



USER INSTRUCTION MANUAL
HOOKS AND CONNECTORS

THESE INSTRUCTIONS APPLY TO THE FOLLOWING MODELS:

FC409151, UFC401100, UFC408120, UFC401400, UFC401101, UFC401110,
UFC404500, UFC404150, UFC405100, UFC404450 AND UFC408100



This manufacturer's user instruction manual meets the requirements of ANSI Z359.12-2009. As per OSHA, this manual should be used as a part of an employee training program.

⚠ WARNING

The products enumerated in this instruction manual are part of a personal protective, work support or rescue system. It is important that the user reads and follows the manufacturer's instructions for each component of the system. This manual contains information which is important to the user's safety and should be kept in a safe place for any future reference as needed. The instructions provided in this manual are meant for the use of this equipment and should be read thoroughly and understood by the user before the equipment is used. Manufacturer's instructions must be properly followed for the correct use and maintenance of this equipment. Never attempt to alter or misuse the products enumerated in this manual and always follow the manufacturer's instructions. Failure to do so may result in serious injury or even death. Please contact KStrong for any questions regarding use of this equipment.

TRAINING

In order to ensure that the user is familiar with the instructions provided in this manual, it becomes the responsibility of the user to undergo proper training on the proper inspection, use and maintenance of this equipment. It is also the employer's responsibility to ensure that all the users are trained in proper use, inspection and maintenance of Fall Protection Equipment.

TECHNICAL SPECIFICATION

Model	Material of Construction	Minimum Breaking Strength	Conformity
FC409151	High Strength Alloy Steel	5000 lbs.	ANSI Z359.1-2007
UFC401100	High Strength Alloy Steel	9000 lbs.	ANSI Z359.12-2009 & CSA Z259.12-11
UFC408120	High Strength Alloy Steel	5000 lbs.	ANSI Z359.12-2009
UFC401400	High Strength Aluminium Alloy	5000 lbs.	ANSI Z359.12-2009
UFC401101	Alloy Steel	9000 lbs.	ANSI Z359.12-2012 and CSA Z259.12
UFC401110	High Strength Alloy Steel	5000 lbs.	ANSI Z359.12-2009
UFC404500	High Strength Alloy Steel	5000 lbs.	ANSI Z359.12-2009 and CSA Z259.12-11
UFC404150	High Strength Alloy Steel	5000 lbs.	ANSI Z359.12-2009 and CSA Z259.12-11
UFC405100	High Strength Alloy Steel	5000 lbs.	ANSI Z359.12-2009 and CSA Z259.12-11
UFC404450	High Strength Aluminium Alloy	5000 lbs.	ANSI Z359.12-2009
UFC408100	High Strength Alloy Steel	5000 lbs.	ANSI Z359.12-2009

IMPORTANT INFORMATION

- It is important to inspect the equipment according to the manufacturer's instructions before each use.
- Inspection of equipment should be conducted on a regular basis by a qualified person and the results recorded in the inspection log.
- DO NOT REMOVE product labels which include important warnings and information for the authorized person. "Authorized Person" is a person who is exposed to fall hazards during the course of their work. This individual requires formal training in the use of personal fall protection equipment and systems. The term "Authorized Person" may be used interchangeably with "User" and "End-User".
- DO NOT ALTER the equipment in any way.
- Always send the equipment back to the manufacturer, or to persons or entities authorized in writing by the manufacturer, for any repairs if required.
- Never use any natural material like manila, cotton, etc. as part of a fall protection system.
- Fall protection equipment should only be used for the purpose for which it has been designed. Work positioning lanyards are not to be used for material handling, and other such activities.
- This equipment should never be used for towing and hoisting or for any other purpose than its intended use.
- A competent person must ensure compatibility of the system to minimize any potential for accidental disengagement.
- Authorized persons, or users, shall be trained on all warnings and instructions provided in this manual.

- It is important for all authorized persons and users to refer to the applicable ANSI standards and to the regulations governing occupational safety.
- Take proper precautions to remove any debris, material, obstructions, etc., from the work area which could cause injury, or otherwise interfere with the functioning of the system.
- Keep the equipment away from anything that could damage it such as sharp edges, rough or abrasive surfaces, high temperature surfaces, heat and welding sources, moving machinery, electrical hazards, etc.
- It is important to select fall protection equipment keeping environmental hazards in mind.
- Do not expose the equipment to chemicals, highly corrosive or caustic environments, or to direct sunlight and UV radiation, which may cause UV degradation.
- Such harmful environments require a more frequent inspection and servicing program of the fall protection equipment to maintain the integrity and safety of the equipment. Contact KStrong if in doubt.
- All the synthetic material of fall protection equipment must be protected from slag, hot sparks, open flames or other heat sources. It is recommended that heat resistance materials are used in such applications.
- It is important to allow adequate fall clearance below the work surface.
- Always have a rescue plan ready and at hand when using this equipment. The rescue plan should be provided to an authorized person. The user shall also be provided appropriate training before using the equipment where a suspension could occur.

▲ WARNING !!

- **Immediately discard any product which is exhibiting unusual wear, deformity or deterioration.**
- **Immediately remove from service any equipment that has been subjected to a fall.**

COMPONENT COMPATIBILITY

Component compatibility with KStrong manufactured fall protection equipment is ensured by strictly following the instructions for each type of equipment used. However, if the fall protection equipment utilizes combinations of components or sub systems that are manufactured by others, only a "qualified" or "competent" person (as defined in OSHA) can ensure the compatibility. If substitutions or replacements are made with non-approved components of sub systems, then this may severely affect the compatibility of the equipment, making the complete system unsafe for use.

COMPATIBILITY OF CONNECTORS

To ensure the compatibility of the connectors with their connecting element, it is important to safeguard that the sizes and shapes of the connectors and the connecting elements do not allow their gate mechanisms to open inadvertently, notwithstanding their orientation with each other. All hooks, carabiners, D-rings and other such connectors, must be capable of supporting a min. force of 5000 lbs. (23 kN). All connectors must be compatible with all system components like anchorages, etc. Never use equipment that is not compatible as this may cause the connectors to disengage unintentionally. All connectors must be compatible in shape and size. As per ANSI Z359.12-2009 and OSHA, only self-locking snap hooks and carabiners may be used.

CONNECTIONS USING CONNECTORS

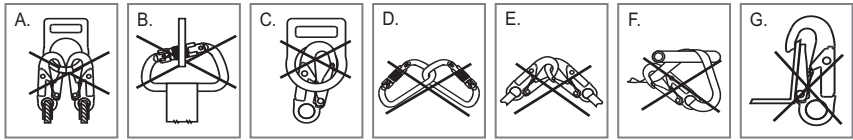
Ensure that only self-locking snap hooks and karabiners are used with this equipment. All connections should be compatible in size shape and strength. The connectors used should be suitable to each application. Ensure that they are fully closed and locked while in use.

NEVER USE INAPPROPRIATE CONNECTIONS

While using KStrong snap hooks and carabiners, they should not be connected as below:

- Two or more connectors should never be attached to a single D-ring.
- Never attach a connector that could result in a load on its gate. Do not make connections where the hook lock mechanism may come in contact with a structural member, and cause the hook to accidentally open and disengage.
- Connectors should not be connected in a false engagement. It should be visually confirmed that the connector is fully engaged to the anchor point. Avoid conditions that allow for features that protrude from the connectors to catch on the anchor, giving a false sense of being connected.
- Connectors should not be connected to each other.
- Connectors should not be connected directly to the webbing or to the rope lanyard or tie back, unless specifically allowed by the manufacturer.
- Connectors should not be connected to any object which does not allow the connector gate to close or lock. Anchor shapes that allow roll out to occur should never be used for connection. If the anchor to which the snap

hook or the carabiner is attached is undersized or irregular in shape, then this may allow for the gate of the connector to come in contact with the anchor, thereby causing the connector to open up and possibly disengage from the anchor. This is known as roll out of the connector.



- Do not use connectors on an anchorage object as shown in figure G

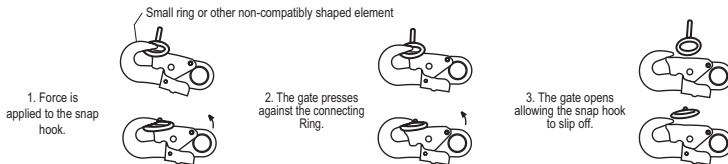
⚠ WARNING

Large throat opening snap hooks should not be connected to standard size D-rings or similar objects. The reason for this is if the hook or D-ring twists or rotates, then this may result in a load on the gate of the connector. Large throat snap hooks are specifically designed for use on fixed structure elements such as rebar or cross members. These are shaped in such a way that they cannot capture the gate of the hook.

IMPORTANT RESTRICTIONS WHILE MAKING CONNECTIONS

- A snap hook should not be connected into a loop or thimble of a wire rope, or attached to it in any way that may slack the wire rope.
- Do not make connections where the connector locking mechanism can come into contact with a structural member, or other such equipment, which may potentially unlock the connector and release the connection.
- To connect to a single or a pair of soft loops on a harness, a carabiner that can fully close and lock should only be used. Snap hooks are not allowed for such connections.
- A carabiner may be connected to a loop or ring connector that is already occupied by a choker style connector. Snap hooks are not allowed for such connections.

If the connecting element to which a snap hook (shown) or carabiner attaches is undersized or irregular in shape, a situation could occur where the connecting element applies a force to the gate of the snap hook or carabiner. This force may cause the gate (of either a self-locking or a non-locking snap hook) to open, allowing the snap hook or carabiner to disengage from the connecting point.



CONNECTING SUBSYSTEMS

Use only those connecting subsystems (self-retracting lifeline, lanyard, rope grab and lifeline, cable sleeves) that are suitable for your application. See subsystems manufacturer's instructions for more information. Some harness models have web loop connecting points. Do not use snap hooks to connect to the web loop. Use a self-locking carabiner to connect to a web loop. Ensure the carabiner cannot cross-gate load (load against the gate rather than along the backbone of the carabiner).

RESCUE PLAN

A rescue plan should be well documented and be in place before performing work at height. The rescue operation must be performed by trained and competent personnel only. The rescue expert team should supervise the rescue operation performed. It is also advised to work in pairs while working on the site.

ENVIRONMENTAL HAZARDS

It is important to take additional precautions while using this equipment in presence of any environmental hazards so as to prevent injury to the user or damage to the equipment.

ENVIRONMENTAL HAZARDS MAY INCLUDE THE FOLLOWING, BUT ARE NOT LIMITED TO

- Chemicals
- Extreme Temperatures
- Corrosive Environments
- Gases
- High Voltage Power Lines
- Sharp Edges
- Moving Machinery and Vehicles

Please contact KStrong with any questions regarding the use of this equipment in the presence of any environmental hazard.

▲ WARNING

This equipment is not designed to be used in high temperature environments. It is important to protect this equipment when using near activities like welding or metal cutting. Hot sparks may cause damage to this equipment or burn it. Contact KStrong for details on use of this equipment in high temperature environments.

ANCHORAGE STRENGTH

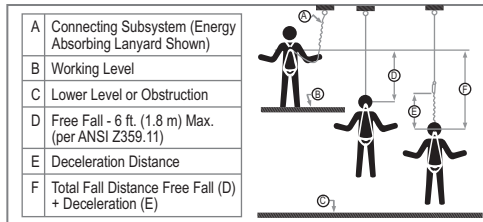
The application type determines the anchorage strength requirement. As per ANSI Z359.1 the necessary anchorage strength for the following applications is listed below:

- **Fall Arrest:** As per OSHA 1926.500 and 1910.66: anchorages that are used for attachment of Personal Fall Arrest Systems (PFAS) shall be independent of any anchorage being used to support or suspend platforms. They should be capable of withstanding a minimum load of 5000 lbs. (23 kN) per user attached, or should be designed, installed and used as part of a complete PFAS which maintains a safety factor of at least two. Rating of the anchorage should always be done under the supervision of a qualified person.
- **Work Positioning:** the structure to which the work positioning system is attached must be able to sustain a static load of min. 3000 lbs. (13.3 kN), applied in the directions permitted by the work positioning system. Or, it should be able to sustain two times the potential impact load, whichever is greater; see 1926.502. However, if more than one work positioning system is attached to an anchorage, then the strength mentioned above must be multiplied by the number of WPS attached to the anchorage.
- **Restraint:** The strength requirement of anchorages which are selected for restraint and travel restraint systems is min. of 1000 lbs. (4.5 kN) static load applied in the directions permitted by the system. If more than one restraint and travel restraint system is attached to anchorage, then the 1000 lbs. shall be multiplied by the number of systems attached to the anchorage to determine the minimum strength requirement.
- **Rescue:** The minimum strength of the anchorage selected for rescue should be such that it is capable of sustaining a static load minimum of 3000 lbs. (13.3 kN) applied in the direction permitted by the system. To determine the strength requirement of the anchorage if more than one rescue system is attached, then multiply 3000 lbs. (13.3 kN) by the number of the systems attached to the anchorage.

GENERAL LIMITATIONS OF FALL ARREST SYSTEM AND REQUIREMENTS

It is important to consider the below mentioned limitations before using or installing this equipment

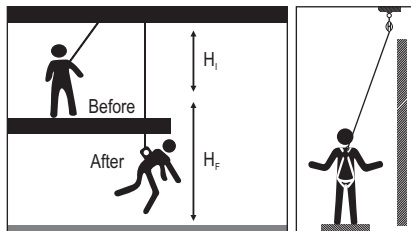
- The **capacity** of KStrong Connectors and Hooks is up to 420 lbs. (140 kg) hence, the combined weight (clothes, tools, shoes, etc.) of a person using these harnesses should not be more than 420 lbs. It is important to ensure that all the components in the system are rated to a capacity which is appropriate to the application. Only one personal protective system should be connected to a connector at any point in time, except in case of an emergency.



- Free Fall:** As per ANSI Z359.1 the personal fall arrest systems used with this equipment must be rigged in such a way that the free fall does not exceed 6 ft. (1.8 m), and as per ANSI Z359.13, it should not exceed 12 ft. Restraint systems must be rigged in such a way that no vertical free fall is possible. Work positioning systems are required to be rigged in a way that the free fall does not exceed 2 feet (0.6 m). Personal riding systems must be rigged so that there is no vertical free fall possible. Climbing systems must be rigged so that free fall is less than 18 inches (46 cm). Rescue systems must be rigged in such a way that there is no vertical free fall. Contact KStrong for any further information needed.

- Fall Clearance:** There should be sufficient clearance below the user to allow the system to arrest a fall so as to prevent the user from striking the ground or any other obstruction. The clearance required is dependent upon the following factors:

- Anchorage location
- Type of connecting subsystem used (energy absorbing lanyard, self-retracting lifeline (SRL), etc.)



If the only available anchorage is situated below the attachment on the harness, and if there is a risk of fall, then it is essential to use a lanyard provided with a properly rated energy absorber. It is important to ensure that there is sufficient fall clearance below the user before using a shock absorbing lanyard. If the weight of a wearer is 220 lbs. and the fall factor is two, we can calculate the fall clearance (which will be equal to the stopping distance $H(2L + 5.74 \text{ ft.}) + \text{an additional distance of } 3.28 \text{ ft.}$

Calculating Total Fall Distances:											
<p>Total Fall Clearance below worker is calculated from Anchorage Connection. Free Fall Distance + Energy Absorber Deceleration Distance + Worker height + Safety Factor. Care must be taken to ensure that the total fall distance is clear of obstructions; such as equipment, to avoid contact with a lower level.</p>	<table border="1"> <thead> <tr> <th>6 ft. free Fall</th> <th>Anchorage</th> </tr> </thead> <tbody> <tr> <td rowspan="2"> <p>Total 19 ft. from Anchorage</p> </td> <td> <ul style="list-style-type: none"> 6 ft. Length of Energy Absorbing Lanyard 4 ft. Deceleration Distance 6 ft. Height of Worker 3 ft. Safety Factor </td> </tr> <tr> <td> <table border="1"> <thead> <tr> <th>12 ft. Free Fall</th> <th>Anchorage</th> </tr> </thead> <tbody> <tr> <td rowspan="2"> <p>Total 20 ft. from Anchorage</p> </td> <td> <ul style="list-style-type: none"> 6 ft. Length of Energy Absorbing Lanyard 5 ft. Deceleration Distance 6 ft. Height of Worker 3 ft. Safety Factor </td> </tr> <tr> <td> <p>This Application requires a special EA lanyard</p> </td> </tr> </tbody> </table> </td> </tr> </tbody> </table>	6 ft. free Fall	Anchorage	<p>Total 19 ft. from Anchorage</p>	<ul style="list-style-type: none"> 6 ft. Length of Energy Absorbing Lanyard 4 ft. Deceleration Distance 6 ft. Height of Worker 3 ft. Safety Factor 	<table border="1"> <thead> <tr> <th>12 ft. Free Fall</th> <th>Anchorage</th> </tr> </thead> <tbody> <tr> <td rowspan="2"> <p>Total 20 ft. from Anchorage</p> </td> <td> <ul style="list-style-type: none"> 6 ft. Length of Energy Absorbing Lanyard 5 ft. Deceleration Distance 6 ft. Height of Worker 3 ft. Safety Factor </td> </tr> <tr> <td> <p>This Application requires a special EA lanyard</p> </td> </tr> </tbody> </table>	12 ft. Free Fall	Anchorage	<p>Total 20 ft. from Anchorage</p>	<ul style="list-style-type: none"> 6 ft. Length of Energy Absorbing Lanyard 5 ft. Deceleration Distance 6 ft. Height of Worker 3 ft. Safety Factor 	<p>This Application requires a special EA lanyard</p>
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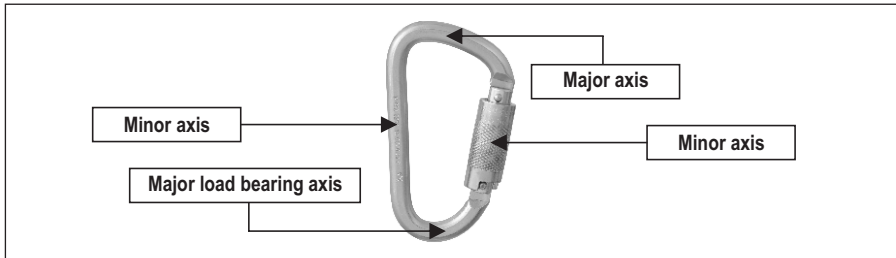
PERIODIC EXAMINATION

Always keep the instructions provided with the product. Take the information from the markings on the product and enter this information in the identification sheet. To ensure the safety of the user, it is essential to check the condition of the equipment through the periodic examination of the product. This equipment must be examined by a qualified person at least once every six months, strictly complying with the manufacturer's instructions. Also, record the previous check on the attached sheet. If the equipment is in heavy usage or is used in a harsh environment, then the frequency of inspection should be increased in accordance with regulations. Check also that the markings on the product are legible.

IF USED NEAR CORROSIVE ENVIRONMENT

In corrosive environments or in areas near seawater, metallic connectors and hooks have a greater chance of corrosion and rusting. Hence, the frequency of their inspection must be altered so as to check their functioning and performance more frequently.

ILLUSTRATION OF CARABINER



PURPOSE

Kstrong hooks and connectors are to be used as components in personal fall arrest, restraint, work positioning and rescue systems.

All KStrong Connectors and Hooks have the following markings on them:

for Gate:	for Body:
Gate Strength	Model: UFC404150 ANSI Z359.12-2009
3600 lbs. (16 kN)	K CSA Z259.12 5000 lbs. PT

APPLICATION

- **Personal Fall Arrest:** KStrong hooks and connectors are used as a component of a personal fall arrest system, as anchorages or as connectors. A full body harness along with a connecting sub system (e.g. energy absorbing lanyard) typically constitutes a PFAS. The maximum arresting force should not be more than 1800 lbs. (8 kN), and the maximum free fall distance allowed is 6 ft.
- **Work Positioning:** The hooks and connectors also form a part of a work positioning system. The full body harness together with connectors and work positioning lanyard constitute a work positioning system. Personal fall arrest system is always used as a backup. For work positioning at height, connect the work positioning sub system (e.g. lanyard) to the belt mounted work positioning attachment anchorage elements (also known as lateral D-rings), or to hip level side D-rings. These D-rings should never be used as connection points for fall arrest.
- **Restraint:** The hooks and connectors also form a component of a restraint system, which prevents the user from reaching a fall hazard (e.g. edge of platform or roof). A full body harness together with connectors and a restraint lanyard or restraint line constitutes a restraint system.
- **Controlled Descent:** For applications of controlled descent, a full body harness is connected with the help of a connector to a descender or an evacuation system. Such harnesses are equipped with a single sternal level D-ring, one or two frontal D-rings, or a pair of connectors originating below the waist.
- **Rescue:** Configuration of rescue systems is dependent upon the type of rescue. Harnesses that are equipped with D-rings on the shoulders may be used for entry and egress into confined spaces.
- **Ladder Climbing:** A climbing system prevents the user from falling when climbing a ladder or other climbing structure. A full body harness is connected with the help of a connector to its frontal D-ring on the sternal location to the climbing system. Other components of a climbing system includes a vertical cable or rail attached to the structure and a climbing sleeve.

LIMITATION OF USE OF HOOKS AND CONNECTORS

KStrong hooks and connectors are to be used as part of personal fall arrest, restraint, rescue or work positioning systems. Full body harnesses, connectors, hooks, lanyards, etc., are designed in such a way that they work in sync with other elements of a personal fall arrest system. While they are designed to arrest a fall from height, they also minimize

the impact load on the wearer. KStrong recommends that only those components or sub systems of the PFAS which are manufactured by KStrong, are used in combination. If other manufacturer's equipment is used, then they should be ensured for compatibility by a qualified person only. If substitutions or replacements are made with non-approved components of sub-systems, then this may severely affect the compatibility of the equipment, making the complete system unsafe for use.

INSPECTION OF COMPONENTS OF PERSONAL FALL ARREST SYSTEM

It is mandatory to have a detailed visual inspection of all the harnesses, lanyards, connectors, etc. prior to each use. This ensures that the equipment is in good condition and is operating correctly. If there are any doubts regarding the safe state of the product, or if the product has been used to arrest a fall, then immediately withdraw the equipment and send it back to the manufacturer or the qualified authorized repair center. Check on the back-shoulder straps of the harness for the fall indicators, which should be intact. If a fall indicator is found to be deployed, then the harness should be removed from use immediately. Never attempt to repair or modify a PPE.

FORMAL INSPECTION

It is mandatory that a competent person other than the user must perform a formal inspection of the PFAS and its components once at least every six months. This frequency should be altered on the basis of conditions for use or exposure. The inspection results should be recorded in the inspection and maintenance log at the end of this manual.

PRE USE- INSPECTION CHECK OF THE HOOKS AND CONNECTORS

The hooks and connectors should be inspected prior to each use as per the following guidelines:

Impact/ Load Indicator: Some KStrong hooks come with the load indicator on them. Look for the presence of a green colored band just above the eye of the connector. If it is present, then the hook has not been subjected to a fall, and one should proceed with other points of examination of the hook. If however the color of the band has changed to red, then this indicates that the connector has been subjected to a fall. In such a case, remove the connector from any further use.

Step 1: Check the markings on the connector- they should be fully present and readable.

Step 2: Inspect the hooks and carabiners visually for presence of cracks, deformities, bends and breaks, damages, burrs, dents or any sharp edges.

Step 3: Look on the hooks and carabiners for the presence of excessive rusting. The presence of rust also compromises the functionality of the connectors. Hence, it is important to ensure that the gate and lock of the connector is functioning smoothly, with the spring action of the gate and lock fully intact. The gate of the connector should close fully, engaging the nose of the hook.

▲ WARNING

Inspect all the other components of the fall arrest, work positioning, rescue systems that are to be used, as per the manufacturer's instructions. Immediately remove from use if the equipment shows evidence of having arrested a fall, or if it is unfit for further use. Do not attempt to repair the equipment on your own.

HOW TO MAKE CONNECTIONS WITH THE CONNECTORS

CARABINER

All KStrong carabiners are designed to be opened by a minimum of two deliberate consecutive actions. First, hold the carabiner and rotate its locking nut to reveal the neck of the connector. Now push the gate towards the center of the carabiner. The carabiner closes and locks automatically once the gate is released.

For triple-locking carabiners, the locking nut needs to be pushed up first, before rotating it.

SNAP HOOK

To open the gate of the snap hook, first press on to the lock of the snap hook alongside the eye of the hook, and then simultaneously press on the gate. This opens the gate of the hook. The gate automatically closes on release, and the lock ensures that it remains so, unless it is pressed again. The direction of application of force on the lock and the gate, is hence, opposite of each other, thereby ensuring that the snap hook does not open up accidentally.

⚠ WARNING

It is important to ensure that the connecting elements of the connectors are compatible in size and shape, while making a connection with the hooks and carabiners. Never connect one hook to another hook, or one carabiner to another carabiner, or a carabiner to a hook. Also, make sure not to connect a connector to any element that may cause the hook or carabiner material to distort/ abrade or wear out.

IMPORTANT POINTS FOR SUBSYSTEM ASSEMBLIES

When connecting an energy absorbing lanyard to the dorsal attachment D-ring of the harness, connect only the shock-pack end of the lanyard to the D-ring.

While making connections, ensure that all connectors are fully closed and locked.

A lifeline should never be connected to a connector using a knot. Also, never tie-back a connector on to a lifeline or the lanyard. Use a spliced end termination and a thimble to attach a connector to a synthetic rope lifeline. Connectors which are required to attach to wire rope lifelines, must be attached to a thimble on a formed eye termination of the wire rope. It is important to ensure that the termination is secured properly by swaging the ends of the wire rope by following proper procedures, before the thimble is connected to a connector.

⚠ WARNING

If the ends of the lifelines are not spliced or swaged properly by following the proper methods, then this may result in the termination to give away, when the connector connected to them is subjected to a force. KStrong shall not be held responsible for the consequences arising out of this.

⚠ WARNING

Knots should never be used for load bearing end terminations, since the presence of knots significantly reduce the strength of a lifeline. See ANSI Z359.1 for more details.

⚠ WARNING

KStrong does not guarantee against subassemblies made using products that are not manufactured by KStrong, and is not responsible for the consequences arising out of the same.

TRAINING

It is essential that the users of this type of equipment receive proper training and instruction, including detailed procedures for the safe use of such equipment in their work application. ANSI/ASSE Z359.2, Minimum Requirements for a Comprehensive Managed Fall Protection Program, establishes guidelines and requirements for an employer's managed fall protection program. These include policies, duties and training, fall protection procedures, eliminating and controlling fall hazards, rescue procedures, incident investigations, and evaluating program effectiveness.

MAINTENANCE, SERVICE AND STORAGE

- Always tag as "Unsuitable" those connectors and hooks which have been found to be unsuitable for further use. Never attempt to repair the equipment on your own. Send the equipment so tagged to an authorized service center (where the authorization has been received from the manufacturer in writing), or back to the manufacturer for replacement of components and repair.
- If soiled, the connectors may be wiped off clean with a dry clean cloth. You may periodically lubricate the area around the hinge and inner sleeve on both the sides of the carabiner, using a light weight penetrant oil. Contact KStrong for any further query.
- Additional maintenance and servicing procedure must be completed by authorized service center only.
- Store the hooks and connectors in a cool dry clean environment, away from direct sunlight. Avoid areas where there may be the presence chemical vapors, heat, excessive moisture, oil or other degrading elements. Soiled, wet or contaminated connectors should first be thoroughly cleaned and dried, before placing them in storage.
- It is extremely important to thoroughly inspect the connectors after extended storage. This inspection should be performed by a competent person only.

EQUIPMENT RECORD				
Product:				
Model and type/identification	Trade name	Identification number		
Manufacturer	Address	Tel, fax, email		
Year of manufacture	Purchase date	Date first put into use		
Other relevant information (e.g. Document number)				
PERIODIC EXAMINATION AND REPAIR HISTORY				
Date	Reason for entry (periodic examination or repair)	Defects noted, repair carried out and other relevant information	Name and signature of competent user	Periodic examination next due date



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