

This device is intended for work-at-height experts. Misuse may result in death or serious injury.



Original Drawings by Will Ott, Certified Arborist



The Singing Tree Rope Runner is a tool to be used by rope technicians working up and down a single fixed line. The Rope Runner is a friction control device that allows a climber to ascend and descend a single rope without changing equipment. It also allows the climber to smoothly control the rate of descent by controlling friction on the climbing line.

In this guide, dangerous use of the Rope Runner is represented with an X, a skull and cross-bones, and/or a downward arrow, representing fast and unsafe downward motion. These scenarios could result in serious injury or death.

Proper use of the Rope Runner is represented by a check mark.

Specifications:

Approximate Break Strength: 22.7 kN / 5000 lbs. end to end

Weight: 246 g / 8.67 oz.



Tested and Recommended Rope : All Gear 11.5 mm Rocket Line, Cherry Bomb, or Blue Craze

Maximum Rope Tolerance: 11 - 13 mm Diameter, 24 strand construction meeting EN 1891 or NFPA 1983

Material: 7075 Aluminum, Stainless Steel

The Rope Runner is for expert use only. It is the user's responsibility to climb safely and have the proper instruction. It is imperative that the user practice extensively with the Rope Runner in a no-risk situation (i.e. with a safety rope from above) before using the Rope Runner in any situation in which injury may occur. Be aware that any at-height activity, including climbing, comes with inherent danger that no tool or instruction can completely negate.

READ ALL INSTRUCTIONS COMPLETELY AND CAREFULLY BEFORE USE.

The Rope Runner is

- NOT for use by novices in SRT techniques
- NOT an SRT training device
- NOT to be used for extreme activities, speeds, and/or in extreme conditions
- NOT for use by anyone not willing to take full responsibility for their own life
- NOT to be used by people over 125 kg (275 lbs) or for multi-person loads
- NOT a fall arrest device

1 Part Nomenclature



2 Components of the Rope Runner



The Body: This is the backbone of the Rope Runner, uniting the other assemblies. The spine of the *Body* is a friction surface and a heat sink. The *Lever Assembly* and the *Tending Assembly* both apply a braking force by compressing the rope against the spine of the *Body* during use.

The Bird Assembly: This "bird" (resembling the profile of a bird) is engaged onto the rope with the help of the *Axle Spring*. It engages the rope and applies friction between the *Slic Pin* and the *Lower Adjustable Friction Bollard*. If the *Bird Assembly* is not engaged on the rope, the Rope Runner is useless. The "beak" of the *Bird* is used to control descent by adjusting how much friction is placed on the line.

The lower *Friction Bollard* is adjustable along the slots in the side cheeks of the *Bird Assembly*. This should rarely be adjusted and most climbing lines greater than 11mm in diameter will work properly in the fully open position. Test the Rope Runner at low heights to determine if adjustments need to be made. Slight adjustments make a big difference, and if this bollard is too tight against the rope descent can be very difficult.

The Tether Assembly: The *Tether Assembly* connects the *Bird Assembly* to the *Lever Assembly*. It should always remain free moving and should never cause resistance to the *Bird Assembly* or the *Lever Assembly*. *The Tether Assembly* also contains a retaining screw that helps engage the *Axle Spring*. The *Axle Spring* is critical to the operation of the Rope Runner.



CAUTION: Continually inspect the *Axle Spring*. If the *Axle Spring* or the *Axle Spring Retaining Screw* is damaged or disabled in any way, retire the Rope Runner immediately. **The Lever Assembly:** When the *Bird* engages on the rope due to the torque of the *Axle Spring*, it pulls up on the *Lever Assembly* and compresses the rope between the *Lever Friction Bollard* and the spine of the *Body*.





The Tender Assembly: This is a small pulley that acts as a tending pulley and compresses the rope against the spine of the *Body*, providing friction. It is secured to the Rope Runner using the same *Carabiner* that attaches the device to the climber. The diagonal slot in the *Body* is captured between the two holes in the *Tender Assembly*.

Quadruple Acting Slic Pins: These allow the Rope Runner to be midline attachable. These pins secure the rope into the *Bird* as well as attach the lever to the body of the Rope Runner. The *Quadruple Acting Slic Pins* require four separate and distinct motions to unlock. Continually inspect the *Quadruple Acting Slic Pins* to ensure the locking mechanisms are working correctly - dirt, ice, sap, or other potentially hazardous materials could disable the locking mechanism. DO NOT use any slic pins other than the *Quadruple Acting Slic Pins* provided with the Rope Runner. Use of other Slic Pins could lead to serious injury or death. Always test this mechanism before use. If a *Quadruple Acting Slic Pin* is lost or broken, contact an Authorized Singing Tree Retailer for a replacement.





Retaining Washers: These washers are useful in keeping the *Quadruple acting Slic Pins* secure to the Rope Runner. They can also be used to attach a chest harness to the lower *Slic Pin* of the Rope Runner to keep slack out of the system while ascending. **The Retaining Wash***ers* are not suitable for any weight greater than 3 kg (6.5 lbs

3 Installing on a Fixed Line

WARNING: Installation Orientation

Do not install the Rope Runner upside down or incorrectly. Incorrect installation could lead to serious injury or death.

Always use proper personal protective equipment (PPE) when climbing. This includes a helmet and eye protection, with additional equipment required if operating machinery such as a chainsaw.



1

The *Quadruple Acting Slic Pin* of the *Bird Assembly* should be on the top of the Rope Runner. (Note: at this stage of installation, the *Tether Assembly* will be above the *Quadruple Acting Slic Pin* due to the action of the spring) Disengage the top *Quadruple Acting Slic Pin* so only one lock remains secured on the inside of the *Bird* side cheeks. It is not neccesary and not recommended to remove the entire pin, as it could lead to a dropped and lost pin. With the *Quadruple Acting Slic Pin* partially locked the rope may fit tightly, but rope up to 13mm will work.





2

Lock the *Quadruple Acting Slic Pin* after the rope is secured between the *Quadruple Acting Slic Pin* and the *Lower Friction Bollard* of the *Bird*. **Ensure that both locks on the** *Quadruple Acting Slic Pin* **are completely locked**.

CAUTION: Secure Slic Pin

The *Quadruple Acting Slic Pin* relies on the actuation of a small spring to become secured. Before use, ensure that the *Quadruple Acting Slic Pin* is fully inserted, constrained, and uninhibited by any rope fibers, and that the metal tabs click outward. Make sure **both tabs of the** *Quadruple Acting Slic Pin* are engaged. Failure to do so could cause the Rope Runner to come off the climbing rope and render the Rope Runner useless, causing serious injury or death.



3

Secure the rope between the *Friction Bollard* of the *Lever Assembly* and the *Body* using the *Quadruple Acting Slic Pin*. Ensure that both locks on the *Quadruple Acting Slic Pin* are completely locked.





4

Place the *Tending Pulley Assembly* over the rope and *Body* so the rope is between the spine of the *Body* and the sheave of the *Tending Pulley*. It is very important that the rope is in the correct position. If the rope is threaded through the Rope Runner rather than having the Rope Runner assembled onto the rope, the chance of the rope running through the areas marked "No Rope" increases. If the rope runs through the areas of the rope runner marked "No Rope", the Rope Runner will not work and its use could result in serious injury or death, as well as damage to the rope.

Use a *Triple Action Locking Oval Carabiner* to capture both the tending pulley and the slotted hole in the body. Be sure both sides of the tending pulley assembly and both sides of the body are captured. The unweighted carabiner should be able to move freely within the slot. When weighted, the tending pulley will clamp the rope against the body. The **Rock Exotica RockO** is the recommended carabiner for the Rope Runner.



Use only oval shaped carabiners with the Rope Runner. Using other shapes of carabiner (D, Pear, etc.) could cause serious injury or death. Use of other shapes of carabiner can also damage the Rope Runner



WARNING: Rope Runner Spring

• Continually inspect the spring on the rear axle connecting the bird and the tether assemblies. **If the spring is disabled, discontinue used immediately.** The Rope Runner will not automatically engage on the line if the spring is disabled.

• Always keep the spring free and clear of dirt, sap, grit, ice, or other potentially hazardous material as they could disable the spring

• Attempting to climb with a malfunctioning spring could result in serious injury or death

4 Ascending with a Rope Runner

The Rope Runner needs to be tended at all times during ascent. It should be free and clear of loose clothing, straps, carabiners, plant material, or clutter.

WARNING: Keep Free From Tangles

Anything that can catch onto or entagle itself in the *Bird* or the *Quadruple Acting Slic Pin* of the *Bird* needs to be avoided at all costs. Anything sliding down the line or hooked onto the *Bird* can drag the Rope Runner and the climber down the line.



A chest strap or lanyard over the shoulder can be attached to the bridge connection or the *Retaining Washers* connected to the *Lower Slic Pin* to advance the Rope Runner. Avoid using large carabiners, snaps, or hooks. A micro S snap is recommended.



Do not allow the Rope Runner to fall below the knees or allow excessive slack to build up in the system. This exposes the climber to the risk of falls, as well as increases the possibility of entanglement. This could lead to serious injury or death

🚹 WARNING

The Rope Runner is a work positioning tool. The Rope Runner is NOT A FALL ARREST DEVICE.



Using ascenders above the Rope Runner is not recommended. The ascender, tether, or foot loop could become disabled, which would bring it into contact with the Rope Runner. Any contact with the top of the Rope Runner can cause a drop, and continued contact can cause uncontrolled descent, possibly resulting in serious injury or death. Using foot or knee ascenders such as the HAAS or Petzl Pantin below the Rope Runner poses no threat to entanglement or function of the Rope Runner and is recommended.



WARNING: Redirected Tail

Do not use the redirected tail of the rope to control your position or descent. Holding the redirected tail can collapse the device causing unexpected descent, and the tail will move through your hands faster due to mechanical advantage. If uncontrolled descent occurs, release the rope and the device to allow the Rope Runner to engage.

Do not use the Rope Runner for more than one climber or for climbers over 125 kg (275 lbs).

Do not allow the Rope Runner to get out of reach of the climber.

5 Descending with a Rope Runner

When the Rope Runner is fully engaged, there are many points where the Rope Runner makes contact with the rope:

- The rope is forced into an S curve by the Bird, between the Slic Pin and Lower Friction Bollard
- The rope is firmly compressed between the Lever and the spine of the Body
- The sheave of the *Tending Pulley Assembly* compresses the rope against the spine of the *Body*

To release friction and initiate descent, the climber slowly exerts downward pressure on the "beak" of the *Bird*. **To stop descent, the climber must release all pressure from the Rope Runner.**

Creep and Uncontrolled Descent are possible due to a variety of factors including (but not limited to):

- Innappropriate rope size or type
- Component wear
- Improper use or installation

If creep or uncontrolled descent occur, push up on the "beak" of the *Bird Assembly* to stop or slow descent.

Use of All Gear 11.5 mm Rocket Line, Cherry Bomb, or Blue Craze rope is recommended. The Rope Runner will accept arborist-grade climbing line 11 - 13 mm in diameter, meeting EN 1891 or NFPA 1983.

Before use at height, practice using the Rope Runner in a safe environment so you are familiar with proper operation of the Rope Runner and are able to recognize factors that could lead to situations such as creep or uncontrolled descent.

WARNING

This device has no panic feature. Stopping requires releasing the device completely.

Do not bend the Rope Runner. Be mindful around limbs, corners, or anything that could expose the Rope Runner to shock or side loading.

"Obviously, a machine can be engineered to have a defined degree of resilience, but once a point of maximum tolerable loading is passed, will suffer irreversible damage and/ or deformation. Once this point of no return is passed, the damage is permanent."

-Mark Bridge, Treemagineers http://www.treemagineers.com/blog/wear-and-tear/

6 Inspection and Additional Info

The quality and condition of your equipment is integral to your safety. Singing Tree Recommends a detailed inspection of the Rope Runner at least once every 12 months.

Before Each Use:

- · Check for any wear, dents, cracks, bends, or damage on the device
- Check that all nuts are secure
- Check the spring action locking mechanisms of both Quadruple Action Slic Pins
- Check the spring action of the Axle Spring
- Check the Axle Spring Retaining Screw
- Check both Friction Bollards
- Check the *Tending Pulley*

During Each Use:

Continually monitor the condition of the Rope Runner and all connections in the system.

Wear and Replacement Parts:

The Rope Runner is subjected to friction through normal use, which can lead to wear. **Dirty and gritty rope can accelerate wearing.** Rope Runner parts are replaceable and are available through Singing Tree Authorized Retailers. **Do not use aftermarket parts from any source other than Singing Tree Authorized Retailers.**

Body Wear

The spine of the *Body* can develop a groove after extended use. If grooving is excessive or shows signs of cracks, bends, or sharp edges, replace the *Body* immediately. **Only use a replacement** *Body* from Singing Tree Authorized Retailers.

Side Plate Wear

Through normal use, the side plates of the Rope Runner (including the side plates of the *Bird,* the *Tether Assembly,* the *Lever Assembly,* and the *Tending Pulley Assembly)* should not show wear. Wear on the side plates is likely caused by misuse and can lead to serious injury or death. The side plates can be replaced with replacement parts from **Singing Tree Authorized Retailers only.**

Bollard Wear

If there is any grooving of the *Friction Bollards,* replace them immediately. **Use only replacement parts from Singing Tree Authorized Retailers.**

9/16" Stainless Steel Nylock Nuts

The 9/16" Stainless Steel Nylock Nut used on the Rope Runner are locking nuts. If any 9/16" Stain less Steel Nylock Nut is removed for any reason, such as part replacement, it should be replaced with a new 9/16" Stainless Steel Nylock Nut. After a 9/16" Stainless Steel Nylock Nut has been installed and removed, its locking power is reduced, and its use could result in serious injury or death. Use only 9/16" Stainless Steel Nylock Locking Nuts from Singing Tree Authorized Retailers.

Replacement and alternative bodies are available from Singing Tree Authorized Retailers.

Retire The Rope Runner If:

- It has endured a major fall or load
- It fails to pass an inspection
- You have any doubt to its reliability or condition
- · You do not know the full history of its use

3 Year Guarantee:

The Rope Runner is guaranteed for 3 years for all material or manufacturing defects. Exclusions include:

- Normal wear and tear
- Oxidation
- Modifications or alterations
- Incorrect usage or storage
- Negligence

Markings:

Confirm that your Rope Runner is an official Singing Tree Rope Runner by looking for the "Singing Tree" and "Rope Runner" markings on the device.

Additional Information:

- · Always have a rescue plan in place in case of any difficulties encountered while climbing
- Climbers must be physically and medically fit for climbing

• When using multiple pieces of equipment together with the Rope Runner, a failure in one piece of equipment can compromise the safety of other equipment

• When using multiple pieces of equipment, instructions and warnings for each piece of equipment must be followed

These instructions cannot address every possible climbing system using the Rope Runner. It is the responsibility of the user to choose the proper climbing system for the situation. It is also the user's responsibility to understand all aspects of the climbing system. Ultimately, responsibility for safety of the climbing system and of the climber falls on the climber.

• The Rope Runner is for expert use only. It is the user's responsibility to climb safely and have the proper instruction.

• It is imperative that the user practice extensively with the Rope Runner in a no-risk situation (i.e. with a safety rope from above) before using the Rope Runner in any situation in which injury may occur.

• Be aware that any at-height activity, including climbing, comes with inherent danger that no tool or instruction can completely negate.

• Installing the device upside down or incorrectly can lead to serious injury or death.

READ ALL INSTRUCTIONS COMPLETELY AND CAREFULLY BEFORE USE.

"This to me rings true: relying not only on technical aids to reduce risk, but rather to learn to recognize it and to define what acceptable levels are and what remedial actions are possible to reduce it, should it prove to be too high."

-Mark Bridge, Treemagineers

http://www.treemagineers.com/blog/out-of-step/

WARNING: Use Appropriate Length of Rope

Leave excessive rope at the working end so the climber can always reach the ground and will not unintentionally come off the rope. Failure to supply sufficient rope can result in serious injuries or death. Always use a stopper knot at the end of the rope to prevent the Rope Runner from coming off the end of the rope.

WARNING: Free Fall Hazard

Failure to properly anchor any rope climbing system will lead to free fall resulting in serious injuries or death.

Tips For Safe Climbing

- Understand the potential forces placed on ascent anchor points, primary suspension points, and tie in points
- · Meticulously inspect anchor points before they are approved
- Ensure good binoculars are easily accessible
- Seek a second opinion, especially when in doubt
- Pull out a line and start again if you are still unsure
- Use a lower/stronger anchor point when uncertain about anchor strength
- Select and ascent system that suits the structure you are climbing
- Carefully consider 'Neighbor Component Compatibility' and 'Correct Component Configuration' when designing ascent systems
- Use ascent systems that can be lowered to facilitate rescues
- Whenever practical, use ascent systems with a parallel backup
 - Mark Bridge / Chris Cowell, Arb News 2009

"Surely when it comes to safety, it cannot be a bad idea to get things right, to be really sure that you have gone the extra mile to ensure that you have worked through at least the most obvious pitfalls that a technique or a tool may present and are using them in the best and safest way possible."

-Mark Bridge, Treemagineers

http://www.treemagineers.com/blog/disinformation-overload/

Reading these instructions alone does not mean you are qualified to climb using a Rope Runner.

There are many ways to misuse this device, and there are many dangers in climbing. It is impossible to list all of these.

If you are not willing and able to assume complete responsibility for your safety, do not use this device.

The Singing Tree Rope Runner is manufactured and distributed by TreeStuff, Inc.

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