole and twist until the clamp is square on the beam, and re-tighten the clamp until firmly attached to the I-beam.
- 11. Pull downward on the Remote Connect Pole to disengage the Skyclamp from the Connection Socket.
- 12. Give 2 sharp tugs on the lanyard strap leading to the Skyclamp to ensure that the snaphook is fully attached to the Anchor Ring
- 13. The clamp may now be used as an anchorage point for personal fall arrest systems.

Removal of the Skyclamp is accomplished by holding the Lanyard strap attached to the anchor ring off to one side pulling the Anchor Yoke out of the way to expose the Hex Tightening Nut. Using the Remote Connect Pole, push the Connection Socket onto the Hex Tightening Nut and rotate the Pole counterclockwise to open the Skyclamp jaws until they slide free of the I-beam flanges.

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Training

It is the responsibility of the employer to train all workers prior to using this system (per OSHA 1926.503 (a)(1)). The employer shall provide a training program for each employee who might be exposed to fall hazards. The program shall enable each employee to recognize the hazards of falling and shall train each employee in the procedures to be followed in order to minimize these hazards.

The employer shall assure that, as necessary, each employee has been trained by a competent person qualified in the following areas:

- a. OSHA regulations governing the use of Personal Fall Arrest Systems (PFAS) and their anchorages.
- b. Ability to recognize potential fall and workplace hazards.
- c. Method of inspection of safety equipment.
- d. Rescue procedures.
- e. Installation and removal techniques.

Planning for Rescue

Prior to system use, a rescue plan must be prepared, the workers must be trained in its use, and the rescue equipment must be on hand to implement it in case of a fall.

Typical rescue plans include (but are not limited to) the following items:

- 1. List of equipment that must be readily accessible in the event of an emergency and the names of those workers certified to use or operate that equipment.
- 2. Emergency contact phone numbers (ambulance, hospital, fire department...) and a means to contact them (cell phone, emergency radio).
- 3. List of employees on the site, and the specific tasks they will perform to effect the rescue.
- 4. If a confined spacing is to be entered a confined space work permit must be filed and approved.

During installation and use of Personal Fall Arrest Systems, anchorage points should be identified, and clearly marked in such a manner as to provide a means to rescue a worker at any position in the workspace.

Inspection

Prior to each use, the worker must inspect the system for any physical damage, wear, corrosion, or malfunctioning parts. All components must be inspected according to the instructions provided with the specific product. If an inspection reveals a problem or unsafe condition, remove the entire system from service until it can be repaired, replaced or re-certified by a competent person.

A formal inspection must be carried out a minimum of once each year, and be formally documented and kept on file with the inspection documents and instruction manuals.

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Servicing

A qualified person trained in the inspection and servicing of system components must carry out servicing of this product. The company's safety officer should maintain a record log of all servicing and inspection dates. This product and all components must be withdrawn from service if subjected to fall arrest forces. Those components may be returned to service only after being certified by a qualified person. Only original Reliance Industries, LLC Products supplied equipment replacement parts are approved for use in this product. Contact Reliance Industries Engineering with questions and when in need of assistance.

Warnings and Limitations

Proper care should always be taken to visually scan the work area prior to use. Remove any obstructions, debris, and other materials from, and beneath the work area that could cause injuries or interfere with the operation of this system. Be cautious of swing fall hazards if working horizontally to the side of the Skyclamp. Always use the shortest lanyard length possible to connect to the Skyclamp.

Users should be familiar with pertinent regulations governing the use of this system and its components. Only trained and competent personnel should install and use this system.

Use only Reliance Industries, LLC supplied or Reliance qualified compatible components.

Guarding Against Application Failure

To avoid property damage, injury or death, the User must take reasonable steps to prevent "Application Failure". An application failure may be any unacceptable use, misuse, or application error on the part of the User or System Designer. Because each end user might use this product in a manner different from Reliance Industries testing platform, and because the User might use this product in combination with other manufacturer's products in a manner not evaluated, contemplated, or tested by Reliance, the User or System Designer is ultimately responsible for verifying or validating the suitability and compatibility of this product for use in his application or system.

Whenever questions regarding proper use or compatibility arise, please contact Reliance Engineering at (303) 424-8650.

If you have any questions regarding the correct installation or use of this product <u>DO NOT USE</u>. Call Reliance Industries Engineering at Ph. (303) 424-8650 or Fax (303) 424-8670.

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Inspection Log for the SkyclampTM Personal Fall Arrest Anchor Clamp

Company:	_ Location:		Date:	
Job Site:				
Describe non-conforming condition	s in the boxes b	pelow:		
	Missing	Labels		Deformed
Inspection Criteria	Parts	Readable	Corrosion	Parts
Clamp jaws free from cracks				
Pivot pins present, 4 ea.				
Jaws intact and not deformed				
Hex tightening nut rotates freely				
Pivot bars not bent				
Ring yoke present, not deformed				
Labels present and readable				
Has a Rescue Plan been prepared				
Is Rescue Equipment on hand				
Have workers been trained in the Re	escue Procedure	es and been give	en a copy of the	Rescue

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