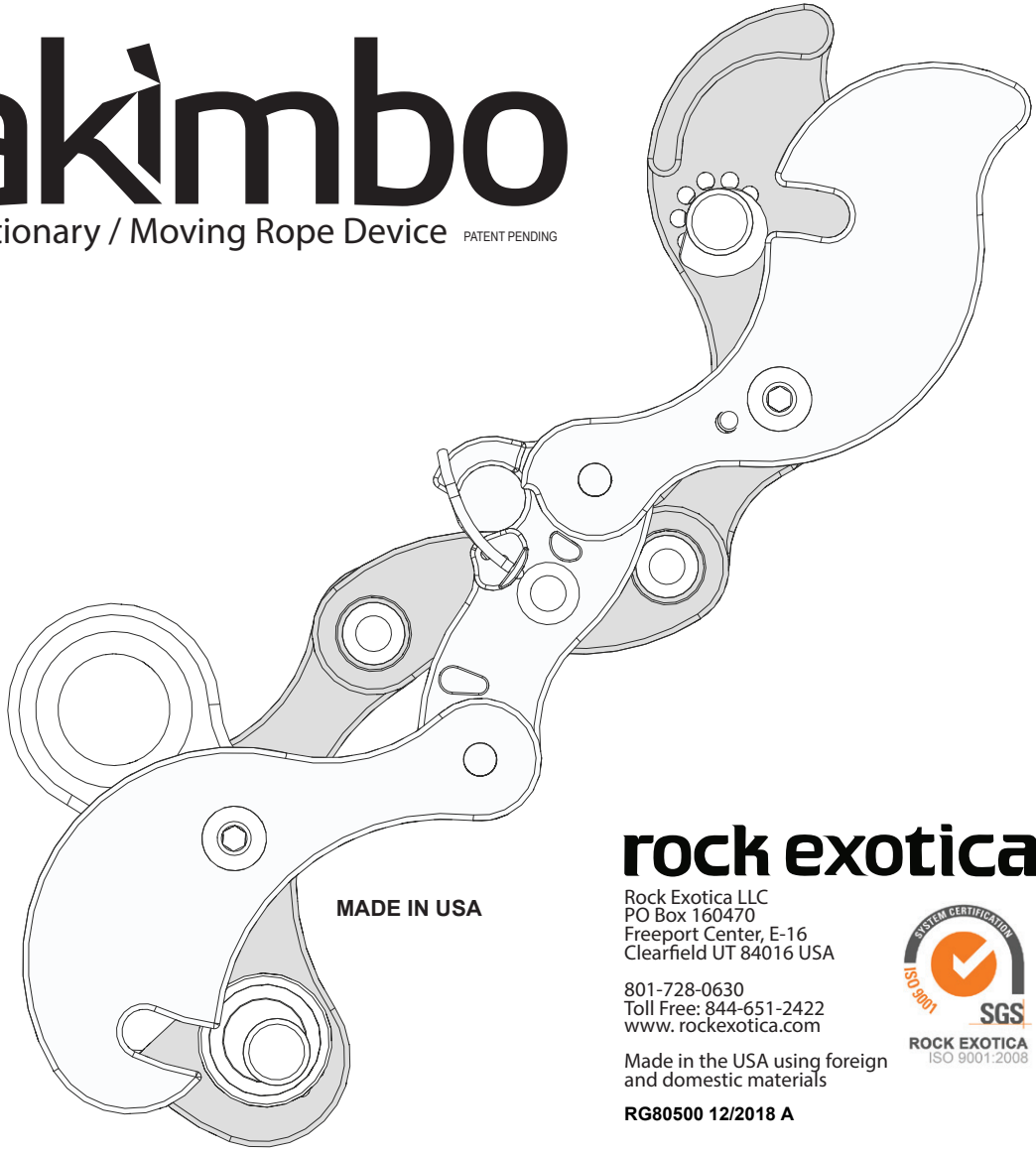
# akimbo

Stationary / Moving Rope Device PATENT PENDING



**MADE IN USA**

rock exotica®

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www. rockexotica.com

Made in the USA using foreign and domestic materials

**RG80500 12/2018 A**

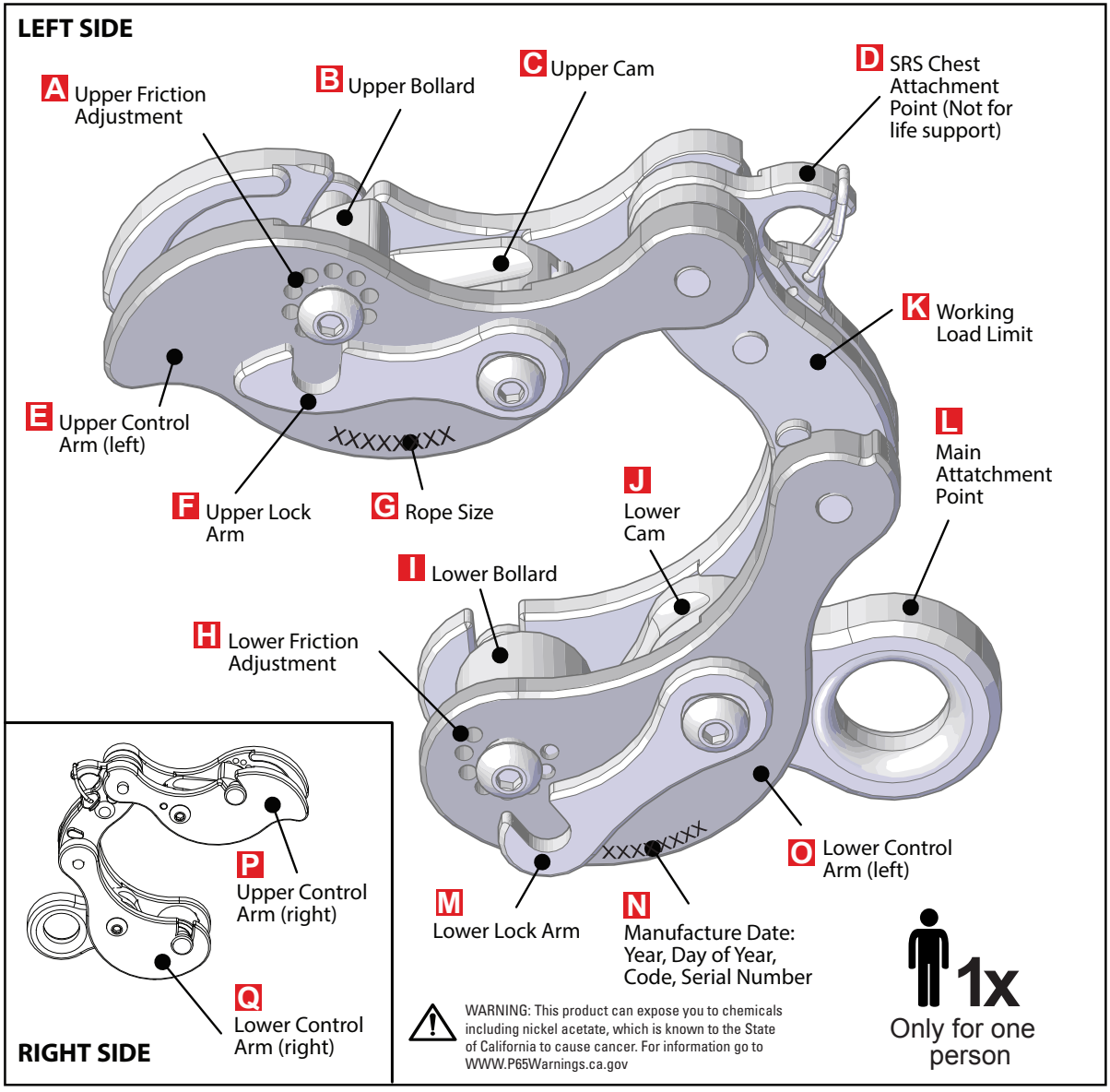
ROCK EXOTICA
ISO 9001:2008

## USER INSTRUCTIONS

Read all instructions carefully before use.

Personal Protective Equipment (PPE)

Register your Akimbo at: www.rockexotica.com/register


LEFT SIDE
A Upper Friction Adjustment
B Upper Bollard
C Upper Cam
D SRS Chest Attachment Point (Not for life support)
K Working Load Limit
L Main Attatchment Point
E Upper Control Arm (left)
F Upper Lock Arm
G Rope Size
J Lower Cam
I Lower Bollard
H Lower Friction Adjustment
O Lower Control Arm (left)
M Lower Lock Arm
N Manufacture Date: Year, Day of Year, Code, Serial Number
P Upper Control Arm (right)
Q Lower Control Arm (right)
RIGHT SIDE
WARNING: This product can expose you to chemicals including nickel acetate, which is known to the State of California to cause cancer. For information go to WWW.P65Warnings.ca.gov
1x
Only for one person

# WARNINGS & PRECAUTIONS FOR USE

**INTRODUCTION**
The AKIMBO is a versatile mid-line attachable friction device that allows climbers to ascend and descend a stationary or moving rope system without changing equipment. Adjustable settings allow for optimal performance with a range of rope diameters and climber weights.

**GENERAL WARNINGS**
-These activities are inherently dangerous and carry a significant risk of injury or death that cannot be eliminated.

-The Akimbo is intended for use by medically fit, specifically trained and experienced users.

-These instructions DO NOT tell you everything you need to know.

-Do not use unless you can and will understand and assume all risks and responsibilities for all damage/injury/death that may result from use of this equipment or the activities undertaken with it.

-Everyone using this equipment must be given and thoroughly understand the instructions and refer to them before each use.

-Any device is subject to failure from fatigue, overloading, misuse, etc. Carefully check all parts and components of this equipment before and after each use.

-You must have a rescue plan and the means to implement it. Inert suspension in a harness can quickly result in death!

-You must have specialized training and exercise extreme caution when using this device near moving machinery or electrical hazards.

-Do not use near sharp edges or abrasive surfaces without appropriate edge protection.

-We are not responsible for any direct, indirect, or accidental consequences or damage resulting from the use of our products.

-Stay up to date! Regularly go to our website and read the latest user instructions: www.rockexotica.com.

**AKIMBO SPECIFIC WARNINGS**
These user instructions assume you have a solid understanding and working knowledge of rope-based tree climbing techniques and the ability to judge safety risks at all times. If you do not have these skills, seek out professional training before using the Akimbo.

-Inspection and operation must be done by individuals who have successfully completed appropriate professional training and accept responsibility for judging their own competence in performing the above tasks.

-The Akimbo is not a fall arrest device, and should not be shock loaded.

-The Akimbo is not intended to be a training device, or for use by novice climbers.

-Use the Akimbo only for the purpose and function it was designed.

-Do not use the Akimbo on icy ropes.

-Consider carrying a back up descent control device in case of an emergency.

-Start low and slow when learning how to use the Akimbo. Stay close to the ground until you are very experienced with its operation.

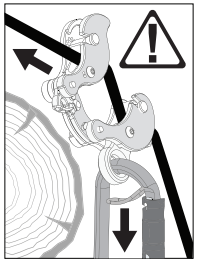
-Guard against fingers, hair or other items being pulled into the Akimbo by the rope.

-When using an adjustable bridge, keep the Akimbo within reach.

WARNING SYMBOLS

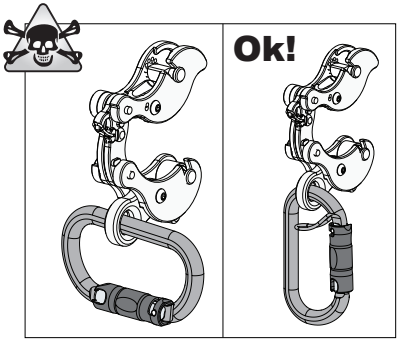
Important safety or usage warning

Situation involving risk of injury or death

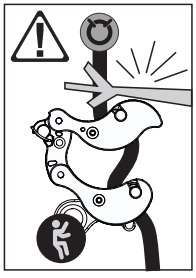


A. Any leverage against the Akimbo can be dangerous. Ensure that the Akimbo does not bend across other objects while climbing.

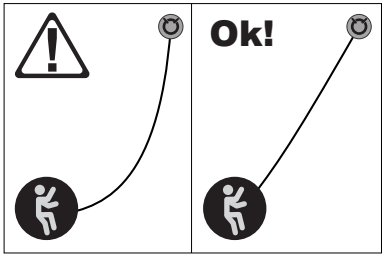
## WARNINGS (CONTINUED)




**B.** Be sure that your connector does not become cross-loaded during use. Use of a carabiner with a wire eye or lanyard pin is recommended.



**C.** Unintentional contact with the Upper Control Arm can cause sudden descent or free fall. Guard against this at all times.




**D.** Slack must never be allowed to enter your climbing system. Stay below your anchor with tension on your climbing line at all times.

## APPROVED ROPES

The following ropes are approved for use with the Akimbo at the Working Load Limit (WLL) shown below. Only approved ropes should be used with the Akimbo. Working Load is equal to the total weight of the climber including gear.

Total Working Load of the climber must not exceed the Working Load Limit (WLL) for the rope listed below or slippage may occur!

Suitability of approved ropes can be affected by environmental factors, condition of rope, and condition of Akimbo. Follow steps on pages 8-11 to test rope and verify friction settings before climbing.

Check www.rockexotica.com/akimbo for updates to the list of approved ropes.

### WLL: 100kg (220lb)

**Do Not Exceed this weight on the ropes listed below!**

| MANUFACTURER | MODEL | DIA. (mm) |
|---|---|---|
| Samson | Voyager Cool | 11.8 |
| Teufelberger | XStatic | 11.7 |
| Yale | Poison Ivy / Blue Moon | 11.7 |

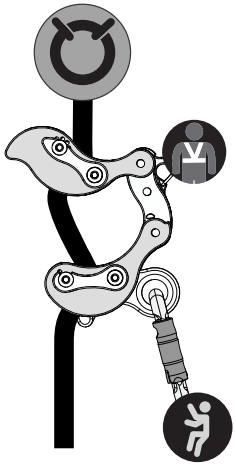
### WLL: 130kg (286lb)

**Do Not Exceed this weight on the ropes listed below!**

| MANUFACTURER | MODEL | DIA. (mm) |
|---|---|---|
| Cousin | Atrax | 11.6 |
| Sterling | Scion | 12.5 |
| Sterling | WorkPro | 12.5 |
| Sterling | HTP | 12.5 |
| Teufelberger | Fly | 11.1 |
| Teufelberger | Drenaline | 11.8 |
| Yale | Scandere | 11.7 |

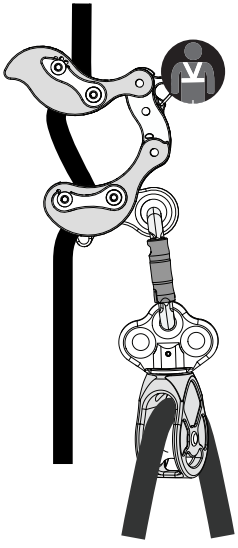
# FIELD OF APPLICATION

## A. Stationary Rope System (SRS)



The primary application for the Akimbo is on a Stationary Rope System (SRS), connected to the climber's main harness, and supplemental, non-PPE chest harness or suitable lanyard (for ascent only).

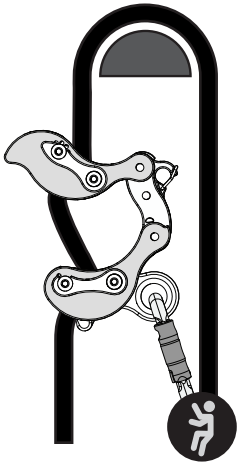
Suitable SRS connection methods:



Connect to the SRS Chest Attachment Point using a small tether or suitable hardware. Rock Exotica recommends using a rockX carabiner.

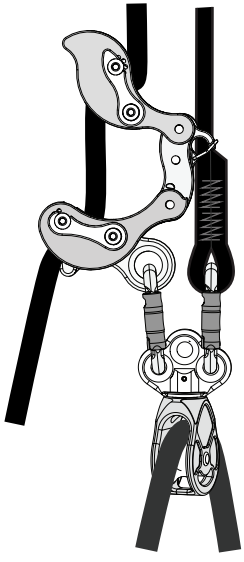
Using an appropriate oval carabiner, connect the Akimbo Main Attachment Point to the ring, swivel attachment, or bridge of the harness. Rock Exotica recommends using a rockO WireEye carabiner.

## B. Moving Rope System (MRS)



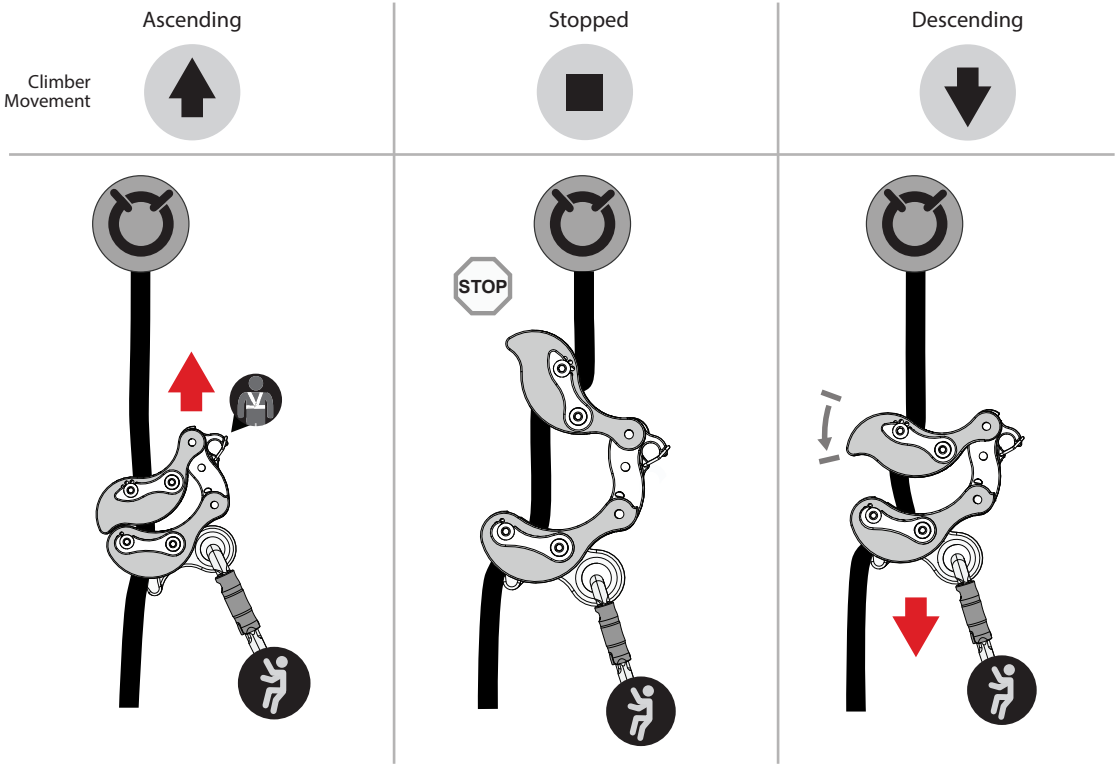
The Akimbo can be used on a Moving Rope System (MRS) when the rope is attached to the climber's harness with a suitable means of connection.

Suitable MRS connection methods:

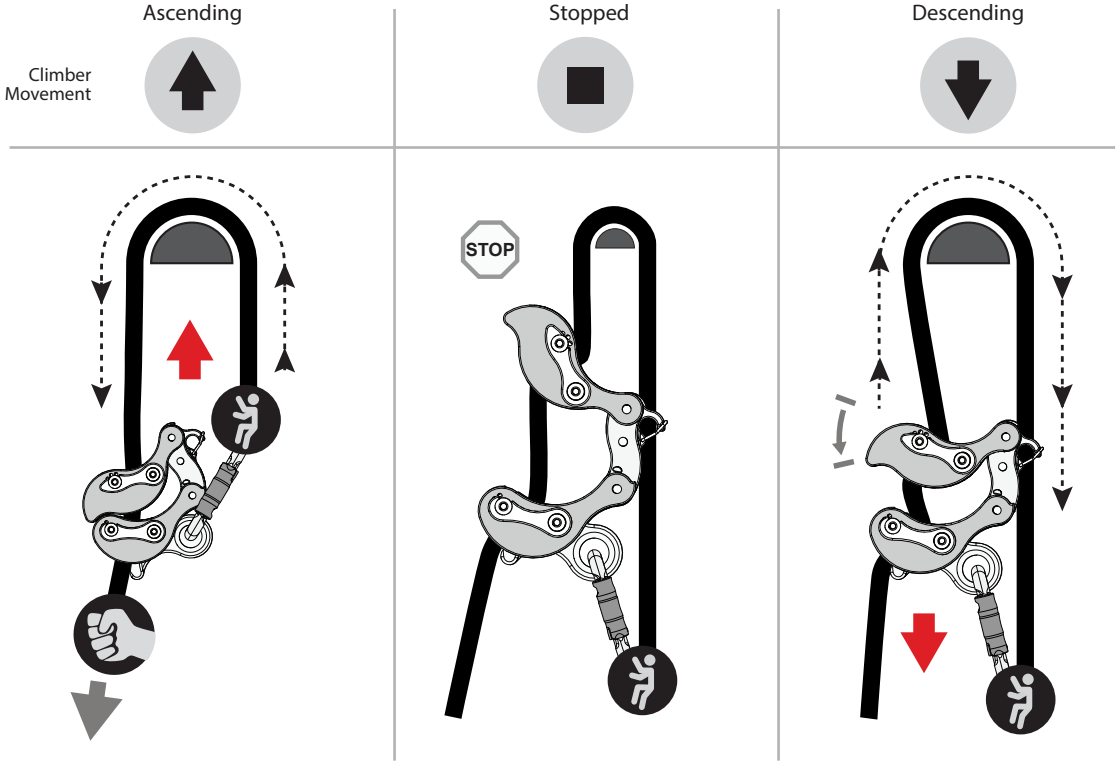


Rock Exotica recommends separating the Akimbo and termination end of the rope. The Rock Exotica Hydra is one example of a suitable connection. Connect the Akimbo using an appropriate oval carabiner. Rock Exotica recommends a RockO WireEye carabiner

## Stationary Rope System (SRS)



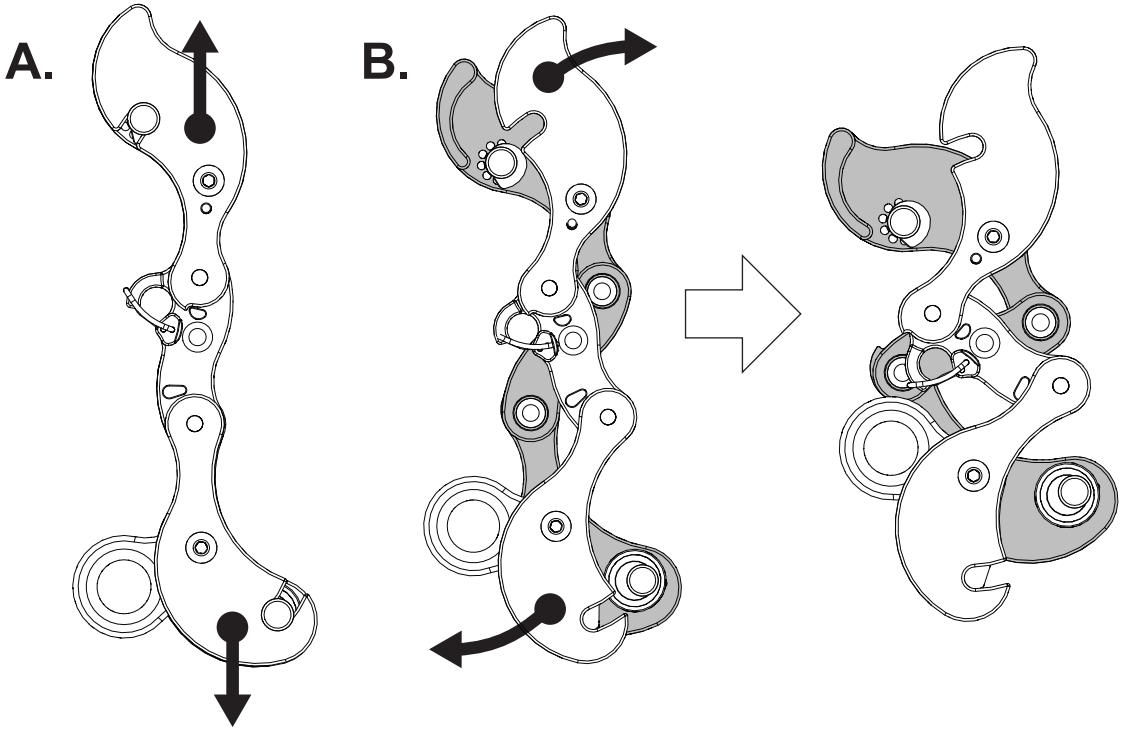
## Moving Rope System (MRS)



## Open the Akimbo

A. Extend the Akimbo fully with the right side facing toward you.

B. Simultaneously push the top and bottom arms of the right face clockwise.

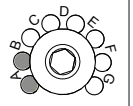
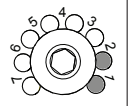
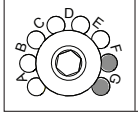
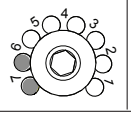


## Adjust to Maximum Friction

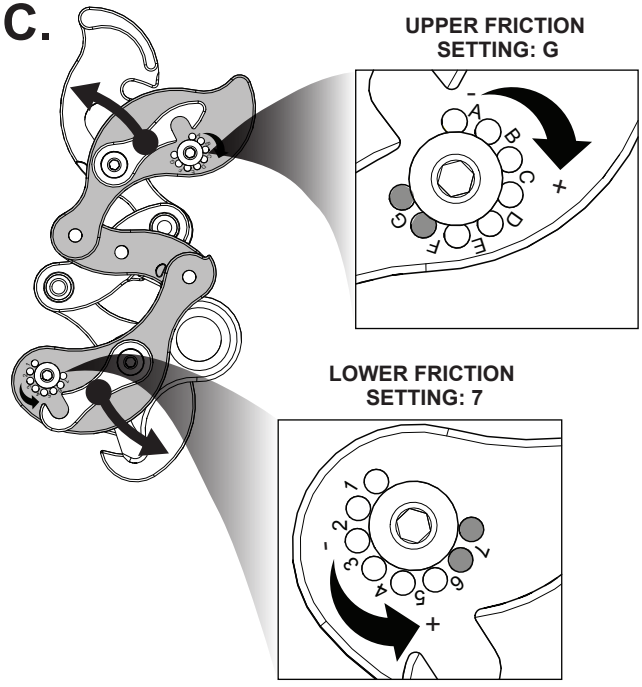
C. Open the Upper and Lower Lock Arms as shown in figure C. Adjust Upper and Lower Bollard to maximum friction setting as shown: G and 7. Arrows point toward an increase in friction.

D. Close both Locking Arms to commit friction settings.

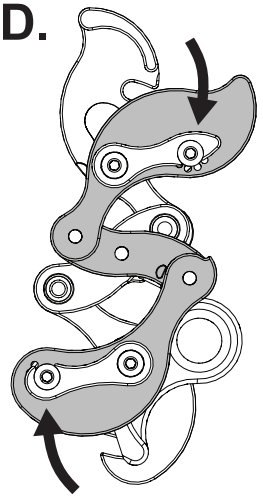
E. If friction setting prevents rope installation (see next page, fig. G), reduce friction settings in one step increments until rope fits snugly inside device.

| | UPPER FRICTION SETTING | LOWER FRICTION SETTING | SETTINGS |
|---|---|---|---|
| Minimum Friction |  |  | A,1 |
| Maximum Friction |  |  | G,7 |

C.




D.



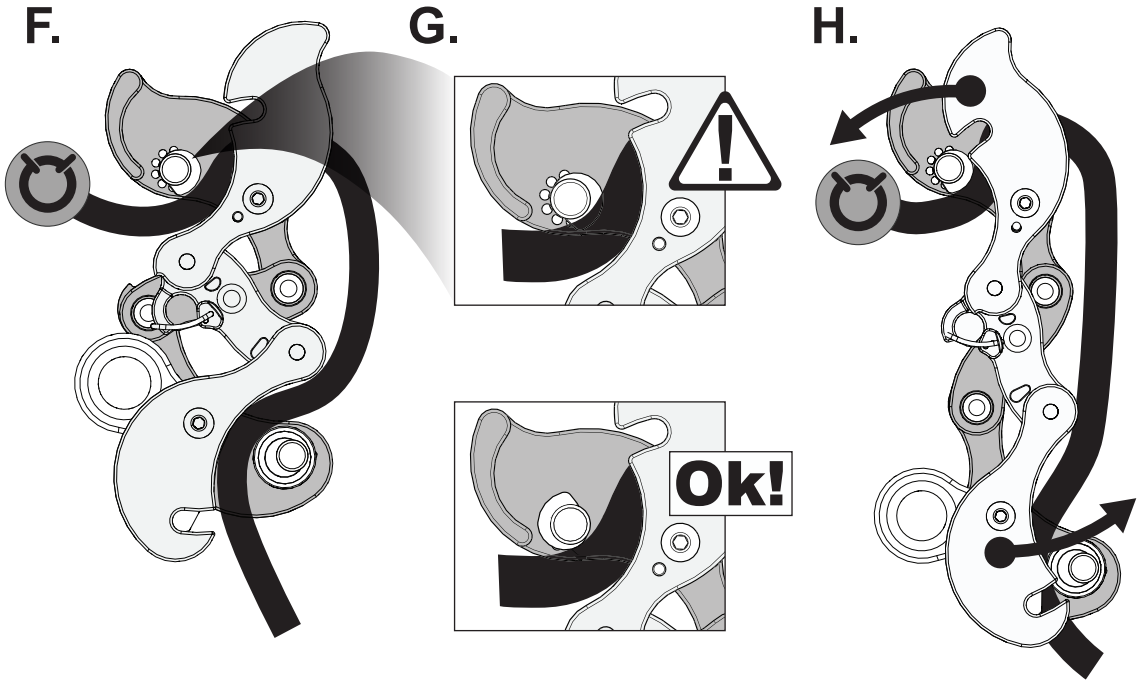
## Install Rope

F. With the RIGHT side of the Akimbo facing you, insert the rope coming from the anchor past the Upper Bollard, followed by the Lower Bollard, as shown by the rope path below. The rope must fit snugly between both the Upper and Lower Cam and Bollard.

G. If rope diameter prevents installation at the highest friction setting on either the Upper or Lower Bollard, follow the steps on the previous page to reduce the friction setting. Continue reducing the friction settings independently until the rope fits snugly between the Upper and Lower Cam and Bollard.

H. Once the rope is installed, close the Akimbo as shown in fig. H.

Do not climb on the Akimbo until the steps on the following pages are completed! Further adjustments of the friction settings are likely necessary.



## Loading & Function Test

I. Place the Akimbo with the rope passing vertically through the device, with the arms positioned to hold its location on the rope. Connect to the Akimbo using a suitable triple action oval connector.

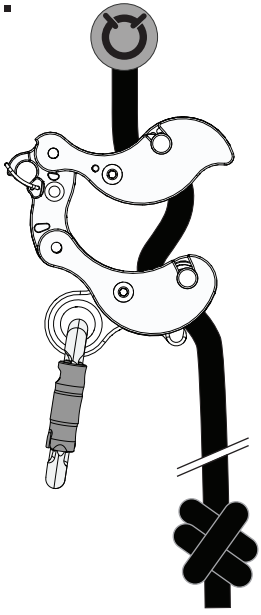
Always tie a stopper knot on the climbing end of the line to prevent the Akimbo from inadvertently coming off the rope.

J. From a safe height, place increasing amounts of body weight onto the Akimbo, including a “bounce” on the device. If the Akimbo slips along the rope, refer to page 9 for instructions on increasing the friction settings before proceeding.

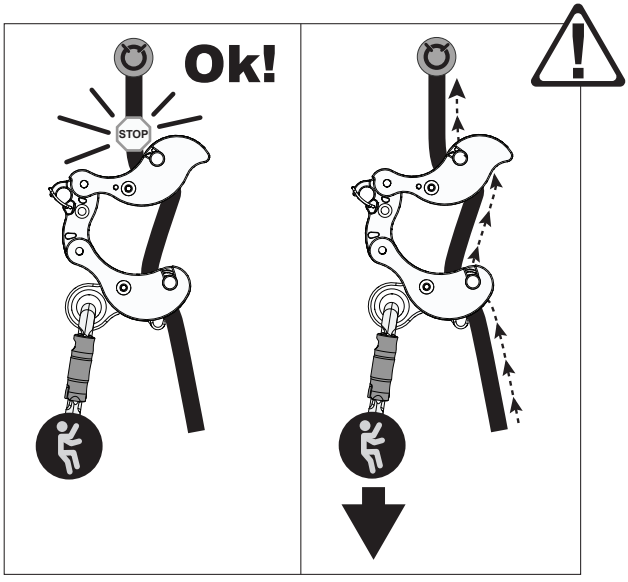
– Friction settings other than described may result in the Akimbo not catching in the event of a fall.

– Perform all friction tests with the Akimbo from a safe height, in a no-risk environment before working at height.

I.



J.



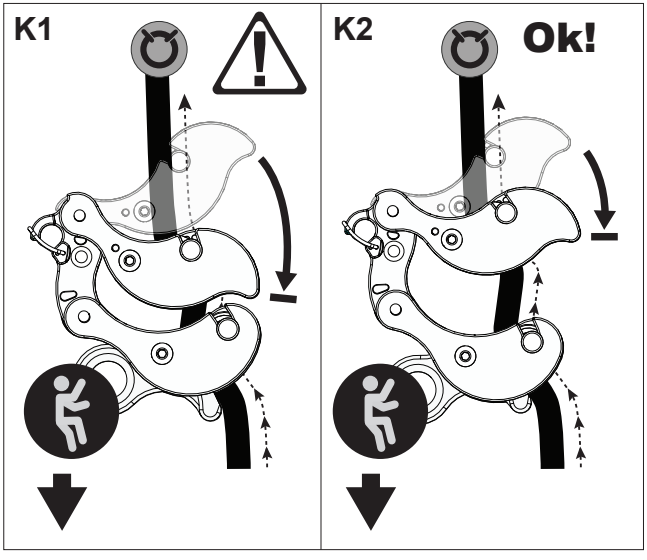
## Loading & Function Test

K. Once the Akimbo sustains your full weight, including a small bounce, gradually depress the Upper Control Arms to descend on the rope from a safe height.

K1: If Akimbo descends only when Upper Control Arms come near, or in contact with Lower Control Arms as depicted in fig. K1, return to page 8 to decrease friction settings, beginning with the Lower Bollard, then repeat step K.

K2: If Akimbo descends as depicted in K2, perform a final bounce on the line. If any slipping occurs, repeat previous steps to increase friction. If the Akimbo sustains your full weight, then proceed to climb.

**K.**




## Always test the Akimbo before each use!

Friction will need to be adjusted often, and in some cases while using the device. Changing the friction settings while at height must be performed while being safely attached to a secondary anchor, such as a work positioning lanyard.

Stop use and evaluate the friction settings on the Akimbo if:

- You detect the device slipping on the rope.
- You switch climbing methods, such as from using Moving Rope System (MRS) to Stationary Rope System (SRS).
- Environmental conditions change (temperature, weather, rain, snow, humidity, etc.).
- Climbing on new or different rope.

## Ascending & Descending

A. Ascend using a foot and/or knee ascender. A hand ascender may be used in combination as well, however, the climber must be aware that anything above the Akimbo may interfere with the Upper Control Arm, potentially causing an uncontrolled descent. This would include setting a prusik or rope grab above the Akimbo for the purpose of creating a 3:1 mechanical advantage.

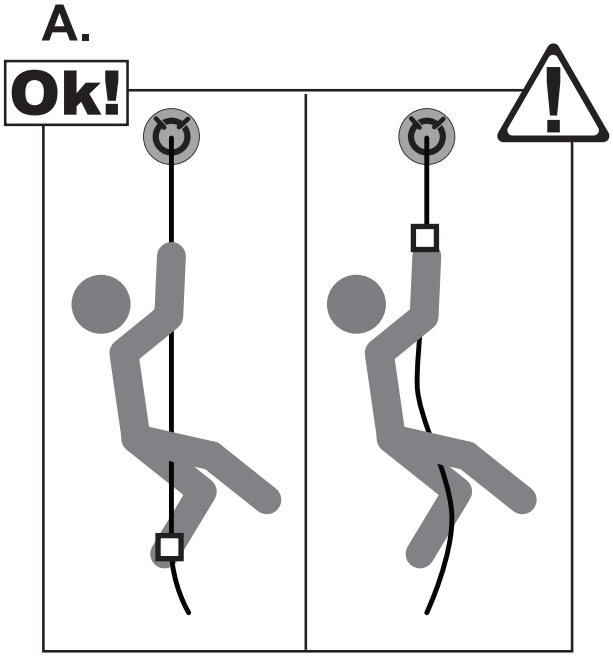
Never use a hand ascender with foot loops!

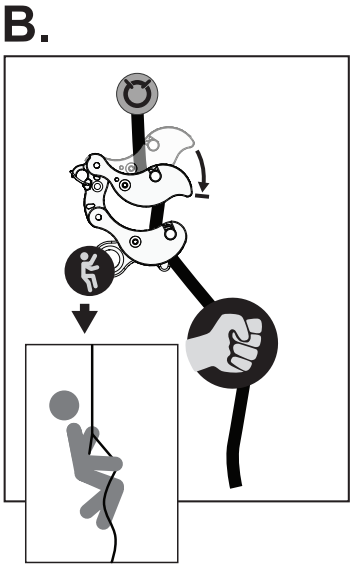
B. Descend on the line by gradually applying downward pressure on the Upper Control Arm. When descending, it is recommended to place free hand on rope trailing from the Akimbo as an additional safety measure.

– The Akimbo does not have a panic feature. Continuous downward pressure on the Upper Control Arm will result in rapid descent leading to potential injury or death.

– Be aware of high temperatures during long descents. Wear gloves when appropriate to avoid burns. Monitor the condition of your rope and inspect for damage if you suspect high temperatures.

– Always descend in a controlled manner.



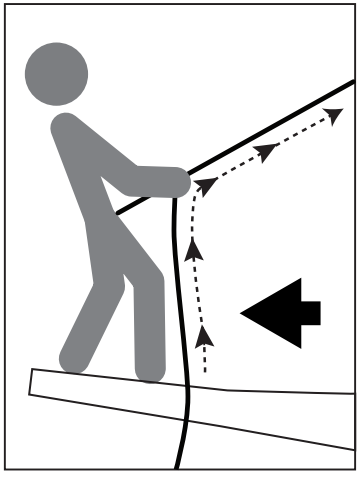
## Positioning in the tree

C. Move away from the trunk of the tree by depressing the Upper Control Arm of the Akimbo and allowing rope to pass upwards through the device.

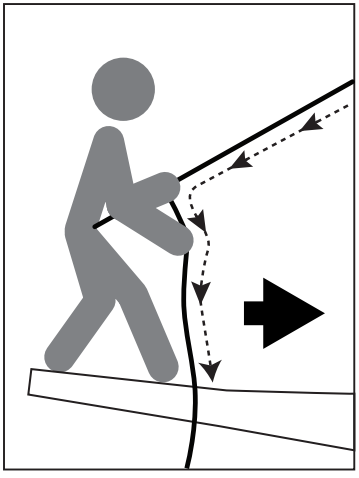
D. To limb walk toward the trunk pull the rope down and outward through the bottom of the device while advancing toward the trunk.

E. Never allow slack to enter your system! Always maintain tension on your system to prevent dangerous shock-loading!

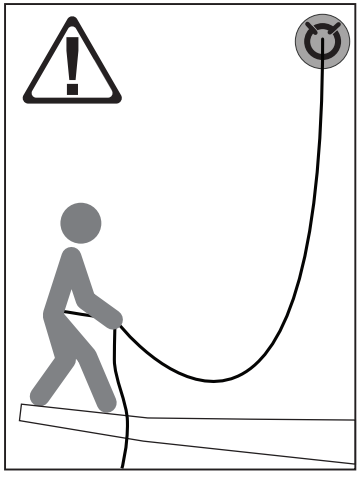
**C.**



**D.**



**E.**



**Inspect Before & After Use**
-Check all parts for cracks, deformation, corrosion, wear, sharp edges or burrs, etc.
-Verify wire gate on the SRS Chest Attachment Point is installed.
-Verify upper cam spring is installed and provides sufficient force against the rope to hold the Akimbo stationary.
-Verify that the Upper and Lower Cam pivot smoothly.
-Verify that the Lower Bollard rotates smoothly.
-Verify the security of each pair of the upper and lower friction setting pins.
-Ensure that the Upper and Lower Control Arms rotate freely in relation to their connection to the spine.
-Ensure that the Akimbo opens and closes without binding.

**Inspection During Use**
Regularly inspect and monitor your system, confirming proper connections, equipment position, fully locked connectors, etc.

**Detailed Inspection**
In addition to inspection before, during and after each use, a detailed inspection by a competent inspector must be done at least every 12 months or more frequently depending on amount and type of use (see following page for inspection guidelines).

**Retire from Service & Destroy if it:**
1. Is significantly loaded.
2. Does not pass inspection or there is any doubt about its safety.
3. Is misused, altered, damaged, exposed to harmful chemicals, etc.
4. If you don't know the full history of its use, or there is any doubt about its condition.

**Environmental Factors**
Moisture, ice, salt, sand, snow, chemicals and other factors can prevent proper operation or can greatly accelerate wear.

**Compatibility**
Verify compatibility with other components of your system. Incompatible connections can cause detachment, breakage, etc. When using multiple pieces of equipment as a system, instructions for each piece of equipment must be followed. Verify that each component used with the Akimbo meets the applicable standards and or laws in your country.

**Lifetime**
Unlimited, but will often be much less depending on conditions and use; it could even be a single use in some cases.

The upper and lower cams will eventually wear down and the Akimbo will begin to slip, even when using previously tested settings. As the cams begin to wear, you will need to increase the friction settings or increase the rope diameter. Retire from service if the Akimbo fails the function test described in this manual.

The lifespan of the Akimbo can be prolonged by avoiding use with dirty ropes and avoiding long or fast descents.

**Maintenance & Storage**
Clean if necessary with fresh water, then allow to dry completely. Store in a dry place away from extremes of heat and cold and avoid chemical exposure.

**Principal Material**
Aluminum alloy, anodized.

**Repairs or Modifications to Equipment**
Are only allowed by the manufacturer or those authorized in writing by the manufacturer.

**Rock Exotica 3-year guarantee**
If your Rock Exotica product has a defect due to workmanship or materials please contact us for warranty service. This warranty does not cover damages caused by improper care, improper use, alterations and modifications, accidental damage or the natural breakdown of material over extended use and time.

# INSPECTION RECORD

Inspections should be performed by a competent person whose training meets the applicable standards and/or laws for the inspection of life safety equipment.

An inspection log including the date, inspectors name, and result of the inspection should be kept as a permanent record.

It is best to issue new equipment to each user so they know its entire history. Use one copy as the permanent inspection record and keep the other with the equipment.

| DOCUMENTATION | |
|---|---|
| Model | |
| Complete Batch # | |
| Year of Manufacture | |
| Purchase Date | |
| Date of 1st Use | |
| User | |

| DATE | CONDITION | INSPECTOR |
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