



CLIMBTECH



OPERATION AND INSTRUCTION MANUAL

Energy Absorbing Y-Lanyard Model: EAL12NC-72Y-C13



WARNING: ALL PERSONS USING THIS EQUIPMENT MUST READ AND UNDERSTAND ALL INSTRUCTIONS. FAILURE TO DO SO MAY RESULT IN SERIOUS INJURY OR DEATH. USERS SHOULD BE FAMILIAR WITH PERTINENT REGULATIONS GOVERNING THIS EQUIPMENT. ALL INDIVIDUALS WHO USE THIS PRODUCT MUST BE PROPERLY INSTRUCTED ON HOW TO USE THE DEVICE. AVOID CONTACT WITH PHYSICAL HAZARDS (THERMAL, CHEMICAL, ELECTRICAL, ETC.). MAKE ONLY COMPATIBLE CONNECTIONS.

Read This Instruction Manual Carefully Before Using This Equipment.

User Instructions must always be available to the user and are not to be removed except by the user of this equipment. For proper use, see supervisor, User Instructions, or contact the manufacturer.



WARNING

Compliant fall protection and emergency rescue systems help prevent serious injury during fall arrest. Users and purchasers of this equipment must read and understand the User Instructions provided for correct use and care of this product. All users of this equipment must understand the instructions, operation, limitations and consequences of improper use of this equipment and be properly trained prior to use in accordance with all applicable standards. All references to “applicable standards” refer to ANSI, OSHA, state, local, and/or federal standards that apply to approved uses.

Misuse or failure to follow warnings and instructions may result in serious personal injury or death.

PURPOSE

The EAL12NC-72Y-C13 is a connecting subsystem consisting of an energy absorbing Y-Lanyard and integrated CBH013X anchorage connectors designed to limit forces during fall arrest while functioning as an interface between an anchorage and full body harness. Any references to “connecting subsystem” in this manual include, and apply to, the EAL12NC-72Y-C13 and all integral components. Any references to “anchorage connector” in this manual include, and apply to, the CBH013X.

USE INSTRUCTIONS

1. A user must be of sound mind and body to properly and safely use this equipment in normal and emergency situations. Users must have a physician ensure they are clear of any medical conditions that may affect the proper and safe use of this equipment in normal and emergency situations.
2. Before using a personal fall arrest system, user must be trained in accordance with the requirements of applicable standards in the safe use of the system and its components.
3. Use only with ANSI/OSHA compliant personal fall arrest or restraint systems. The anchorage must have the strength capable of supporting a static load, applied in the directions permitted by the system, of at least 5,000-lbf (22kN) in the absence of certification.
5. Use of this product must be approved by an engineer or other qualified person (as defined by OSHA 29 CFR 1926.32 (m)) to be compatible with any and all structural & operational characteristics of the selected installation location and system to be connected to this connecting subsystem.
6. The connecting subsystem must be inspected prior to each use for wear, damage, and other deterioration. If defective components are found the connecting subsystem must be immediately removed from service in accordance with applicable standards and the manufacturer’s inspection requirements.
7. 60 inches must be added to the fall clearance calculation to account for maximum deceleration distance this connecting subsystem may add to the complete system. Fall arrest systems should be used in a way minimizes fall potential and risk of swing falls. Adequate fall clearance must be planned for after accounting for all components of the system and surroundings. Surroundings include but are not limited to lower levels, machinery, and other obstacles.
8. If due for scheduled maintenance or inspection, connecting subsystem should be tagged not for use until maintenance or inspection has been performed.
9. A rescue plan, and the means at hand to implement it, must be in place that provides the prompt rescue of users in the event of a fall, or assures that users are able to rescue themselves.
10. After a fall occurs the connecting subsystem must be removed from service and destroyed immediately.

USE LIMITATIONS: The connecting subsystem shall not be used outside its limitations, or for any purpose other than that for which it is intended.

1. The connecting subsystem is designed for single user, with a capacity up to 310 lbs (140 kg) including clothing, tools, etc.
2. Do not expose the connection subsystem to chemicals or harsh solutions which may have a harmful effect.
3. Do not alter or modify this product in any way.
4. Caution must be taken when using any component of a fall protection, travel restraint, work positioning, rope access, or rescue system near moving machinery, electrical hazards, sharp edges, or abrasive surfaces, as contact may cause equipment failure, personal injury, or death.
5. Do not use/install equipment without proper training by a “competent person” as defined by OSHA 29 CFR 1926.32(f).
6. Do not remove the labeling from this product.
7. Additional requirements and limitations may apply depending on system being used. All complete systems utilizing the connecting subsystem must be approved by an engineer or other qualified person.
8. Repairs should not be made to the connecting subsystem. If inspection reveals damage it should be removed from service and destroyed.
9. The connecting subsystem should only be used as intended, (see PURPOSE).
10. Connecting subsystem should not be used as part of a horizontal lifeline system.
11. Connecting subsystem must only be connected to one fall arrest system at a time.
12. Connecting subsystem is designed to be used in temperatures ranging from -10°F to +130°F (-23°C to +54°C).
13. Anchorage connector must only be loaded as allowed in CONNECTION INSTRUCTIONS.

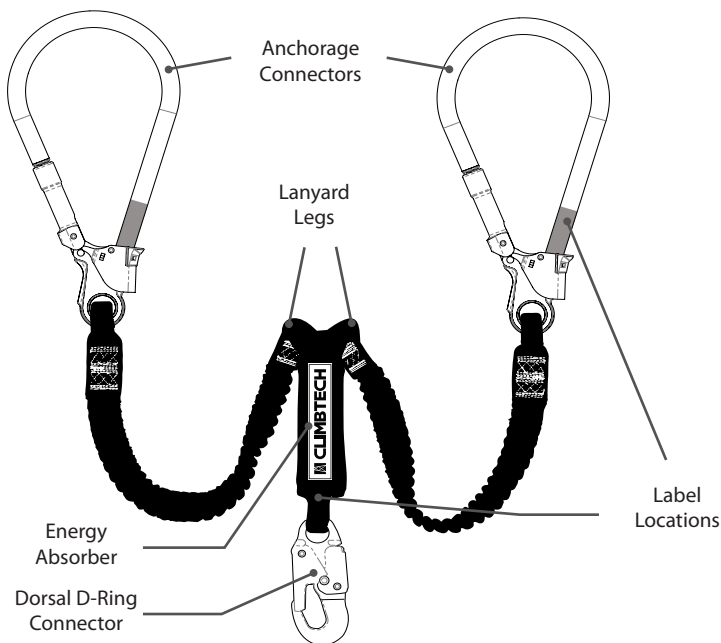
COMPATIBILITY LIMITATIONS

Connecting subsystem must only be coupled to compatible full body harnesses and anchorages. Compatibility must be determined by an engineer or other qualified person. OSHA 29 CFR 1926.502 prohibits snaphooks from being engaged to certain objects unless two requirements are met: it must be a locking type snaphook, and it must be "designed for" making such a connection. "Designed for" means that the manufacturer of the snaphook specifically designed the snaphook to be used to connect to the equipment listed. The following connections must be avoided, because they can result in rollout* when a nonlocking snaphook is used:

- Direct connection of a snaphook to horizontal lifeline.
- Two (or more) snaphooks connected to one D-ring.
- Two snaphooks connected to each other.
- A snaphook connected back on its integral lanyard.
- A snaphook connected to a webbing loop or webbing lanyard.
- Improper dimensions of the D-ring, rebar, or other connection point in relation to the snaphook dimensions that would allow the snaphook keeper to be depressed by a turning motion of the snaphook.

***Rollout: A process by which a snaphook or carabiner unintentionally disengages from another connector or object to which it is coupled. (ANSI Z359.0-2007)**

KEY COMPONENTS



SPECIFICATIONS

Minimum Breaking Strength: 5,000-lbf (22kN)

Gate Strength: 3,600-lbf (16kN)

Transverse Strength: 3,600-lbf (16kN)

Capacity: 1 user 130-310-lbs

Max Arrest Force: 1,800-lbf

Weight: 4.8-lbs

Materials: Nylon, Polyester, Aluminum, Zinc Plated Steel, Plastic, Rubber, Stainless Steel.

Compliance: ANSI Z359.13, OSHA 1926.503, OSHA 1910.140, ANSI Z359.12 (Dorsal D-Ring Connector, Anchorage Connectors' connection point), ANSI Z359.18 (Anchorage Connectors).

Energy Absorbing Lanyard Length: 6ft (1.83m).

Average Arrest Force: 1350-lbf (6kN) Ambient/Dry, 1575-lbf (7kN) Cold/Wet.

Elongation/Deceleration Distance: 60" (1.52m) MAX.

Note: EAL Length is measured when tensioned to 10-lbf and does not include Elongation/Deceleration Distance.

Note: MAX Elongation/Deceleration Distance should still be used when calculating fall clearances for fall distances less than 12 feet and all approved user weights less than 310 lbs.

LABELS

Energy Absorbing Lanyard Labels

Warning: User Capacity Range 130-310 lbs.

12ft. **1350lbs.**

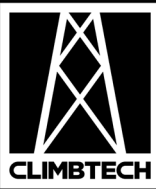
Maximum Free Fall Average Arresting Force

Maximum Deployment Distance 60"

Forces may increase when cold and/or wet


Read Instructions before Use

DO NOT REMOVE
INSPECT BEFORE USE



Model: EAL12NC-72Y-C13
Length: 6ft
Manufacture Date: MM/YYYY
Capacity: 1 user (130-310 lbs.)
Compliance: ANSI Z359.13,
 OSHA 1926.503 & 1910.140
Materials: Nylon, Polyester, Rubber
Serial Number: XXXXXXXXXX

DO NOT REMOVE
INSPECT BEFORE USE



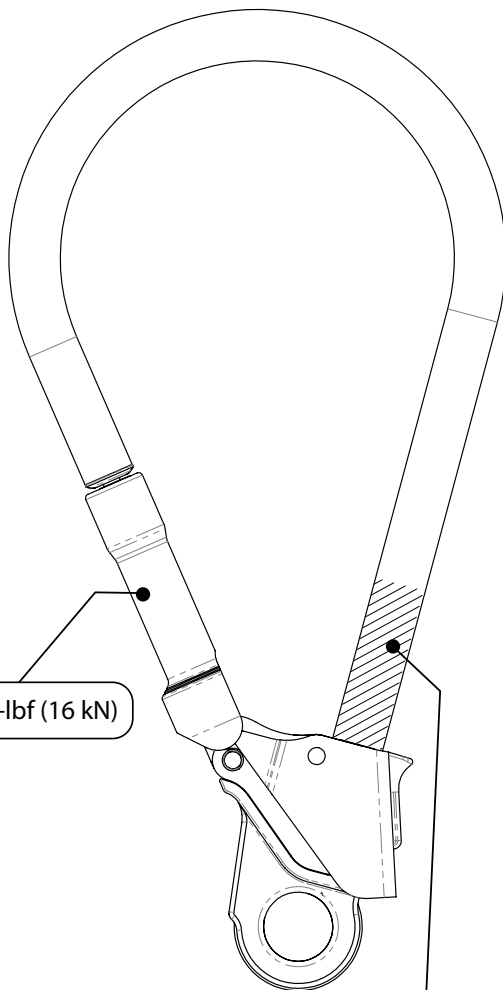
WARNING: ALL PERSONS USING THIS EQUIPMENT MUST READ AND UNDERSTAND ALL INSTRUCTIONS. FAILURE TO DO SO MAY RESULT IN SERIOUS INJURY OR DEATH. USERS SHOULD BE FAMILIAR WITH PERTINENT REGULATIONS GOVERNING THIS EQUIPMENT. ALL INDIVIDUALS WHO USE THIS PRODUCT MUST BE PROPERLY INSTRUCTED ON HOW TO USE THE DEVICE. AVOID CONTACT WITH SHARP EDGES, ABRASIVE SURFACES, AND OTHER PHYSICAL HAZARDS (THERMAL, CHEMICAL, ELECTRICAL, ECT.) MAKE ONLY COMPATIBLE CONNECTIONS.

DO NOT REMOVE
INSPECT BEFORE USE




INSPECTION GRID	DATE											DO NOT REMOVE INSPECT BEFORE USE
	INITIALS											

Note: Labels for connecting subsystem are tucked into Energy Absorber cover from the side containing a Dorsal D-Ring Connector.

ANCHORAGE CONNECTOR LABELS

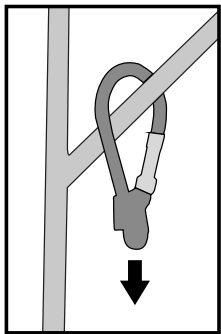
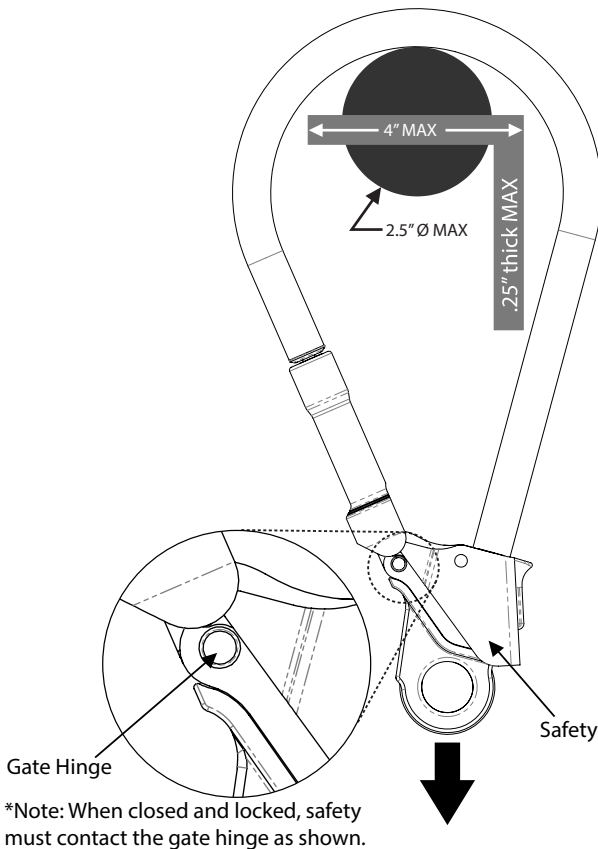


Gate Strength: 3600-lbf (16 kN)

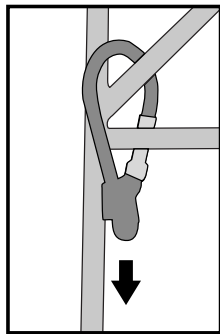
 MAX 310-lbs		 5000-LBF MBS
<p>Model: CBH013X-000-CTS PAT # US 10,384,086 B2 Batch: CBH-XXX-XXXX/ MFG: MM/YYYY ANSI Z359.18 Type A & ANSI Z359.12 (Connection Point) WARNING: MAKE ONLY COMPATIBLE CONNECTIONS. USER MUST READ, UNDERSTAND, AND FOLLOW ALL INSTRUCTIONS. FAILURE TO DO SO MAY RESULT IN SERIOUS INJURY OR DEATH. PRODUCT IS DESIGNED TO DEFORM. ADD 6 IN (153 MM) TO FALL CLEARANCE CALCULATIONS. DO NOT USE IN TEMPERATURES BELOW -10 °F (-23 °C).</p>		

Note: For markings of components not manufactured by ClimbTech, refer to manufacturer for proper marking information.

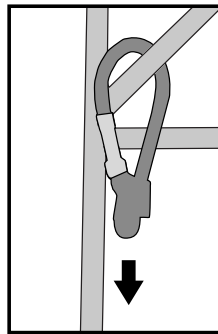
ANCHORAGE CONNECTOR CONNECTION INSTRUCTIONS



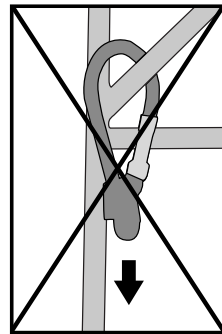
SCENARIO A



SCENARIO B



SCENARIO C

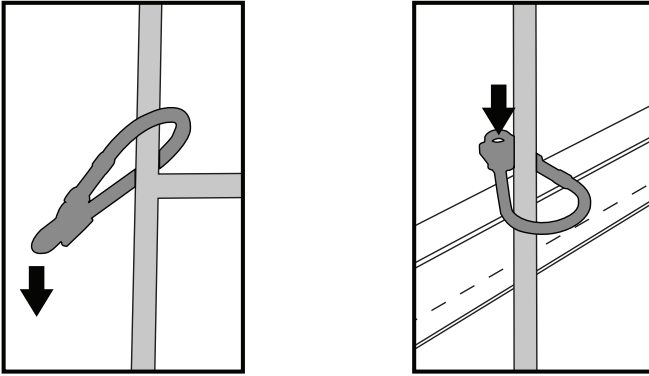


SCENARIO D

Inspect every connection. Ensure gate has closed and locked. Ensure dangerous loading conditions are not present and will not develop in the event of a fall. Subjecting the anchorage connector to any forces that are not along the major axis (transverse, over edge, cantilever, ect.) may cause deformation sufficient to inhibit normal operation, **even at forces less than the specified serviceability load.**

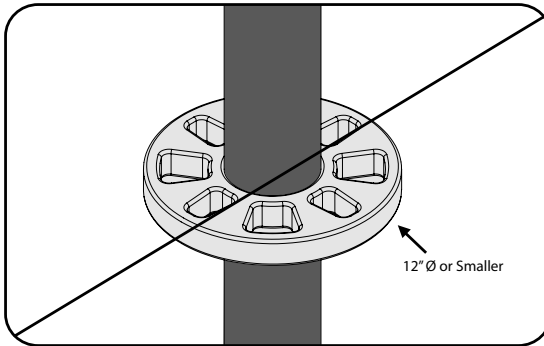
Note: Buildup of dirt and grime around moving parts may cause opening/closing action to hang up or have a gritty feel. To avoid lasting degrading effects to the action, clean and lubricate promptly according to CLEANING AND LUBRICATION INSTRUCTIONS.

TRANSVERSE LOADING

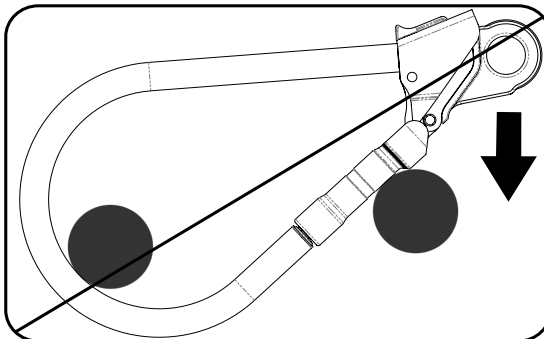


Transverse/Side loading tested using ANSI Z359.12 fixturing in static and dynamic load conditions. Dynamic Testing performed according to ANSI Z359.18 Type A requirements.
Minimum Static Breaking Strength: 3600-lbf.

DANGEROUS LOADING CONDITIONS

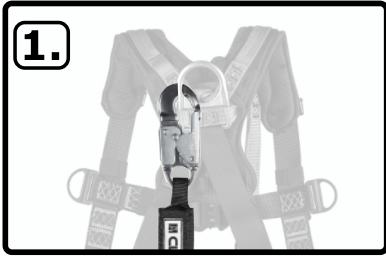


Warning: This anchorage connector is designed to deform under fall arresting forces. Do not make connections that may allow the anchorage connector to disengage the anchorage when deformed. This includes but is not limited to scaffolding rosettes smaller than 12" in diameter.



Warning: Connections that allow fall arresting forces to act in the opening direction of the gate are not permitted.

ENERGY ABSORBING LANYARD CONNECTION INSTRUCTIONS

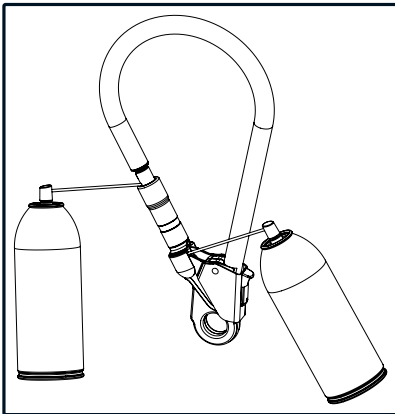


Connect the *Dorsal D-Ring Connector* directly to the Dorsal D-Ring of a compatible full body harness. This is the only permitted connection for the Dorsal D-Ring Connector. D-Ring extensions or other products that may increase the length of this connecting subsystem are strictly prohibited.

MAINTENANCE, CLEANING AND STORAGE

Cleaning periodically will prolong the life and proper functioning of the product. The frequency of cleaning should be determined by inspection and by severity of the environment. Clean with a mild soap and warm water solution. Do not use any corrosive chemicals that could damage the product. Wipe all surfaces with a clean, dry cloth to remove excess water and hang to dry. When not in use, store in a cool, dry, clean environment, out of direct sunlight and free of corrosive or other degrading elements.

CLEANING AND LUBRICATION INSTRUCTIONS



1. With safety depressed and gate in unlocked position, use compressed air to expel dirt from gate. Pay particular attention to locations shown.
2. Repeat step 1 using a PTFE based Dry Lubricant with no harsh chemicals (DuPont Teflon Non-stick Dry-Film Lubricant Model DNS616601 or equivalent).
3. Repeat steps 1 and 2 as necessary, then dry with compressed air and remove excess lubricant with a dry cloth.

INSPECTION GUIDELINES

Official periodic inspection must be made at least semiannually. The inspection must be performed by a qualified person other than the intended user. If severe weather or conditions exist then inspections must be

1. Inspect webbing and stitching for damage due to cuts, abrasion, tears, excessive heat, chemical contact, excessive stretching, ultraviolet deterioration, rotting, mildew, and any other factors that may interfere with proper function of the connecting subsystem.
2. Inspect stitching for cut, worn, or unraveling threads.
3. Inspect hardware for cracks, dents, wear, sharp edges, corrosion, deformation, alternations, or other damage that may interfere with proper function of the connection subsystem.
4. Ensure *Energy Absorber* has not been deployed.
5. Gates and safeties of Anchorage Connectors and Dorsal D-Ring Connector should automatically close and lock. Lubricate as instructed if necessary.
6. Markings must appear legibly as shown in user instructions.
7. Inspect for any additional conditions that may render the product unsuitable for use as a connecting subsystem.
8. Record inspection results in the INSPECTION AND MAINTENANCE LOG.

INSPECTION AND MAINTENANCE LOG

MODEL NUMBER: _____

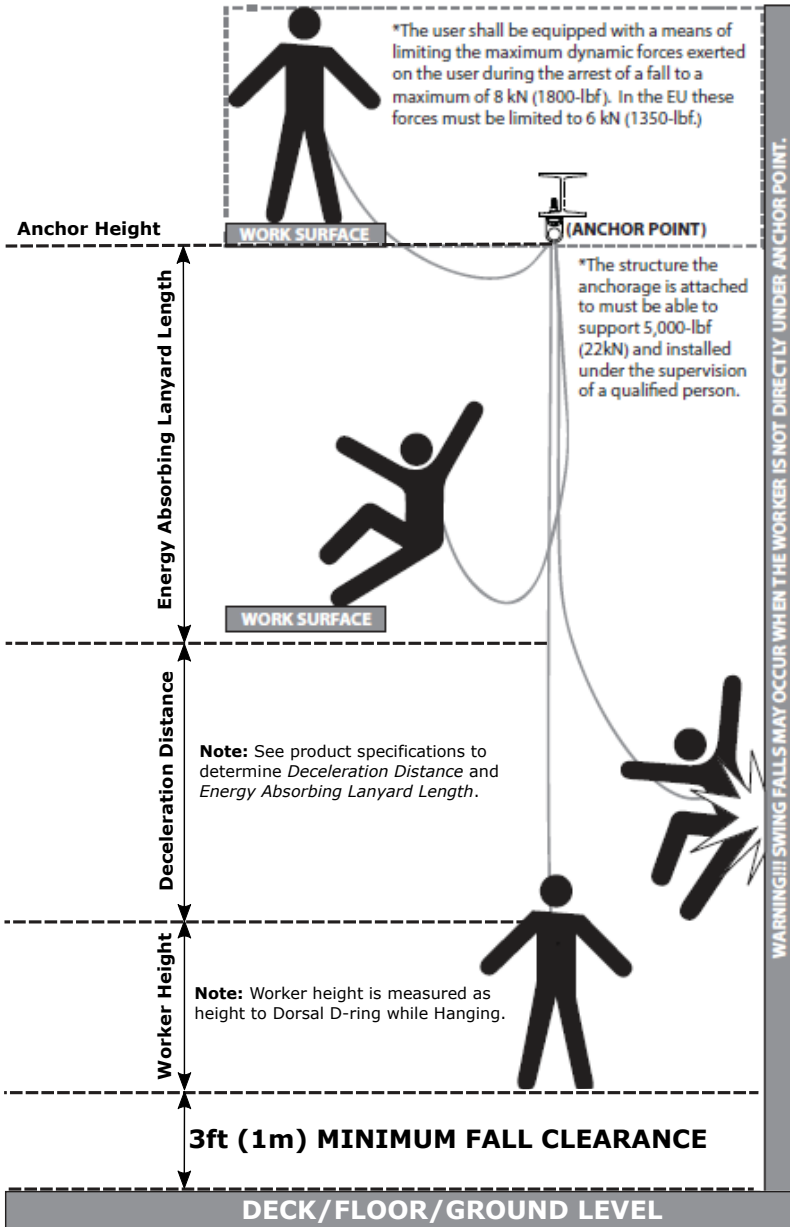
DATE OF MANUFACTURE: _____

Date	Part Number	Comments	Inspector Name

***If any damage that could affect the strength or operation of the device, or unsafe conditions are found, proper disposal is required. The full body harness must be rendered unusable and then properly discarded.**

CALCULATING FREE-FALL DISTANCE

When calculating free-fall distance, the anchor height should be greater than the sum of energy absorbing lanyard length, deceleration distance, worker height, and minimum fall clearance. Additionally, care must be taken to avoid collisions while falling obstacles, swing falls and additional hazards. Contact the manufacturer



WARNING: All products subjected to fall arresting forces should be removed from service immediately!

Product Warranty, Limited Remedy and Limitation of Liability

WARRANTY: THE FOLLOWING IS MADE IN LIEU OF ALL WARRANTIES OR CONDITIONS, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Equipment offered by ClimbTech is warranted against factory defects in workmanship and materials for a period of one year from date of purchase or first use by the original owner.

LIMITED REMEDY: Upon notice in writing, ClimbTech will repair or replace all defective items at ClimbTech's sole discretion. ClimbTech reserves the right to require that the defective item be returned to its plant for inspection before determining the appropriate course of action. Warranty does not cover equipment damage resulting from wear, abuse, damage in transit, failure to maintain the product or other damage beyond the control of ClimbTech. ClimbTech shall be the sole judge of product condition and warranty options. This warranty applies only to original purchaser and is the only warranty applicable to this product. Please contact ClimbTech technical service department for assistance.

LIMITATION OF LIABILITY: IN NO EVENT WILL CLIMBTECH BE LIABLE FOR ANY INDIRECT, INCIDENTAL, SPECIAL OR CONSEQUENTIAL DAMAGES INCLUDING, BUT NOT LIMITED TO LOSS OF PROFITS, IN ANY WAY RELATED TO THE PRODUCTS REGARDLESS OF THE LEGAL THEORY ASSERTED.

For more information:

