

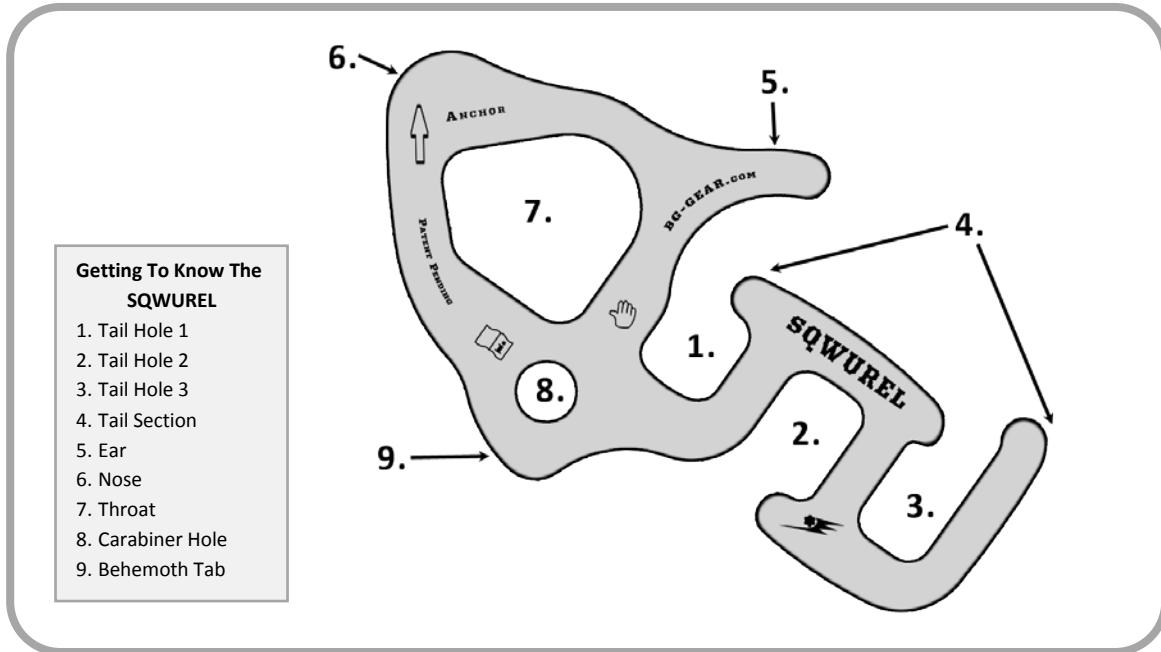


SQWUREL



Variable Friction Descender for Canyoneering

- Made in UTAH, USA •7075 T6 Aluminum •DIM: 6.539 x 3.781 x 0.375 Inches •Weight: 4.4 Ounces
- Patent Pending •Single Rope: 8mm - 11mm •Double Rope: 8mm - 9mm



Visit www.BG-Gear.com for contact information, downloadable versions of these instructions and other material.

© 2014 BG-Gear Last Updated – 05-14-15

WARNING - FAILURE TO HEED ANY OF THESE WARNINGS MAY RESULT IN SEVERE INJURY OR DEATH.

This BG-Gear product is a canyoneering descender for canyoneering use only and must be used in accordance with the product's instructions. Activities involving the use of this product are inherently dangerous and present the risk of injury or death to you and/or others and cannot be made safe. It is the user's obligation to be aware of and use all relevant safety procedures. Before using this product, the user must read and understand all instructions and warnings accompanying this product and become familiar with the capabilities and limitations of this product and associated equipment. You must understand and accept the risks involved with the use of this product. If you are not sure how to use this product properly, seek professional guidance. You are responsible for your own actions and decisions.



BG-Gear products must be used in accordance with the product's instructions and only for the specified purpose it was designed for. Any person using BG-Gear products in any manner is responsible for learning proper techniques, assumes all risk, and accepts full and complete responsibility for any and all damages, loss or injury of any kind to you and/or others, including death, which may result from the use or misuse of any BG-Gear products.

Instructions accompanying BG-Gear products are not a substitute for qualified personal instruction. Any person using BG-Gear products is responsible for obtaining qualified instruction on the proper use, techniques and limitations associated with the product. Before using this product you must be familiar with rescue techniques, so rescue may be immediately carried out in case of difficulties encountered while using this product; this implies adequate training in the necessary rescue techniques. BG-Gear is not responsible for any direct, indirect or accidental consequences, damages, injury, or death resulting from use or misuse of this product. Any litigation involving this product will be in Nevada State pursuant to Nevada law. Inspect all equipment before each use and destroy any gear that is damaged, worn or unsafe for any reason.

The distributor-wholesaler-retailer-reseller is responsible for providing this warning information to the customer.

Guarantee

This product is guaranteed free of all material and manufacturing defects for 2 years. Exclusions: normal wear and tear, oxidation, modifications, incorrect storage, incorrect usage, poor maintenance, negligence, misuse of this product, or using the product for any purpose other than what it was designed for.

Modifications

Do not modify any BG-Gear products. BG-Gear products may only be repaired with replacement parts supplied by BG-Gear.

General Safety

Always wear a helmet while using this product. While using the SQWUREL ensure that clothing, straps, ropes, fingers, hair and other body parts do not get pulled into the device. Always ensure the rope reaches all the way to the bottom before beginning to rappel.

This device is NOT hands free; you must always grip the brake end of the rope to control your descent. A suitable friction mode must be selected before the device is weighted / loaded. Friction will vary depending on rope size, type, condition and environment (e.g. wet, dirty, etc.). Before using the device in the field or at height, test the device in a safe and controlled environment to determine proper friction settings.

These instructions explain how to correctly use your equipment. Only certain techniques and uses are described. Any misuse of this equipment will increase the risk of accident, injury or death. Contact BG-Gear if you have any doubts or difficulty understanding these instructions.

Compatibility

Prior to using this product, verify this product has good working interaction with other elements of your system. Use the SQWUREL with a locking carabiner which has a preferably round or oval cross section of about 12mm in diameter. Use the SQWUREL with 8mm - 11mm static rope (single rope use) and 8mm – 9mm static rope (double rope use). Warning, some ropes (especially new and/or thin ropes) can be slippery and may require setting the SQWUREL to a higher Friction Level.

Life Span

The SQWUREL has an indefinite life span if it continues to pass inspection and there is no doubt about the safety of the product. Contact BG Gear if there is any doubt about the safety of the product.

Inspection / Retirement

Before and After each use, inspect the device for cracks, sharp edges, corrosion, deformation, wear, marks, other defects and check to be sure the o-ring is present inside the Carabiner Hole. **During each use**, monitor the condition of the device checking for cracks, sharp edges, corrosion, deformations, wear, marks and other defects. **During each use**, monitor connections to other equipment in the system. Make sure all pieces of equipment in the system are correctly positioned with respect to each other and ensure the carabiner is locked during each use.

Some marking and wear as a result of using the device is normal. Immediately retire any device that shows signs of cracking, sharp edges or shows signs of deformation.

During normal use rope will rub the device creating wear and rope grooves at various points on the device. The rope grooves will become deeper as the device experiences more use. Wet / Sandy ropes will greatly increase the rate at which rope grooves develop. Regularly inspect and monitor the rope grooves on the device. Retire the SQWUREL when any part of the device shows significant wear. Visit www.BG-Gear.com for more details on when to retire the SQWUREL.

Retire any device that does not pass inspection, has been misused, modified, damaged, dropped from height, exposed to harmful chemicals, becomes obsolete due to changes in legislation or standards, or becomes incompatible with other equipment in your system. If there are any doubts about the condition of this product, contact BG-Gear.

Warning! An exceptional event can lead to retirement of the device after a single use, depending on the type and intensity of usage and the environment of usage. Retire any equipment if you do not know its entire usage history. **DESTROY retired equipment to prevent further use** (the SQWUREL is aluminum and can be recycled).

Limitations

It is not possible to list all the ways this product can be misused. This product must be used only in the manner described in the instructions. Users must first practice using the product in a safe and controlled environment.

Care - Cleaning - Storage

Clean the product with fresh water only and dry thoroughly before storing. Store the product in a dry place away from exposure to UV, chemicals and extreme temperatures.

Warning Symbols

The warning symbols alert you to some potential dangers related to the use of your equipment, but it is impossible to describe all potential dangers. You are responsible for using your equipment correctly and heeding each warning.



Imminent Risk of
serious injury or death



Potential Risk of
accident or injury



Suggested
configuration



Not Suggested
configuration

FRICION MODES + FRICTION SETTINGS = FRICTION LEVEL

FRICION MODES - - - - initial setting

Friction Modes are chosen and set by placing the rope in specific configurations prior to putting a load on the SQWUREL.

There are three initial Friction Modes to choose from when setting up the SQWUREL;

- SIMPLE MODE – is used for most people in most conditions.
- JUMBO MODE – is used for larger people or when ropes or conditions create the need for additional friction.
- BEHEMOTH MODE – is used for very large people and or heavy loads or when ropes or conditions create the need for maximum friction.

After selecting a Friction Mode, the user can place a load on the SQWUREL and begin using the SQWUREL.

Additional friction can be added while the SQWUREL is loaded and in use by changing the Friction Settings (see below).

FRICION SETTINGS - - - - on the fly adjustment

Friction Settings are levels of friction that can be adjusted through while the SQWUREL is loaded and in use by placing the rope in the tail holes in various configurations.

There are four Friction Settings to adjust through while the SQWUREL is loaded and in use;

- FS0 – Friction Setting 0 is the lowest setting. Set when the SQWUREL has been set into one of the initial Friction Modes.
- FS1 – Friction Setting 1 offers a little more friction than Friction Setting 0. Set by placing the rope in the Tail Hole 1.
- FS2 – Friction Setting 2 offers a little more friction than Friction Setting 1. Set by placing the rope in the Tail Hole 1 and Tail Hole 2.
- FS3 – Friction Setting 3 offers a little more friction than Friction Setting 2. Set by placing the rope in the Tail Hole 1 and Tail Hole 2 and Tail Hole 3.

While loaded and in use, the user can adjust the SQWUREL through all four of the Friction Settings to vary the friction to the desired level at any time during use.

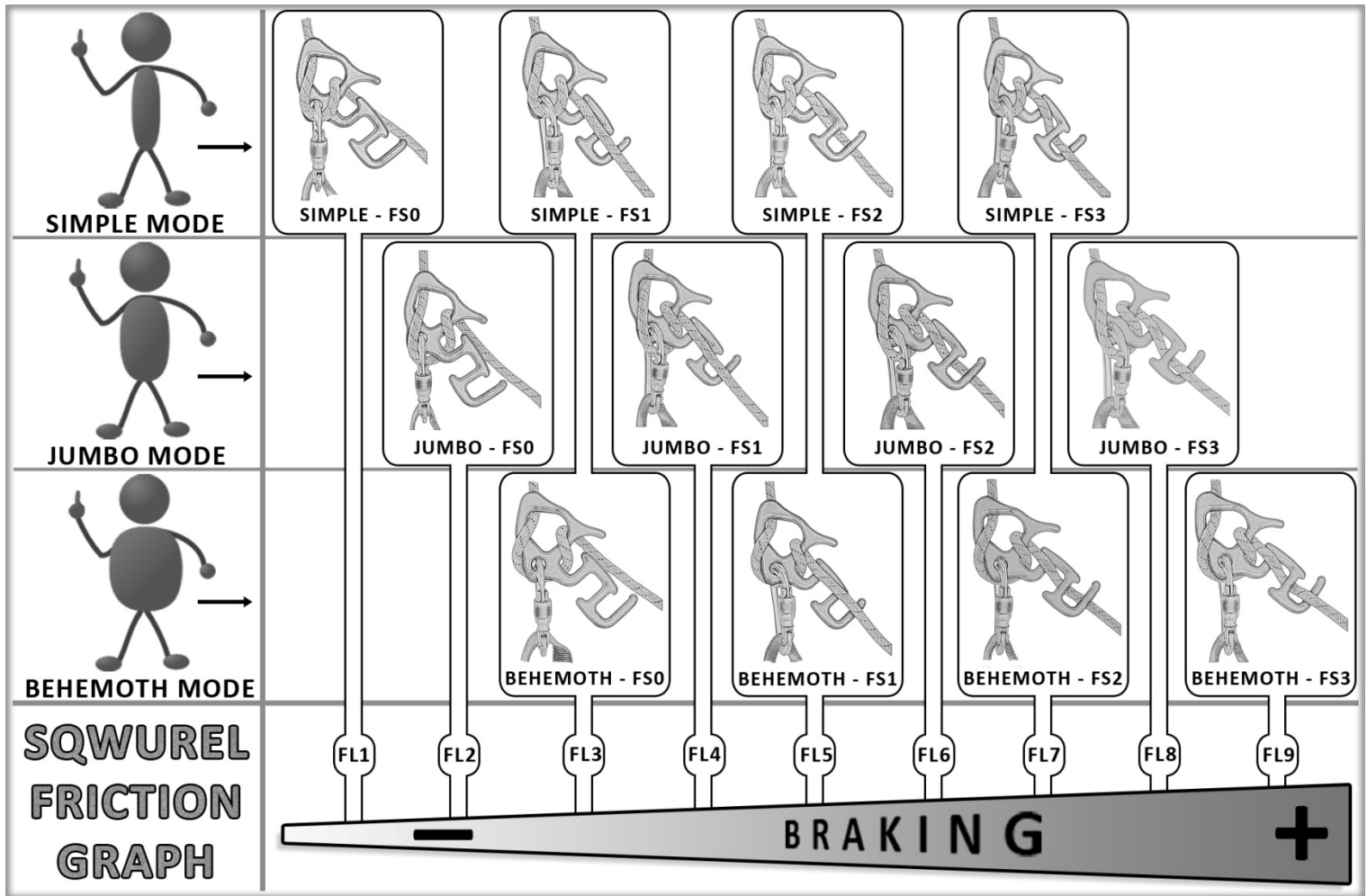
FRICION LEVEL - - - - Using Friction Modes and Friction Settings together.

The combination of the Friction Mode and the Friction Setting will set the SQWUREL at one of 9 specific Friction Levels (FL1 through FL9).

Each Friction Mode increases the amount of friction by approximately one half of the amount of one Friction Setting.

Refer to the SQWUREL Friction Graph to understand how the 9 friction levels (FL1 through FL9) relate to one another.

For example both SIMPLE-FS1 and BEHEMOTH-FS0 set the SQWUREL at FL3 and offer the same level of friction.



SETTING A FRICTION MODE

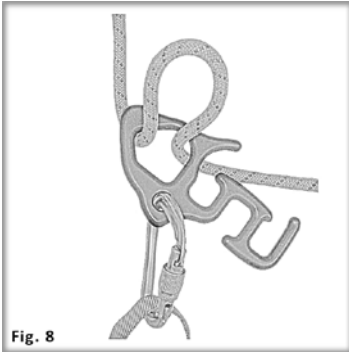


Fig. 8

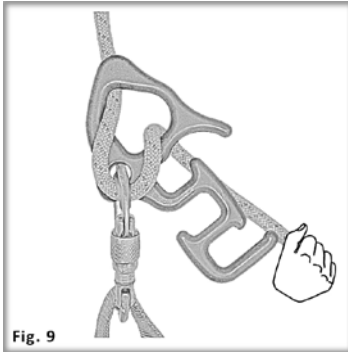


Fig. 9

SIMPLE FRICTION MODE

SIMPLE MODE can be used with single ropes 8mm to 11mm in diameter.
SIMPLE MODE can be used with double ropes 8mm to 9mm in diameter.

Pull a bight of rope through the Throat (Fig. 8).

The bight must always be clipped into the carabiner (Fig. 9).

Always lock the carabiner.

This places the SQWUREL in Friction Level SIMPLE-FS0.

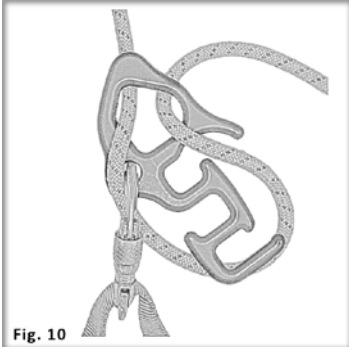


Fig. 10

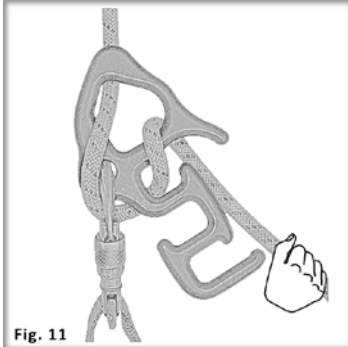


Fig. 11

JUMBO FRICTION MODE

JUMBO MODE can be used with single ropes 8mm to 11mm in diameter.

Set the SQWUREL to SIMPLE MODE (Fig. 8 and Fig. 9).

The bight must always be clipped into the carabiner.

Always lock the carabiner.

Pull the bight over the entire Tail Section (Fig.10).

Cinch the bight down snug under the Tail (Fig.11).

This places the SQWUREL in Friction Level JUMBO-FS0.

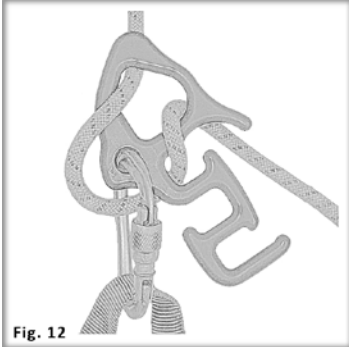


Fig. 12

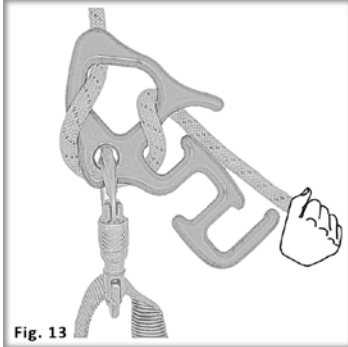


Fig. 13

BEHEMOTH FRICTION MODE

BEHEMOTH MODE can be used with single ropes 8mm to 11mm in diameter.

Set the SQWUREL to JUMBO MODE (Fig. 8, Fig. 9, Fig. 10 and Fig. 11).

The bight must always be clipped into the carabiner.

Always lock the carabiner.

Pull the bight out and move it behind the Behemoth Tab (Fig.12).

Cinch the bight down snug behind the Behemoth Tab (Fig. 13).

This places the SQWUREL in Friction Level BEHEMOTH-FS0.

USING FRICTION SETTINGS

ADJUST FRICTION SETTINGS

Friction settings can be used to adjust friction "on the fly" while the SQWUREL is weighted / loaded and in use.

Illustrations are shown with SIMPLE Friction Mode. Friction Settings can be used with all Friction Modes.

Never let go of the brake end of the rope while rappelling with the SQWUREL. Direct the rope through the Tail Holes to progress through the Friction Settings.

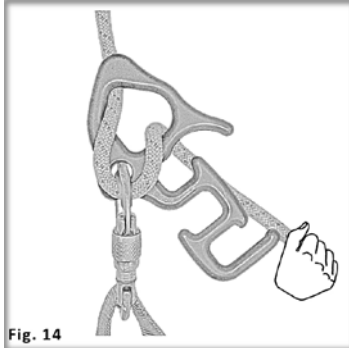


Fig. 14

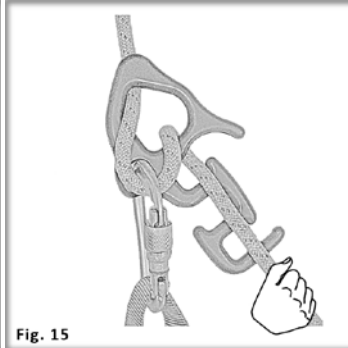


Fig. 15

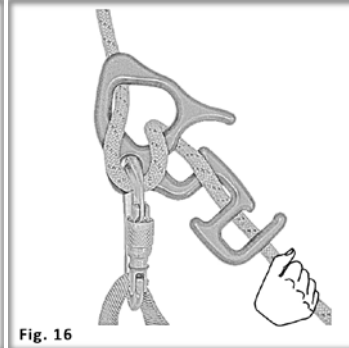


Fig. 16

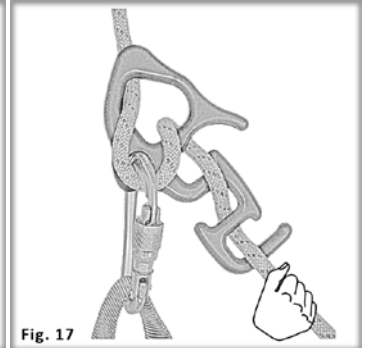


Fig. 17

Friction Setting FS0 (Fig. 14).

Friction Setting FS1, to advance from Friction Setting FS0 to Friction Setting FS1, direct the rope up into Tail Hole 1 (Fig. 15).

Friction Setting FS2, to advance from Friction Setting FS1 to Friction Setting FS2, direct the rope down into Tail Hole 2 (Fig. 16).

Friction Setting FS3, to advance from Friction Setting FS2 to Friction Setting FS3, direct the rope up into Tail Hole 3 (Fig. 17).

STORAGE POSITIONS



Fig. 1



Fig. 2

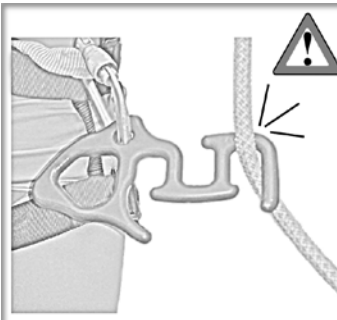


Fig. 3

To place the SQWUREL in a storage position, clip the SQWUREL to a side gear loop on your harness using the Throat (Fig. 1) or the Tail (Fig. 2).

Placing the SQWUREL in a storage position while not in use can help avoid accidental snagging (Fig. 3).

DEVICE ORIENTATION



Fig. 4



Fig. 5

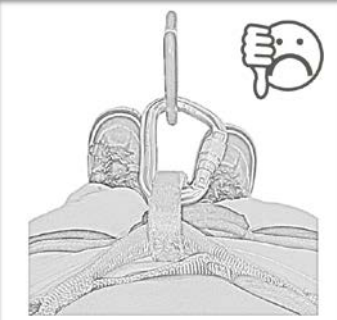


Fig. 6

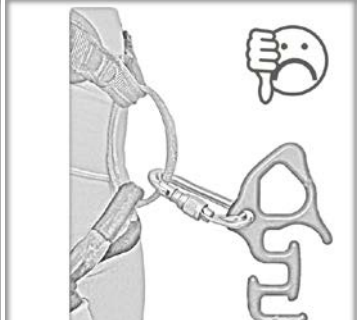


Fig. 7

Proper Orientation

The SQWUREL should be oriented horizontally. Fig. 4 top view, Fig. 5 side view

Improper Orientation

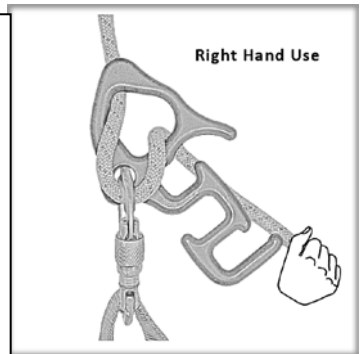
The SQWUREL should NOT be oriented vertically. Fig. 6 top view, Fig. 7 side view

RIGHT OR LEFT HAND USE



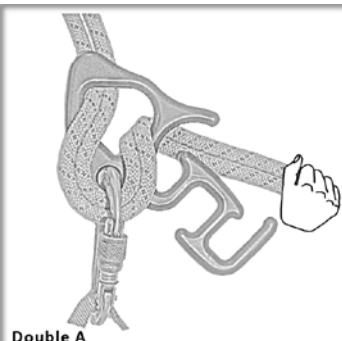
Left Hand Use

For left hand use, turn the SQWUREL over.

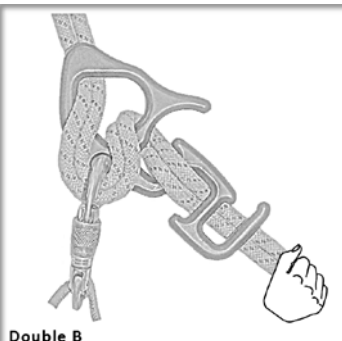


Right Hand Use

DOUBLE ROPE USE



Double A



Double B

DOUBLE ROPE USE

The SQWUREL can be used with double rope.
Rig as for single rope in Simple Mode and use Friction Settings.

Jumbo and Behemoth modes are not to be used with double rope.

LOCKING OFF

WARNING: If locking off for long periods, lock off where your feet can be against the wall and avoid locking off where you will be free hanging.

Practice in a safe controlled environment and become familiar with the function of these methods before using these methods in the field.

If you are unsure how to perform these methods, seek professional instruction before using these methods in the field.

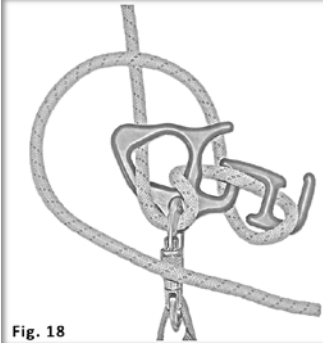


Fig. 18

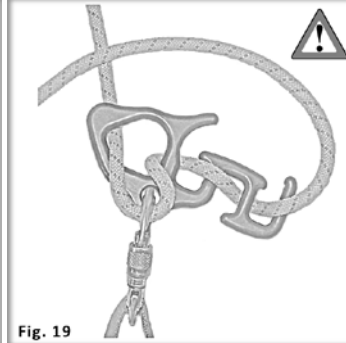


Fig. 19

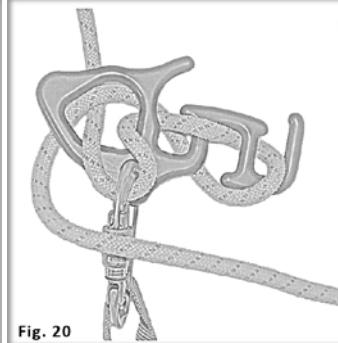


Fig. 20

Use the Tail Section to increase to Friction Setting 3 by directing the rope through all three Tail Holes.

Wrap the brake end of the rope under the tail, then pull the rope up over the Nose of the SQWUREL (Fig. 18).

Warning: Do not pull the rope up without wrapping under the tail (Fig. 19).

Pull the rope down forcing it between the Nose of the SQWUREL and the rope leading toward the anchor (Fig. 20).

SOFT LOCK OFF METHOD

The Soft Lock Off method is for use with ropes 8mm to 11mm in diameter.

Warning: The Soft Lock Off method must only be used when the SQWUREL remains weighted / loaded. The Soft Lock Off can come undone and fail if the SQWUREL is unweighted / unloaded. Bouncing, standing or any movement that releases tension on the rope can potentially cause the Soft Lock Off to come undone and fail.

Use the Tail Section to increase to Friction Setting 3 by directing the rope through all three Tail Holes.

Create a bight in the brake end of the rope and push it through the carabiner attached to the SQWUREL (Fig. 21).

Twist the bight up to create a loop so the brake end of the rope is on top and in front of the other rope (Fig. 22).

Create another bight of rope in the brake end of the rope, move the bight behind the carabiner and push the bight through the loop (Fig. 23).

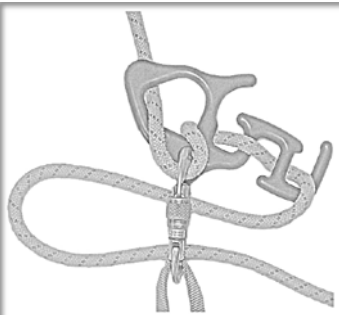


Fig. 21



Fig. 22

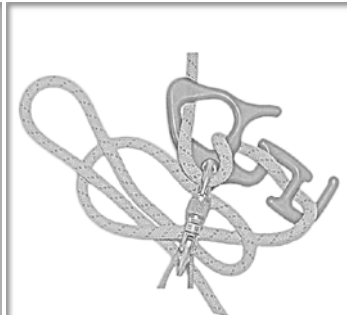


Fig. 23

HARD LOCK OFF METHOD

The HARD Lock Off method can be used with ropes 8mm to 11mm when the SQWUREL is weighed / loaded or when the SQWUREL is unweighted / unloaded.

Warning: The Hard Lock Off requires delicate finger and hand motions. While performing the Hard Lock Off ensure fingers, clothes and straps do not get pulled into the knot.

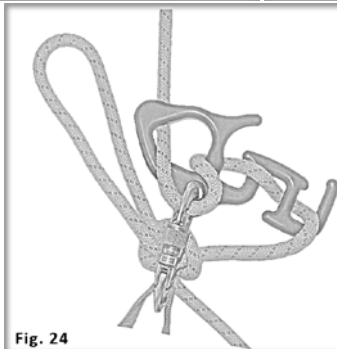


Fig. 24

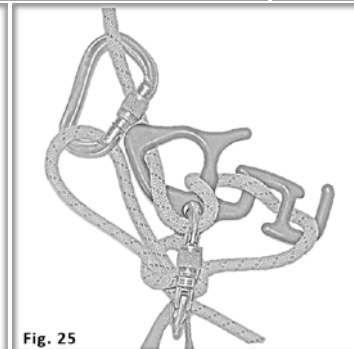


Fig. 25



Warning: The knot must be tied on the spine of the carabiner as shown. Do not tie the knot on the gate of the carabiner.

Always clip the final bight to the rope above the SQWUREL to prevent the rope below the rappeller from pulling on the knot and potentially untying it.

Pull the bight to tighten the knot around the spine of the carabiner (Fig. 24).

Clip the bight to the rope above the SQWUREL using a locking carabiner (Fig. 25).

Always lock the carabiner