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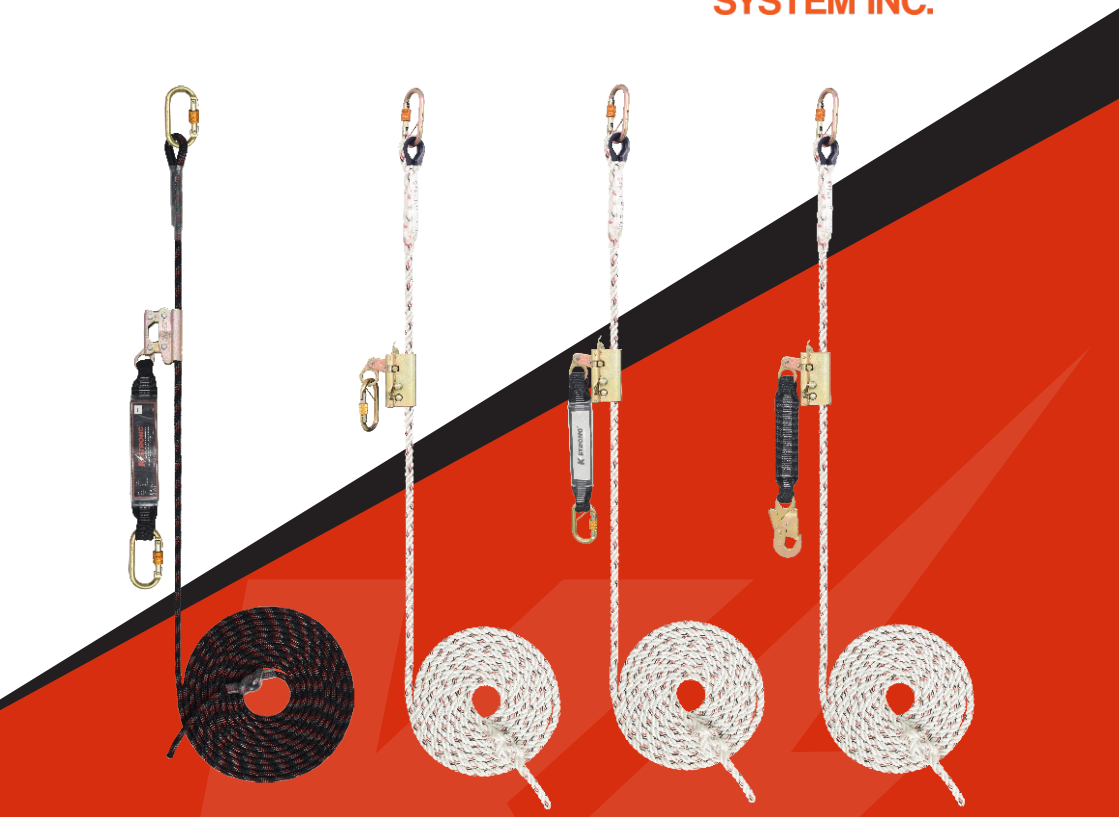

USER INSTRUCTION MANUAL

TEMPORARY VERTICAL ROPE LINE SYSTEMS

CE 0598

EN 353-2:2002

THESE INSTRUCTIONS APPLY TO THE FOLLOWING MODELS:

AFA950001, AFA950201, AFA950202, AFA951201, AFG801010, AFG801013 and AFG801011

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Please read and understand the manufacturer's instructions for each component or part of the complete system. Manufacturer's instructions must be followed for proper use, care, and maintenance of this product. These instructions must be retained and be kept available for the user's reference at all times. Alterations or misuse of this product, or failure to follow instructions, may result in serious injury or death.

Note: The user is advised to keep this user instructions document for the life of the product.

IMPORTANT:

- Prior using the equipment, please do record the product identification information found on the ID label of your rope grab in the equipment record table of this manual.
- If you have questions on the use, care, or suitability of this equipment for your application, contact KStrong.

The Temporary Anchorage Line system is classed as a Personnel Protective Equipment (PPE) by the European PPE Regulation (EU)2016/425 and have been shown to comply with this Directive through the Harmonized European Standard EN 353-2:2002.

System Components	
AFA950001	Alloy Steel Openable Rope Grab for Fibre Rope: Ref. AFG801001 Steel Screw Locking Karabiner: Ref.AFC601100C Anchorage Line: Polyamide Twisted Rope of dia 14mm to 16mm Has coloured tracer yarn which loses its colour in due course of time, to show that the rope is now unfit for further use.
Unique Feature	Rope Grab installed comes with unique gravity locking system that prevents incorrect usage.

AFA950001

System Components	
AFA950201	Alloy Steel Openable Rope Grab AFG801001 permanently stitched with shock absorber Steel Screw Locking Karabiner: Ref. AFC601100C Anchorage Line: Polyamide Twisted Rope of dia 14mm to 16mm Has coloured tracer yarn which loses its colour in due course of time, to show that the rope is now unfit for further use.
Unique Feature	Rope Grab installed comes with unique gravity locking system that prevents incorrect usage.

AFA950201

System Components	
AFA950202	Alloy Steel Openable Rope Grab AFG801001 permanently stitched with Spacing Strap Steel Snap Hook Anchorage Line: Polyamide Twisted Rope of dia 14mm to 16mm Has coloured tracer yarn which loses its colour in due course of time, to show that the rope is now unfit for further use.
Unique Feature	Rope Grab installed comes with unique gravity locking system that prevents incorrect usage.

AFA950202

System Components	
AFA951201	Alloy Steel Non Openable Rope Grab AFG801005 permanently stitched with Shock Absorber Steel Screw Locking Karabiner: Ref. AFC601100C Anchorage Line: Kernmantle Rope of dia 12mm Has coloured tracer yarn which loses its colour in due course of time, to show that the rope is now unfit for further use.
Unique Feature	The system is incorporated with Stainless Steel Rope Grab, hence is highly corrosion resistant. Best suitable for marine and off shore atmosphere.

AFA951201

System Components	
AFG801010-XX **AFG801013-XX**	For AFG801010-XX- Openable Galvanized Steel Rope Grab: Ref. AFG801010 For AFG801013-XX- Openable Galvanized Steel Antipanic Rope Grab: Ref. AFG801013 Steel Screw Locking Karabiner: Ref. AFC601100 Anchorage Line: Kernmantle Rope of dia 12mm (XX denotes the length of anchorage line) Has coloured tracer yarn which loses its colour in due course of time, to show that the rope is now unfit for further use.
Unique Feature	Openable Rope Grab used in **AFG801013** comes with unique anti-panic feature

AFG801010-XX

AFG801013-XX

System Components	
AFG801011-XX	For AFG801011-XX- Openable Aluminium Alloy Rope Grab: Ref. AFG801011 Steel Screw Locking Karabiner: Ref. AFC601100 Anchorage Line: Kernmantle Rope of dia 11mm (XX denotes the length of anchorage line) Has coloured tracer yarn which loses its colour in due course of time, to show that the rope is now unfit for further use.
Unique Feature	• Extremely light in weight and is corrosion resistant

AFG801011-XX

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1. **APPLICATION:**

- **Possible usage:** The fall arrestors are guided type fall arrestors on a flexible anchorage line made of a three strand polyamide rope / Kernmantle rope dia ranging from 11mm to 16mm as per system requirement. The fall arrestor accompanies the user without requiring manual adjustment during upward or downward movement, and locks automatically on the anchorage line when a fall occurs.

  Applications of these types of products include: inspection work, construction and demolition, maintenance, oil production, window washing, and other activities where the need exists for fall arrest or restraint.

  The following definitions describe these applications:-

  - **Fall Arrest:**The rope grab is used as part of a complete fall arrest system. Such systems generally include: a lifeline, rope grab, lanyard, and full body harness (body support). Applications include: production of a worker on scaffolding, powered platforms, or ridding a boats wain's chair. Maximum permissible free fall is 6feet.
  - **Restraint:** The rope grab is used in combination with a lifeline, lanyard or connector, and body support to restrain the user from reaching a hazard (sloped or leading edge roof work). No vertical free fall is possible.

- **The Following Limitations Must Be Considered Before Using This Product:**
  - **Capacity:** This equipment is designed for use by persons with a combined weight (person, clothing, tools, etc.) of no more than 140Kg.

    Note: Not more than one person should be attached to a single lifeline. Please do not add any lanyard/ connector between fall arrestor and user as it can increase the distance from arrestor to user connection point. This can lead to product failure and cause serious injury or death.
  - **Free Fall:** Restraint systems must be set up such that there is no possible vertical free fall. Personal fall arrest systems must be rigged in such a way to limit the free fall to 2m (EN 353-2:2002). See associated connecting subsystem manufacturer's instructions for further information.
  - **Fall Clearance:** Make certain that enough clearance exists in your fall path to prevent striking an object. The amount of clearance required is dependent upon the type of connecting subsystem used (lanyard, lifeline), the anchorage location, and the amount of stretch in the lifeline.
  - **Corrosion:** Do not leave this equipment for long periods in environments where corrosion of metal parts could take place as a result of vapors from organic materials. Sewage and fertilizer plants, for example, have high concentrations of ammonia. Use near seawater or other corrosive environments may require more frequent inspections or servicing to ensure corrosion damage is not affecting the performance of the product.
  - **Chemical Hazards:** Solutions containing acids, alkali, or other caustic chemicals, especially at elevated temperatures, may cause damage to this equipment. When working with such chemicals, frequent inspection of this equipment must be performed.
  - **Heat:** This equipment is not designed for use in high temperature environments.
    - To a D-ring to which another connector is attached.
    - In a manner that would result in a load on the gate.

    Protection should be provided for this equipment when used near welding, metal cutting, or similar activities. Hot sparks may burn or damage this equipment.
  - **Electrical Hazards:** Due to the possibility of electric current flowing through this equipment or connecting components, use extreme caution when working near high voltage power lines.
  - **Component Compatibility:** The rope grab addressed by these instructions is intended for use with KStrong lifelines and lifeline subsystems only.
  - **Training:** This equipment is to be used by persons who have been properly trained in its correct application and use.

2. **SYSTEM REQUIREMENTS:**

- **Connecting to Anchorage or Anchorage Connector:** When attaching the lifeline or lifeline subsystem to the anchorage or anchorage connector, ensure the connector (self-locking snap hook or karabiner) is fully engaged and locked onto the connection point. Ensure connections are compatible in size, shape, and strength.
- **Connecting to the Harness:** For fall arrest applications, connect to the dorsal D-ring located between the shoulders on the back of the full body harness. For restraint applications, the dorsal or frontal harness attachment may be used. If using a body belt for restraint applications connect to the D-ring opposite the restraining load. Ensure connections are compatible in size, shape, and strength.
- **Connecting to the Rope Grab:** When connecting an energy absorbing lanyard to the rope grab, attach the lanyard end to the rope grab to reduce possible interference with the operation of the rope grab by the energy absorber "pack". Some rope grab models may be supplied with a permanently attached lanyard or energy absorber. Do not attempt to attach additional lanyards or connectors to these subsystems. If using a karabiner to connect directly to the rope grab, ensure the karabiner does not interfere with the operation of the rope grab. Ensure connections are compatible in size, shape, and strength. Ensure the connector attached to the rope grab allows the handle to rotate freely, and does not interfere with the rope grab operation.

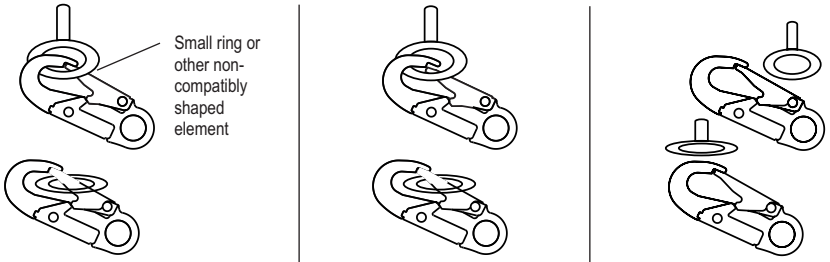
- **Connections:** Only use self-locking snap hooks and karabiners with this equipment. Only use connectors that are suitable to each application. Ensure all connections are compatible in size, shape and strength. Do not use equipment that is not compatible. Ensure all connectors are fully closed and locked.

  KStrong connectors (snap hooks and karabiners) are designed to be used only as specified in each product's user instructions. KStrong snap hooks and karabiners should not be connected:-

  - To a D-ring to which another connector is attached.
  - In a manner that would result in a load on the gate.

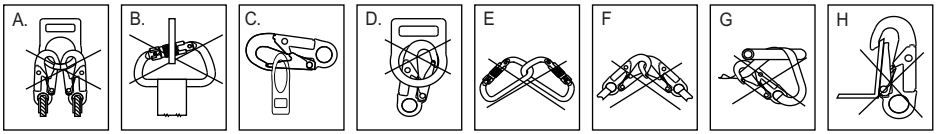
Fig. 3: Unintentional Disengagement (Roll-Out)

If the connecting element like a snap hook (shown) or karabiner attached 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 karabiner. This force may cause the gate (of either a self –locking or a non-locking snap hook) to open, allowing the snap hook or karabiner to disengage from the connecting point.



1. Force is applied to the snap hook.	2. The gate presses against the connecting ring.	3. The gate opens allowing the snap hook to slip off.

NOTE: Large throat-opening snap hooks should not be connected to standard size D-rings or similar objects which will result in a load on the gate if the hook or D-ring twists or rotates. Large throat snap hooks are designed for use on fixed structural elements such as rebar or cross members that are not shaped in a way that can capture the gate of the hook.



  - Directly to webbing or rope lanyard or tie-back (unless the manufacturer's instructions for both the lanyard and connector specifically allows such a connection).
  - To any object which is shaped or dimensioned such that the snap hook or karabiner will not close and lock, or that roll-out could occur.

- **Anchorage Strength:** The anchorage strength required is dependent upon the application. The following lists guidelines for specific application types:

  - Fall Arrest: Anchorages selected for personal fall arrest systems shall have a strength capable of sustaining static loads, applied in the directions permitted by the personal fall arrest systems, of at least: (A) 3,600 lbs. (16 kN) when certification exists (see EN 353-2:2002 for certification definition), or (B) 3000 lbs. (12 kN) in the absence of certification. When more than one personal fall arrest system is attached to an anchorage, the anchorage strengths set forth in (A) and (B) above shall be multiplied by the number of personal fall arrest systems attached to the anchorage.

    Anchorages used for attachment of personal fall arrest systems shall be independent of any anchorage being used to support or suspend platforms, and capable of supporting at least 3000 lbs. (12 kN) per user attached, or be designed, installed, and used as part of a complete personal fall arrest systems, which maintains a safety factor of at least two, and is supervised by a qualified person.

  - Restraint: Anchorages must be capable of supporting a minimum of 3000 lbs. (12 kN) per system attached.

WARNING: Restraint anchorages may only be used where there is no possible vertical free fall. Restraint anchorages do not have sufficient strength for fall arrest. Do not connect personal fall arrest systems to restraint anchorages.

Applicable Systems	Rope Grab Reference No.	Diameter of Rope used	Rope Type	Rope Length available with system (in mtrs.)	Connection Type
AFA950001, AFA950201, AFA950202	AFG801001	14 mm to16 mm	Polyamide Twisted	5m - 100m	Detachable
AFA951201	AFG801005	12 mm	Kernmantle	5m - 100m	Non- Detachable
AFG801010-XX AFG801013-XX	AFG801010 AFG801013	12 mm	Kernmantle	5 to 100	Openable
AFG801011-XX	AFG801011	11 mm	Kernmantle	5 to 100	Openable

- **Construction:** Kernmantle or 3-strand lay ropes are recommended. Inspect the lay of the rope by grasping it several feet from the end between the thumb and index finger. You should not be able to easily squeeze or flatten the rope. Untwisting should be difficult and the rope should spring back to its original shape.
- **Material:** Select lifeline ropes made from polyester fibers. Polyester has less stretch and less swelling due to moisture absorption than nylon. Ropes made solely of polypropylene, polyethylenes, or other olefins must not be used. Ropes made from cotton, sisal, hemp, abaca (manila), or other plant/animal fibers must not be used. EN 353-2:2002 requires rope used in vertical lifelines to be made of virgin synthetic materials having strength, aging resistance, abrasion resistance, and heat resistance characteristics equivalent or superior to polyamides.
- **Strength:** Select a lifeline which, when terminated and installed, will retain a minimum strength of 5,000 lbs. (22.2 kN) as per EN 353-2:2002. Selection must account for strength reduction factors, such as sharp edges and degrading factors (i.e. chemicals).

NOTE: As per EN 353-2:2002: knots shall not be used for load bearing end terminations, but may be an acceptable means of securing the free end of the lifeline at ground level.

IMPORTANT: Only lifeline ropes which meet the size, construction, and material properties required for compatible use with this rope grab may be used.

NOTE: Applications such as working near high voltage may require special lifeline materials; consult KStrong before using such lifelines.

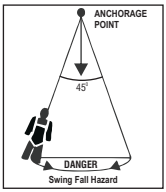
For fall arrest systems, KStrong recommends using energy absorbing lanyards incorporating self-locking snap hooks. All lanyards certified to EN 355:2002 must have a minimum breaking strength of 5,000 lbs. (22.2 kN).

- **Body Support:** The recommended body support for fall arrest applications is a full body harness, for restraint applications a body belt may be used.

WARNING:

- Do not alter or intentionally misuse this equipment. Consult KStrong if using this equipment with components or subsystems other than those described in this manual. Some subsystem and component combinations may interfere with the operation of this equipment.
- Do not use this equipment if you are unable to tolerate the impact from a fall arrest. Age and fitness can seriously affect your ability to withstand a fall. Pregnant women and minors must not use this equipment.

3. **OPERATION AND USE:** Before each use of this equipment, carefully inspect it to ensure that it is in good working condition. Do not use if inspection reveals an unsafe condition.



- Plan your fall arrest or restraint system before starting your work. Consider all factors that affect your safety before, during, and after a fall. Refer to these and related subsystem component instructions, and state and federal safety regulations for guidance in planning your system. The following list gives some important points to consider when planning your system:
  - **Anchorage:** Select a rigid anchorage point that is capable of supporting the required loads. The anchorage location must be carefully selected to reduce possible free fall and swing fall hazards and to avoid striking an object during a fall. For restraint systems, the anchorage must be located such that no vertical free fall is possible. For fall arrest systems, OSHA requires the anchorage be independent of the means suspending or supporting the user.
  - **Free Fall:** Do not work above the anchorage level; increased fall distance will result. Personal fall arrest systems must be rigged such that the potential free fall is never greater than 1.8 mtrs. Restraint systems must be rigged such that there is no possible vertical free fall.
  - **Fall Arrest Forces:** The assembled fall arrest system must keep fall arrest forces below 6 kN. when used with a full body harness. Do not use a body belt for fall arrest.
  - **Swing Falls:** Swing falls occur when the anchorage point is not directly above the point where a fall occurs. The force of striking an object while swinging can be great and cause serious injury. Swing falls can be minimized by working as directly below the anchorage as possible.
  - **Fall Clearance:** Make certain enough clearance exists in your fall path to prevent striking an object. The amount of clearance needed is dependent upon the type of connecting subsystem used and anchorage location.
  - **Sharp Edges:** Avoid working where parts of the system will be in contact with, or abrade against, unprotected sharp edges.
  - **Rescue:** The user must have a rescue plan and the means at hand to implement it if a fall occurs.
  - **After A Fall:** Components which have been subjected to the forces of arresting a fall must be removed from service immediately and destroyed.
  - **General Use Considerations:** Avoid working where lifeline may cross or tangle with that of another worker. Do not allow the lanyard to pass under arms or between legs. Do not clamp, tie, or otherwise prevent the rope grab lanyard connection handle from moving freely into the “locked” position.
  - **Sloped Roofs:** Provisions must be made (warning lines, monitors, guardrails) to prevent swing falls from unprotected roof edges or corners. The rope grab should be connected to the body support using a locking karabiner (direct connection) or a short lanyard. If a lanyard is used for connecting to the rope grab, keep the length as short as possible, and never greater than 3 feet. The lifeline must be protected from contact with sharp or abrasive edges and surfaces. The rope grab locking operation must not be hindered by interference with the roof or objects on the roof surface.
  - **Unstable Surfaces:** The rope grab is not suitable for use on unstable or slowly shifting materials, such as sand or grain.
  - **Advice & Information:**
    - Ensure that the medical condition of the user does not affect his / her safety in normal and emergency use.
    - Ensure that manufacturer's packing is used during transportation to prevent damage. In case original packing is not available, use polybag which is sealed to prevent moisture.

WARNING:

- Never connect more than one personal fall arrest or restraint system to a single lifeline or rope grab.
- Follow manufacturer's instructions for associated equipment used in your fall protection or restraint system.

IMPORTANT: For custom versions of this product, follow the instructions herein. If included, see supplemental instructions for additional information.

Ref. AFA950001, AFA950201, AFA950202

4. **POSSIBLE USAGE:** The fall arrestor, models AFA950001, AFA950201 and AFA950202 is a guided type fall arrestor on a flexible anchorage line made of a three strand polyamide rope of 14-16mm diameter. It accompanies the user without requiring manual adjustment during upward or downward movement, and locks automatically on the anchorage line when a fall occurs. The device is provided with a double security opening system to ensure safe attachment or release of the user at any point of the rope.

- **Follow Step 1 to Step 4 to use the Anchorage Line:**

STEP 1: Slide the tension lever of the fall arrestor up wards with your left thumb as shown in fig. 2 and 3 until it gets locked on the locking rivet. This position is called the FREELY MOVING MODE, this is so because when the user is moving up or down along the anchorage line he has to use the fall arrestor in the FREELY MOVING MODE. However, when the user is working in the stationary position at a height, it is advised that the tension lever be released to its normal position which is called the STATIC MODE. [See fig. 2 and 3]

While using the fall arrestor in the static mode, one has to make sure that the lower end of the flexible anchorage line is secured e.g. by an attached lower termination to the loop, to prevent the rope from slacking.

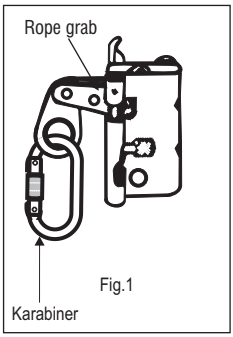


Fig.1

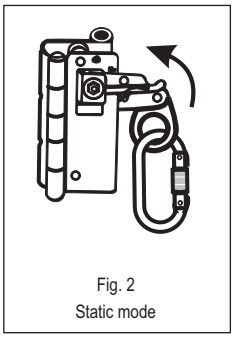


Fig. 2
Static mode

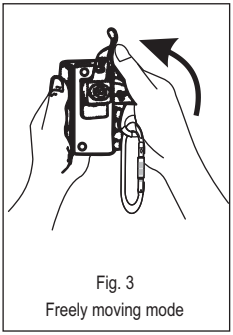


Fig. 3
Freely moving mode

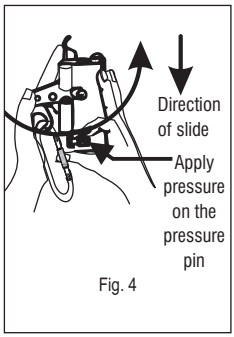


Fig. 4

STEP 2: Slide down the latch of the fall arrestor with your right index finger and push it down upon the pressure pin then open the hinge as shown in fig. 4.

STEP 3: Now get the anchorage line inside the fall arrestor with the hinge open as shown in fig. 5(a) and close the hinge. The pressure pin automatically pushes the latch upwards locking the fall arrestor as showing fig. 5(b).

STEP 4: Now attach the fall arrestor to the front attachment elements of your full body harness with the karabiner as shown in fig. 5(C). You are now free to move up and down along the anchorage line and the moment the free fall occurs, it will lock against the anchorage line preventing free fall.

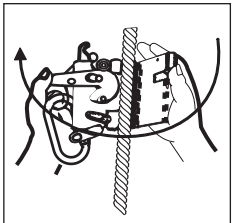


Fig. 5(a)

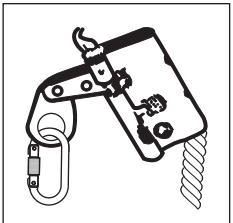


Fig. 5(b)

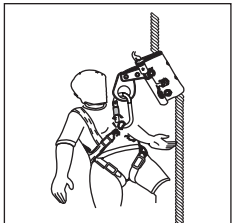


Fig. 5(c)

Ref. AFA951201

5. **POSSIBLE USAGE:** The fall arrestor, model AFA951201, is a guided type fall arrestor on a flexible anchorage line made of a kernmantle rope of dia 12.0mm. It accompanies the user without requiring manual adjustment during upward or downward movement, and locks automatically on the anchorage line when a fall occurs.

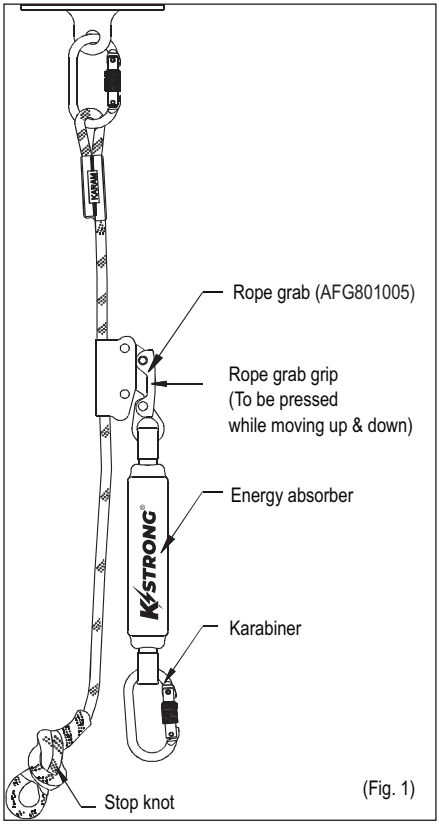
- **Follow Step 1 to Step 4 to use the fall arrestor:**

  STEP 1: Connect the upper end of the anchorage line with the help of the karabiner to the anchorage point. Ensure that the anchorage point has a strength of more than 12 kN.

  STEP 2: Now connect the karabiner of the rope grab to the attachment element of your Full Body Harness. Ensure that the karabiner is locked tight.

  STEP 3: The user is now free to move up and down while pressing the rope grab grip as shown in fig. 1 along side.

  STEP 4: Ensure that when you are working, the rope grab grip is released to its normal position.



(Fig. 1)

Ref. AFG801010-XX / AFG801013-XX

6. **POSSIBLE USAGE:** The fall arrester, model AFG801010-XX / AFG801013-XX is a guided type fall arrester on a flexible anchorage line made of Kernmantle rope of dia 12 mm. It accompanies the user without requiring manual adjustment during upward or downward movement, and locks automatically on the anchorage line when a fall occurs.

- **Follow Step 1 to Step 8 to use the fall arrester:**

  STEP 1: Press the safety clip of the rope grab and loosen the screw to open the covers. Refer Fig. 2

  STEP 2: Insert the rope inside the rope grab. Refer Fig. 4

  STEP 3: Close the flange covers and tighten the screw. Refer Fig. 5

  STEP 4: Release the safety pin.

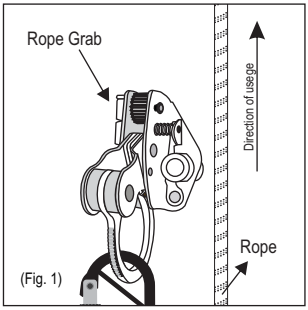
  STEP 5: Connect the upper end of the anchorage line with the help of the karabiner to the anchorage point. Ensure that the anchorage point has a strength of more than 12 kN.

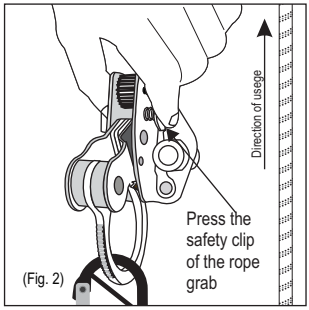
  STEP 6: Now connect the karabiner of the rope grab to the attachment element of your Full Body Harness. Ensure that the karabiner is locked tight. Refer Fig. 6

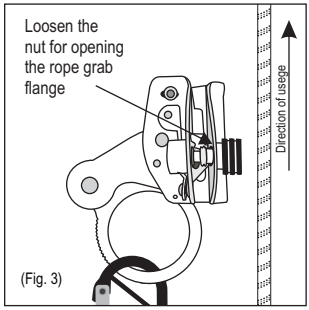
  STEP 7: The user is now free to move up and down while pressing the rope grab grip.

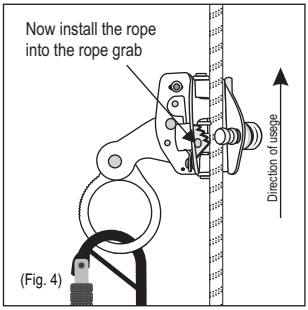
  STEP 8: Ensure that when you are working, the rope grab grip is released to its normal position.

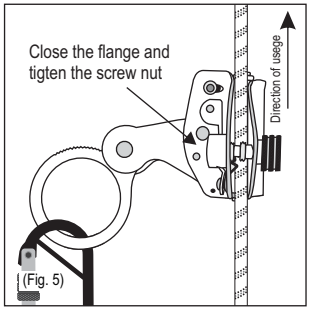
- **Refer the below given pictogrames for installing the system.**

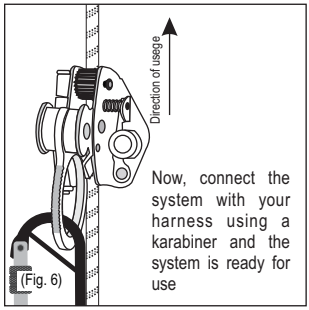












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Ref. AFG801011-XX

7. **POSSIBLE USAGE:** The fall arrester, model AFG801011-XX, is a guided type fall arrester on a flexible anchorage line made of Kernmantle rope of Dia 11.0mm. It accompanies the user without requiring manual adjustment during upward or downward movement, and locks automatically on the anchorage line when a fall occurs. A karabiner can be used to connect the harness with fall arrester on the flexible anchorage line.

- **Follow Step 1 to Step 5 to use the fall arrester:**

  STEP 1: Connect the upper end of the anchorage line with the help of the karabiner to the anchorage point. Ensure that the anchorage point has strength of more than 12kN.

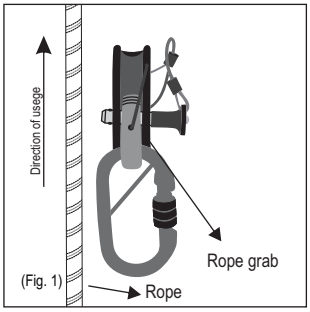
  STEP 2: To install AFG801011-XX on the anchorage line release the locking pin to remove the lock, now insert the anchorage line inside the fall arrester's body. Put the lock back and fix it with locking pin. Refer Fig. 2 and Fig. 3

  STEP 3: Now connect the karabiner of the rope grab to the attachment element of your Full Body Harness. Ensure that the karabiner is locked tight. Refer Fig. 5

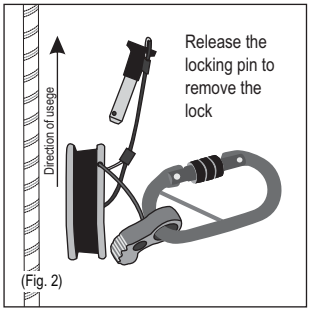
  STEP 4: The user is now free to move up and down while pressing the rope grab grip as shown in fig. 1 alongside.

  STEP 5: Ensure that when you are working, the rope grab grip is released to its normal Position.

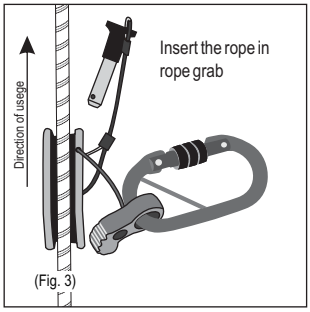
- **Refer the below given pictogrames for installing the system.**



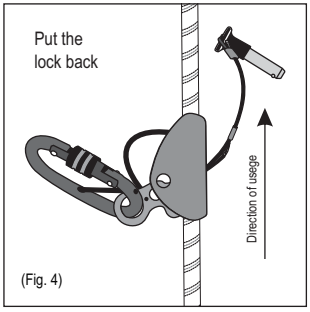
(Fig. 1)



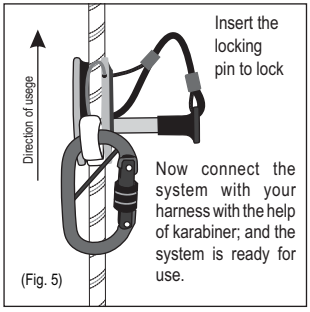
(Fig. 2)



(Fig. 3)



(Fig. 4)



(Fig. 5)

8. POSITIONING THE ROPE GRAB ON THE LIFELINE:

- Using the lanyard connected to the rope grab, pull up slightly on the rope grab locking hockey to release it from the locked position. Always keep a minimum of 3.7m (12 feet) of rope below the rope grab to accommodate locking distance and fall clearance.
- Using the connected lanyard, raise or lower the rope grab to the desired location. Apply tension to the lifeline to assure smooth travel of the rope grab on the lifeline. Lifeline tension can be achieved by adding a weight on the lifeline end or extending additional lifeline (in a hanging orientation) to provide weight.
- After locating the rope grab, position it on the lifeline at or above the shoulders to reduce possible free fall. Lock the rope grab at this position by pulling the locking hockey until the hockey lever is in the full down position. The locking hockey must be released before attempting to reposition the rope grab.
- Under special conditions, such as working on a moving platform, it is allowable to let the rope grab follow the worker as the platform is moved. The lanyard should be kept as short as possible and must not exceed 3 feet (0.9m) in length (2 feet (0.6m) in Canada).

9. LIMITATIONS FOR USE: Strictly follow the maintenance instructions procedure laid below:

- Keep lifelines clean.
- In case of minor soiling, wipe the equipment with cotton cloth or soft brush. Do not use abrasive material. For intensive cleaning, wash in water at a temperature between 30˚c to 60˚c using a neutral detergent.
- Always protect the lifeline if passing over or around sharp edges. Sharp edges can reduce rope strength by 70% or more.
- Avoid twisting or kinking lifelines when coiling or uncoiling.
- Avoid direct sunlight. Store in cool dry place, preferably away from moisture, direct sunlight, extra acidic or basic conditions and sharp edges.
- Avoid using lifelines near acids or alkalines. If the lifeline is used around any chemical or compound, watch for signs of deterioration.
- Never use a knotted lifeline, knots can reduce rope strength by 50%.
- Store lifelines properly
- The primary function of Type B and Type C rope adjustment device is progression along the working line, and they shall always be used in conjunction with Type A rope adjustment device and a safety line.
- Any overload or dynamic loading on the rope .
- Any over load or dynamic loading on the rope adjustment device may damage the anchor line.
- After use of the rope grab and its subsystem components, return it for cleaning or storage as described in the user instruction manual.

10. ROPE DIAMETERS: Authorize is used of static, semi-static, (EN 1891) or dynamic (EN 1892) rope of kernmantle construction. Ø11 mm to Ø16 mm EN 12841 Type A and EN 353-2.

11. ADVICE and INFORMATION:

- It should be the personnel property of its user.
- It should not be used in highly acid or basic environments.
- The fall arrestor has been tested to EN 353-2 and 12841and is appropriate only for single person use.
- Ensure that the structure on to which the anchor is fitted is strong enough to withstand a load of 20kN.
- Ensure that the fall arrestor is installed directly above the user's head.
- Ensure that the equipment is compatible with other items when assembled into a system.
- It is essential to verify the free space required beneath the user at work place before each occasion of use so that in case of a fall there will be no collision with ground or other obstacle in the fall path.
- It is essential for the safety of user that if the product is resold outside the original country of destination, the reseller shall provide instruction for use, for maintenance, for periodic examination and for repair in the language of the country in which product is to be used.

12. INSPECTION: The rope grab must be inspected by a competent person* other than the user at least annually. Record the results of each formal inspection in the inspection log. Before each use inspect the product, damage, and defects and inspected by a competent person* at least twice a year, in accordance with the manufacturer's recommendations, with inspection dates documented.

- *** Competent Person:** A highly trained and experienced person who is ASSIGNED BY THE EMPLOYER to be responsible for all elements of a fall safety program, including, but not limited to, its regulation, management, and application. A person who is proficient in identifying existing and predictable fall hazards, and who has the authority to stop work in order to eliminate hazards
- **Authorized Person:** A person who is assigned by their employer to work around or be subject to potential or existing fall hazards It is the responsibility of a Qualified or Competent person to supervise the job site and ensure all applicable safety regulations are complied with.

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13. INSPECTION STEPS FOR ROPE GRAB:

STEP 1: Inspect the attachment eye and locking hockey to ensure that the hockey moves freely.

STEP 2: Inspect the locking hockey and ensure that the teeth are not rounded or worn.

STEP 3: Inspect the locking hockey lever spring and auto-locking lever springs. Ensure they are in the proper location and undamaged.

STEP 4: Inspect the spring for the locking pin (located in the groove) and ensure it is the proper location and undamaged.

STEP 5: Use the opening lever (knurled knob) to ensure that the locking pin travels freely up and down the locking sleeve.

STEP 6: Test repeatedly that the rope grab opens when the release button is depressed with the opening lever. The release button must be fully extended after the rope grab is closed.

STEP 7: The two halves of the rope grab must close and open freely on the hinge. Inspect the lifeline channel and ensure that there are no dips or depressions worn into the channel and that the dimples are without damage. Ensure all the labels and engravings are legible.

STEP 8: Inspect the hinge, attachment eye, and the rest of the rope grab for signs of corrosion, wear, cracks, distortion or other damage.

STEP 9: With the rope grab open and upside-down, the gravity-lock pin should drop down and prevent the rope grab from closing

STEP 10: Activate the parking feature and verify that there is resistance against the locking hockey when attempting to raise the attachment eye. With the parking feature deactivated, there should be no resistance on the locking hockey.

STEP 11: To test models equipped with the Panic Lock feature, install rope grab on lifeline. Pass the thumb on one hand through the attachment eye and grasp the rope grab body with the rest of the hand. Force the eye to open the locking lever until it stops. Run the rope grab down the lifeline and ensure that it locks onto the lifeline.

STEP 12: Record the inspection date and results in the inspection log provided at the last.

14. INSPECTION STEPS FOR LIFELINE:

STEP 1: Lifeline hardware must not be damaged, broken, distorted, or have any sharp edges, burrs, cracks, worn parts, or corrosion. Ensure the connecting hooks work properly. Hook gates must move freely and lock upon closing.

STEP 2: Inspect the rope for concentrated wear. The material must be free of frayed strands, broken yarns, cuts, abrasions, burns, and discoloration. The rope must be free of knots, excessive soiling, heavy paint buildup, and rust staining. Rope splices must be tight, with fi ve full tucks, and thimbles must be held by the splice. Cracked or distorted rope thimbles may indicate that the lifeline has been impact loaded. Check for chemical or heat damage (indicated by brown, discolored, or brittle areas). Check for ultraviolet damage, indicated by discoloration and the presence of splinters and slivers on the rope surface. All of the above factors are kNown to reduce rope strength. Damaged or questionable ropes must be replaced.

STEP 3: Inspect marking. All markings must be present and fully legible.

STEP 4: Record the inspection date and results in the inspection log found in the lifeline user instruction manual.

* If inspection reveals a defective condition, remove the unit from service immediately and destroy, or contact a factory authorized service center for repair.

15. MAINTENANCE: Proper maintenance of the equipment is essential for its successful performance. Regular cleaning is essential.

- In case of minor soiling, wipe with cotton cloth or soft brush.
- Do not use abrasive material. For intensive cleaning, it can be washed with water using neutral detergents.
- Do not use acid or basic detergents. Strictly follows the cleaning procedure as mentioned. If the fall arrest becomes wet, it should be allowed to dry naturally and kept away from direct heat.
- Store in a cool dry place.
- Avoid humid and acidic environment for storage.

16. INSTRUCTIONS FOR PERIODIC EXAMINATIONS: It is emphasized that periodic examination of the fall arrestor is important as the safety of the user depends upon continued efficiency and durability of the equipment. It is recommended that the fall arrestor is periodically examined at least once every year.

The periodic examination should be conducted by a competent person and strictly in accordance with our laid procedures. It is important to check the legibility of the markings in every examination.

Note: To maintain the longevity of the self-retractable blocks, KStrong strongly recommends to get them serviced at a KStrong Authorized Service Centre only. If not, KStrong shall not be liable for any warranty claims.

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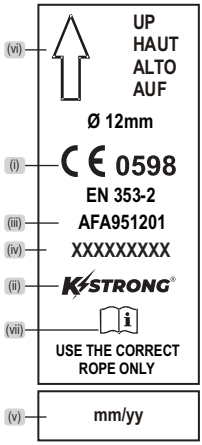
MARKING

The Fall Arrester is marked with :

(i) The CE mark showing that the product meets the requirements of the European PPE Regulation (EU) 2016/425
(ii) Identification of the manufacturer
(iii) Type or product code
(iv) UID for traceability
(v) Year of Manufacture
(vi) Right Direction of usage.
(vii) Read the instruction before use.



LIFESPAN: The estimated product Lifespan is 10 years from the date of manufacture. The following factors can reduce the Lifespan of the product: intense use, contact with chemical substances, specially aggressive environments, extreme temperature exposure, UV exposure, abrasions, cuts, violent impacts, bad use or maintenance.

DISCLAIMER: Prior to use, the end user must read and understand the manufacturer's instructions supplied with this product at the time of shipment and seek training from their employer's trained personnel on the proper usage of the product. Manufacturer is not liable or responsible for any loss, damage or injury caused or incurred by any person on grounds of improper usage or installation of this product.

EQUIPMENT RECORD		
Product		
Model & type/Identification	Trade Name	Identification number
Manufacturer	Address	Tel, email into use
Year of manufacture	Purchase Date	Date first put into use
Other relevant information (eg. document number)		

PERIODIC EXAMINATION AND REPAIR HISTORY				
Date	Reason for entry (periodic examination or repair)	Defects noted, repairs carried out and other relevant information	Name and signature of competent person	Periodic examination next due date

Certification Body :
SATRA Technology Europe Ltd, Bracetown Business Park, Clonee, Dublin D15 YN2P Ireland (Notified Body 2777)

Ongoing Assessment Body:
SGS Fimko Oy, Takomotie 8, FI-00380 Helsinki, Finland (Notified Body 0598)

For EU Declaration, please visit **https://kstrong.com/asia/eu-declaration-form/**

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