UNICENDER™ CLIMBING TOOL OWNER'S MANUAL

Don't even think about using your new UNICENDER climbing tool without reading AND UNDERSTANDING this manual

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INTRODUCTION

This Manual assumes you have a solid understanding, and working knowledge of rope climbing techniques. If you do not have these skills, seek out training from someone who does, before using the UNICENDER climbing tool.
The instructions in this manual are not intended to teach climbing. The purpose of this manual is to explain the proper use and limitations of the UNICENDER climbing tool. Thompson Tree Tools makes no expressed or implied guarantees or warranties concerning the UNICENDER climbing tool.
The UNICENDER climbing tool is patent pending.

Climbing is inherently dangerous. Each climber using the UNICENDER climbing tool is personally responsible for knowing the proper techniques specific to climbing and how to use the UNICENDER climbing tool. Each person assumes all risk and accepts full responsibility for any damages and or injury, including death, resulting from its use. If you are not ready for this responsibility, don't use this tool.

READ THIS MANUAL CARFULLY

This manual has the information you will need to use the UNICENDER climbing tool safely. The UNICENDER climbing tool is not difficult to use, but its use is not obvious just by looking at it.

DESCRIPTION

The UNICENDER is a versatile rope climbing tool that features:

- Ascending and descending with both doubled rope technique (DdRT) and single rope technique (SRT).
- Two modes of descent in both DdRT and SRT:

    1.CONTROL MODE is a squeeze to stop system, similar in practice to descending on an ATC or figure eight. You control your descent by varying your grip on the rope exiting the device. Squeeze to stop, release to go.

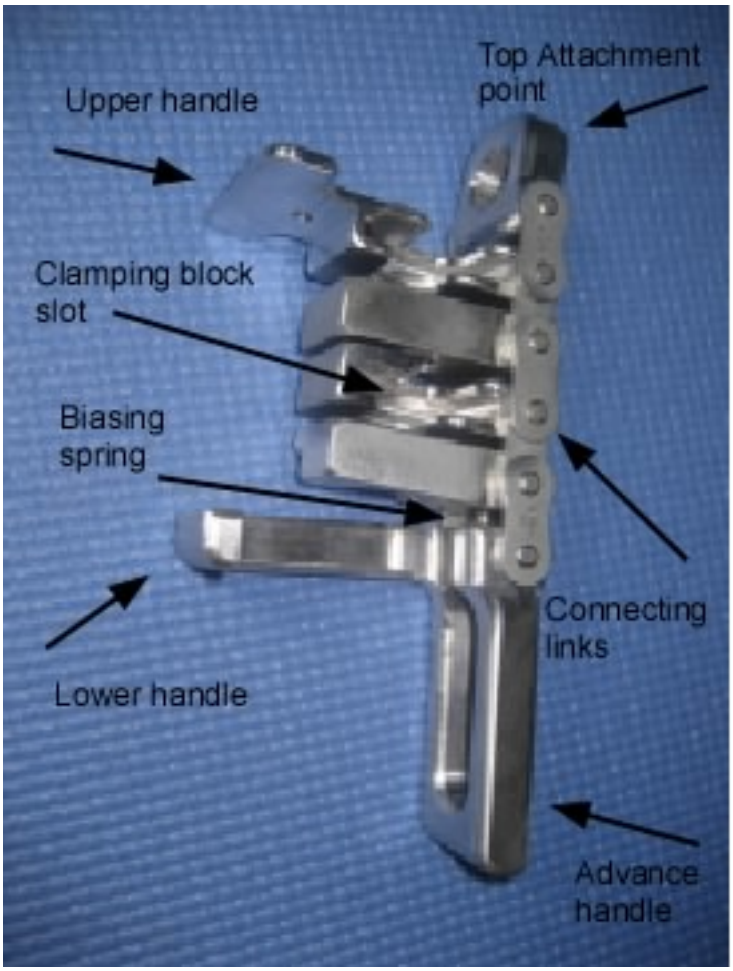
    2. ADVANCED MODE is a squeeze to go system, similar in practice to descending on a friction hitch such as a Blake's or French prusik, you control your descent by squeezing the UNICENDER climbing tools upper

and lower handles together, The extent you squeeze adjusts the UNICENDER climbing tools grip on the rope, this in turn varies the speed of your descent. Squeeze to go, release to stop.

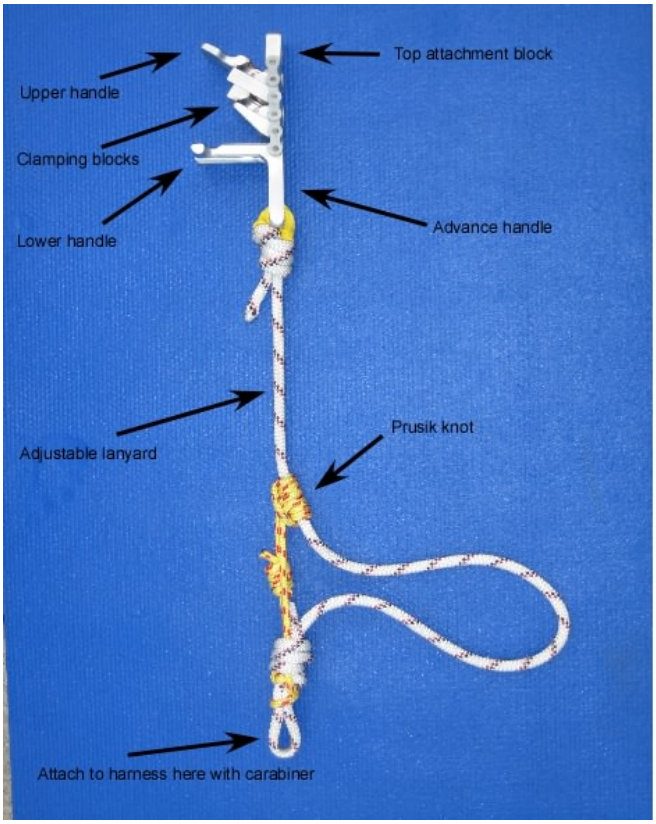
- Auto advance in DdRT: when ascending using doubled rope technique you simply pull the rope exiting the UNICENDER climbing tool and the UNICENDER climbing tool will automatically advance ahead of you.
- Easy attachment midline: the UNICENDER climbing tool takes four deliberate separate actions to securely attach it to the rope midline, yet with some practice it only takes a fraction of the time it takes to tie dress and set a friction hitch.

<u>THINK SAFETY</u>.
Start low and slow when learning how to use your new UNICENDER climbing tool.
Stay close to the ground until you have a sense of how it acts.
The UNICENDER climbing tool is safe if it is used correctly.

First familiarize your self with the components of the UNICENDER climbing tool.



To use your UNICENDER climbing tool you will need a lanyard to connect it to your climbing saddle.



The lanyard in this picture is just an illustration of a simple adjustable lanyard.
The UNICENDER climbing tool does not come with a lanyard

There are a myriad of options when it comes to choosing a lanyard, everything from a fixed length sling to a custom spliced adjustable lanyard.

Consider these points when selecting your lanyard:

- The lanyard is suitably strong (Z133.1 safety standard is 5400lb breaking strength or better)
- Attached securely. Attach your lanyard to the advance handle of the UNICENDER climbing tool with a locking carabineer or suitable knot such as a figure eight.
- Ease of use. Having your lanyard easily adjustable during a climb can be helpful particularly with activities like limbwalking where a short lanyard is required to keep the UNICENDER climbing tool within reach.
- Correct length for the climber using it.

Adjust the length of your lanyard so the UNICENDER climbing tools upper handle is just within reach when you are seated in your saddle.

ATTACHING THE UNICENDER CLIMBING TOOL TO THE ROPE

- Hold the UNICENDER climbing tool vertical and next to the climbing line.
- Hold the top clamping block away from the others enough to expose the slot.
- Slide the rope into the slot.

- Now hold the next clamping block away from the first and third to expose its slot. This slot is on the other side of the block. Bend the rope to allow it to slide into that slot.

- Proceed in this manner inserting the rope into the alternating slots all the way to the last one.

- Then position the rope within the “L” of the bottom handle.

The UNICENDER climbing tool is quadruple locking.
It requires four separate and deliberate actions to attach and detach it to and from the rope.

DETACHING THE UNICENDER CLIMBING TOOL FROM THE ROPE

Follow the attachment process in reverse; starting from the bottom and work your way up, separating the clamping blocks enough to enable you to remove the rope from the clamping block slots. With some practice you can attach and detach the UNICENDER climbing tool from the rope in a matter of seconds.

FIRST CLIMB WITH DOUBLED ROPE TECHNIQUE (DdRT)

The UNICENDER climbing tool is not like any other tool on the market, so don't assume you know how to use it. Start low and slow and get a feel of how the UNICENDER climbing tool works before climbing high. Doubled rope technique uses both sides of a rope over an anchor point. One side is attached to the top of the UNICENDER climbing tool at its end and the other is threaded through the UNICENDER climbing tools clamping blocks . You have made an adjustable rope loop over a secure anchor point, (such as a tree branch). The UNICENDER climbing tool allows you to lengthen and shorten the loop to move you up or down. The best part is the rope slides over the anchor point like a pulley and gives you a two to one advantage while climbing. It also halves all the forces on the clamping blocks which makes the UNICENDER climbing tool easier to control. When first learning how to use your new UNICENDER climbing tool, double rope technique is the place to start.

- With a rope through a secure anchor point, attach the working end (the bitter end) of the rope to the top attachment point of the UNICENDER with a triple locking carabineer or suitable knot such as a figure eight.
- Attach the UNICENDER climbing tool to the standing part of the rope, as described above.

- Attach the UNICENDER climbing tool to your climbing harness with an adjustable lanyard using a suitable triple locking carabiner. Adjust the lanyard so the top handle of the UNICENDER climbing tool is just within reach when you are seated in the harness.
- Now pull on the rope which is exiting the bottom of the UNICENDER climbing tool.
- The UNICENDER CLIMBING TOOL WILL AUTOMATICALLY ADVANCE sliding up the rope and then lock when you stop pulling.

- Pull yourself up off the ground using just your arms (or add a foot lock or a second ascender.) At a couple of feet off the ground, STOP.
- Now for coming down.

FIRST DESCENT WITH DOUBLED ROPE TECHNIQUE (DdRT)

There are two modes of descending with the UNICENDER climbing tool.

-CONTROL MODE
-ADVANCED MODE

We will start with CONTROL MODE because it is the safest.

CONTROL MODE

Take the rope exiting the bottom of the UNICENDER climbing tool and wrap it counter clockwise over the upper handle, notice that the rope runs under the arm of the lower handle. Pull down on the rope, this releases the UNICENDER climbing tools grip on the rope.

The friction of the rope over the handles holds your weight.
Control the speed of your descent by moderating your squeeze on the rope with your hand. To return to ascending, quickly flip the rope off the top handle. CONTROL MODE is safer than advanced mode because it is a squeeze to stop mode.
There is a slight jerk when transitioning from ascending to descending and back again. This is normal and takes some getting used to. Practice CONTROL MODE until you are comfortable with using it.
CONTROL MODE is a squeeze to stop mode.
CONTROL MODE only takes one hand to operate.
Notice : if you weigh under 120 lbs or if there is too much friction at the anchor point, CONTROL MODE may not allow you to descend. In this case use ADVANCED MODE. CONTROL MODE may be more useful later, with single rope technique so don't write it off.

ADVANCED MODE

Reach up with one hand. Grab the upper handle with your fingers.

Squeeze against the lower handle with your palm while holding the rope exiting the bottom of the UNICENDER climbing tool with the other hand down by your hip.

Start by squeezing gently. Slowly squeeze harder until you find the point where the rope stars to slip.
It's like learning to use the clutch in your car: it takes practice to be smooth.

Experiment with moderating your speed by adjusting the extent you squeeze the handles. If you want more control or if there is very little friction in the system, use CONTROL MODE.
Advanced mode is the fastest and most efficient mode but can be jerky until you master feathering the disengagement point.
Advanced mode is a squeeze to go mode. It is more dangerous than CONTROL MODE. Use extreme caution when using this mode.

Practice the descent modes close to the ground until you've mastered them.
Different situations will dictate witch mode you should use. Think conservative if there is any question use a squeeze to stop mode.

SQUEEZE TO GO VS. SQUEEZE TO STOP

It is human nature to grab (squeeze) harder when surprised or panicked. With a squeeze to go mode like ADVANCED MODE this could be disastrous, if you squeeze the handles together in a panic you will come down too fast (also known as falling). For the UNICENDER climbing tool, to stop your descent you must let go of the handles (very Zen). It takes training to overcome the grab instinct. But in the mean time we have the squeeze to stop mode of descent: CONTROL MODE. This mode uses your grab instinct to stop your descent. Safer by design.

An added perk of the control mode is that it extends the useful life of the UNICENDER climbing tools clamping surfaces by concentrating the friction and abrasion on the handles.

We suggest you always use control mode when ever practicable. Sometimes in doubled rope technique, there is enough friction in the system (tree bark, or other rough surface) to make the extra wrap not necessary or practical. *If in doubt, take a wrap.*

CLIMBING AND DESCENDING WITH SINGLE ROPE TECHNIQUE (SRT)

Before climbing with SRT you must know both modes of descent.

ASCENDING WITH SRT

Single rope technique uses a single rope attached to a secure anchor point with a suitable knot, such as a running bowline.

The process for ascending is the same as in DdRT, except there is no rope attached to the top attachment block of the UNICENDER climbing tool. Also there is no 2:1 advantage. This makes for a very challenging but fast and efficient climb.

For this technique, you must use a foot lock or another ascender to take your weight while you manually advance the UNICENDER climbing tool.

With a rope attached to a secure anchor point, attach the UNICENDER climbing tool to the rope as described above.

Attach the UNICENDER climbing tool to your climbing harness with an adjustable lanyard using a suitable triple locking carabiner. Adjust the lanyard so the UNICENDER climbing tools upper handle is just within reach when you are seated in the harness.

Advance the UNICENDER climbing tool by holding the advance handle in one hand. Release your weight from the UNICENDER climbing tool by standing up on a foot lock or second ascender such as the Pantin. Push the UNICENDER climbing tool up the rope until the support lanyard is taut. Now sit and get another grip with your foot lock or ascender.

Climb a couple of feet off the ground and STOP.
Now for coming down.

DESCENDING WITH SRT

Descending with SRT is the same as in DdRT except for the fact that the forces are doubled. And each of the descent modes will act a little different because of it.
Start with CONTROL MODE and get a feel for it.
We don't recommend ADVANCED MODE with SRT unless you are a Zen master.
If you do use ADVANCED MODE with SRT be aware in the release point is different from doubled rope technique. This is because the UNICENDER climbing tools clamping blocks are supporting all your weight, not half your weight as in DdRT.
We recommend using a squeeze to stop mode with SRT.

PRACTICE

Practice, practice, practice.
Climbing is a high stakes activity; you need strong safe gear and a cool head.
The UNICENDER climbing tool is a high-performance tool that requires skill to operate well. The only way to gain skill is to practice.

ROPE SELECTION

For the UNICENDER climbing tool to perform at its best,
use low stretch, hard laid braided ropes.
Such as Samson's 7/16" Velocity
Or New England's ½" Safety blue.

BEFORE CLIMB CHECKS

-Check clamping blocks for cracks or deformation. Discard the tool that has suffered abuse.
-Check that the biasing spring is working properly and pushing the clamping blocks toward their Locked position.
-Check that the connecting links are in good condition and that the clips are in place and they are not deformed. Check that the epoxy safety cap is intact.

CAUTION: POTENTIAL FOR PINCH INJURY AND OR ROPE BURN

Always wear repelling gloves when operating the UNICENDER climbing tool.
When using the UNICENDER climbing tool, restrict hand placement to the advance handle, the
upper handle and lower handle. See picture above.
Avoid placing fingers between the clamping blocks. When load is applied, they squeeze together.

THE UNICENDER CLIMBING TOOLS SPECS

- The UNICENDER climbing tool slips on the rope @ 1200 lbs.
-The UNICENDER climbing tool has a breaking strength of 7,000 pounds,
-The UNICENDER climbing tool clamps the rope in 7 places distributing the load over a larger area than conventional ascenders.
-The UNICENDER climbing tools clamping surfaces are smooth. No teeth to put puffs in your rope.
-The UNICENDER climbing tool clamping blocks are made of heat-dissipating 7075 aluminum.
-The UNICENDER climbing tool has no maximum rope length limitation.

DANGER

Know the limitations of the UNICENDER climbing tool.
The UNICENDER climbing tool is safe if used correctly.
Do not use the UNICENDER climbing tool on icy ropes.
Do not use the UNICENDER climbing tool on twist constructed rope. Use braided ropes only of the correct diameter.
Remember your climbing system is only as strong as its weakest link. Check all equipment before going aloft and know the breaking strengths of each component.
The UNICENDER climbing tool is intended for one user. Do not lend out your UNICENDER climbing tool.
Do not use your UNICENDER climbing tool for any other purpose than climbing, descending and positioning on a rope.

UNICENDER CLIMBING TOOL CARE

Keep your UNICENDER climbing tool dry. If it does get wet, dry it off as soon as possible.
Periodically lightly oil the chain links.
Inspect your UNICENDER climbing tool for damage before every climb. If damaged in any way, retire it immediately. Or send it back to us for repairs.
Do not climb on a damaged UNICENDER climbing tool.
Retire your UNICENDER climbing tool if it is subjected to a hard fall.
Avoid hard impacts such as a drop on hard ground.
If any part is broken or deformed, retire the tool.
If you take your UNICENDER climbing tool apart, you assume all responsibility for future failures of that tool. Instead, send it back to us for repairs and we will do it right.
Only Thompson Tree Tools is authorized to service the UNICENDER climbing tool.