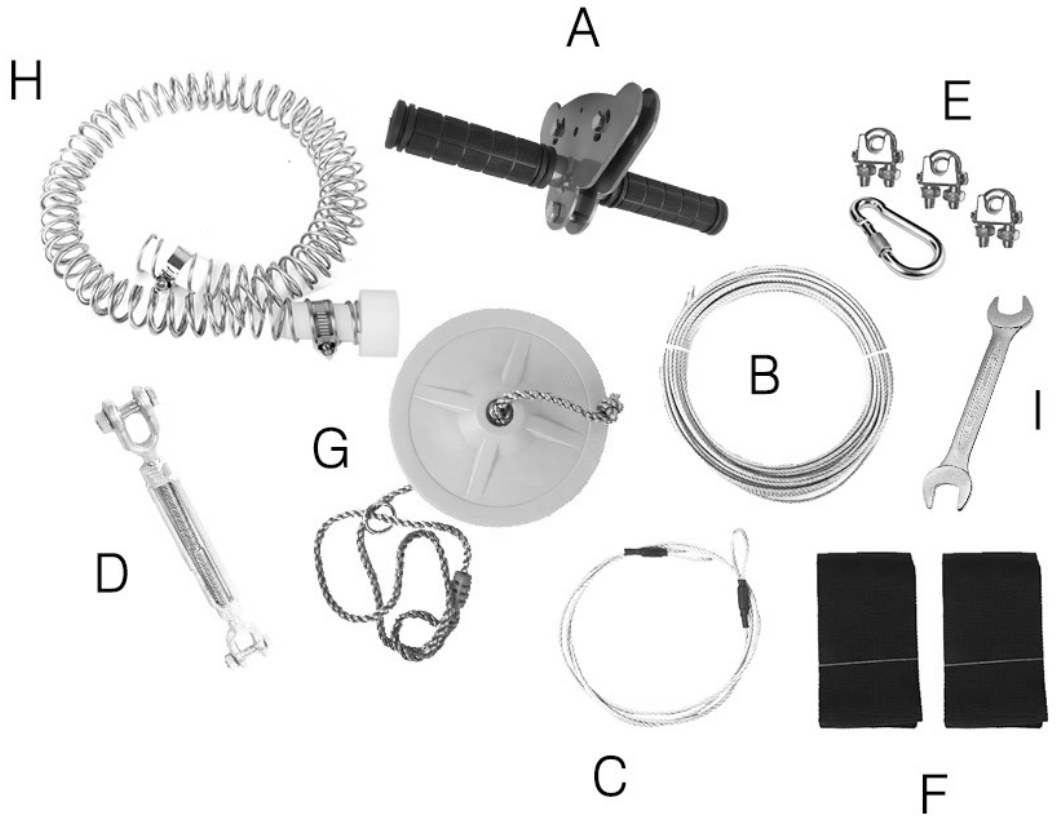
SLACKLINESHOP
NEW ZEALAND

Home Zipline Kit

INSTRUCTIONS

Contents

A. (1) Trolley with sealed ball bearing pulley
B. (1) 5mm 30m main cable
C. (1) 1.5m Sling Cable with looped eye
D. (1) 15cm Turnbuckle with 2 eye bolts and nuts
E. (3) U-Clamps, (1) Seat connection buckle
F. (2) Tree Protection
G. (1) Seat and rope
H. (1) Damping spring device
I. (1) Double-ended spanner
Please note: You will need (6) long nails to help with installation.



Instructions

Activities involving the installation and use of ziplines are inherently hazardous by their nature. Poor installation, poor site selection, or improper use can cause severe injury or death. The buyer and installer of this product assume all risk and accept all responsibility for any damage or injury, including death, that may arise from the use of the zipline.

- The Zipline is intended to be used by a maximum weight of 91kg (200 lbs). The zipline is designed for children to ride a few feet off the ground.Make sure everything is installed correctly. Inspect and test the line before use.
- If worn or damaged parts are found discontinue use and replace components.
- Never use the line when there is thunder or lightning.
- Avoid hands or hair near/inside the cable of the trolley.
- Do not reach up to grab cable while riding.
- The height from the bottom of the seat to the ground should be between 400mm and 1600mm

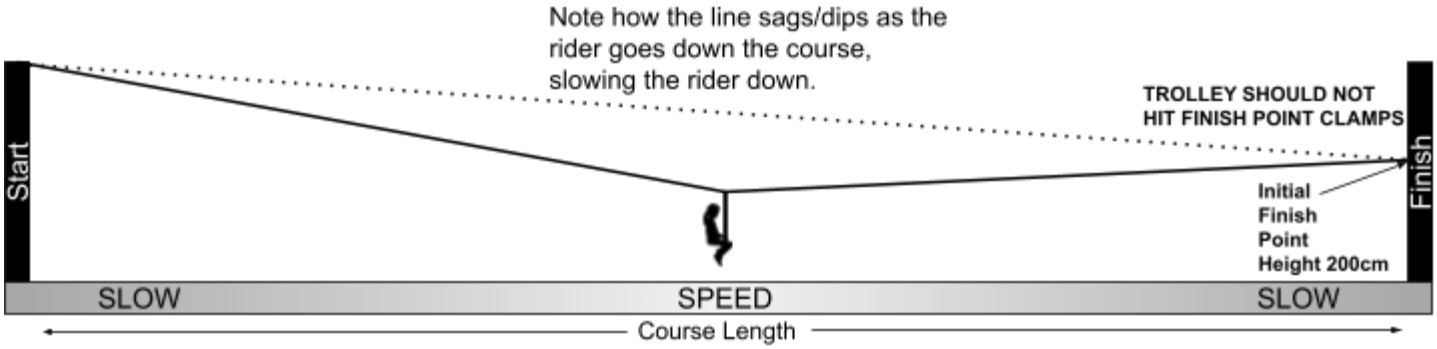
Assembly

- Attach to healthy trees that are at least 97cm in circumference.
- Never attach a tree showing decay, cracks, exposed roots, diseases, excessive lean.
- When using poles or posts for attachment ensure that the side load strength is suitable.
- Ensure there is a minimum of 2m of excess cable over at the finish point.
- Do not set-up the zipline on a steep hill as excessive speeds may occur.
- The setup goal is to have the rider accelerate at first, then at the last third of the course start decelerating and finish the course going slightly uphill at the end, due to dipping or sagging of the zipline as they progress down the course.
- Once the zipline is set-up, weight test the wire 2m from each end by pulling down on the trolley / seat whilst still standing on the ground and then sitting on the seat ideally with an adult weighing 90kg.

Flat or Level Course Attachment Height Guideline

General set-up	Start Point Height for Course (space between trees)								Height to set End Point 2m
Course Length	30m	27m	24m	21m	18m	15m	12m	9m	
Initial Setting (from ground)	3.35m	3.20m	3.05m	2.90m	2.75m	2.60m	2.45m	2.30m	

This table is meant to aid setup showing minimum height. Adjustments for rider height and weight as well as terrain variations should be taken into consideration. At no time should the trolley hit the U-clamps at the finish point when testing. If so, lower the start point attachment height and retest.



Sloping Course Adjustment Attachment Height Guideline

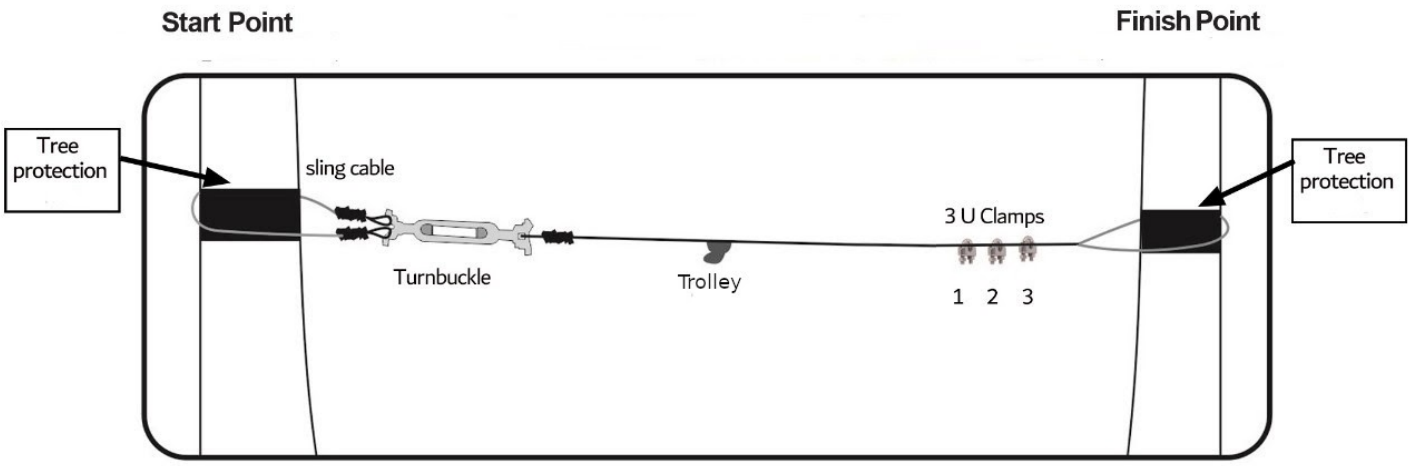
If the course is sloping downhill, you need to measure how much drop in inches at ground level it is from your start point compared to your finish point and then subtract that from your start point height. For example: Your course is 25m and you estimate the ground level drop is 2m, you will need to set your start height at 2.45m (3.05m less 0.6m) See chart for the maximum you can reduce your start point height (never have the start point less than 2m from the ground). Every course is different, examine the course clearance so the rider's feet do not drag near the end of the course.

Course Length	30m	27m	24m	21m	18m	15m	12m	9m
Initial Setup start Height	3.35m	3.20m	3.05m	2.90m	2.75m	2.60m	2.45m	2.30m
Maximum Slope Height Reduction Allowed	1.37m	1.22m	1.00m	0.90m	0.76m	0.60	0.45m	0.30m

Attaching Zipline

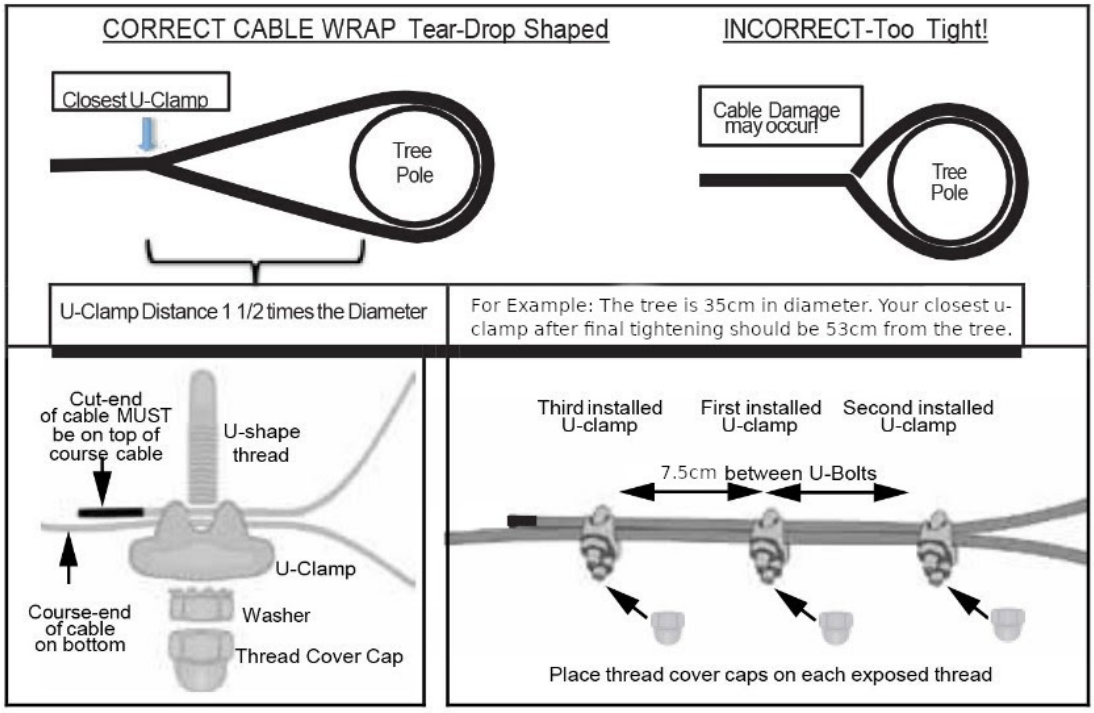
A. Loop sling cable around the start point of the zipline.
Note: If the diameter of the tree at the starting point is too big, you can reverse the set-up so the sling cable is at the finish point. For a longer sling cable:

a. Determine your start point and finish point heights. Use (3) nails (spaced 5cm apart) for each tree to keep the cable from slipping down the tree during installation. Note: Do not put the nails into or through the cable.
b. Fully extend the turnbuckle and attach one tumbuckle end of the sling cable ends with the nut and bolt.
c. Take the looped eye of the main cable and attach it to the other end of the turnbuckle (with the nut and bolt).
d. Unwind the course cable along the zipline course removing and twists.
e. Thread the cable through the trolley, below the two trolley bearings and above the grips shaft.
f. Wrap the un-looped end around your finish point tree (letting the cable rest on the three small nails).



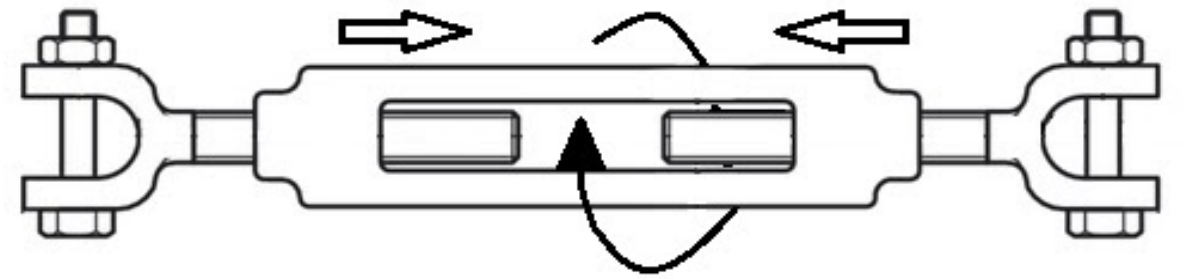
B. U-clamp Installation

a. Pull the wrapped cable as tight as you can with your hands. While holding tight with one hand, attach the first u-clamp and tighten slightly, 5cm from the tree.
b. Repeat the above until you have removed as much slack by hand as possible. Then tighten the first u-clamp. Do not overtighten - over tightening will cause the wire to compress.
c. Please ensure all 3 U Clamps are installed as per directions above



Tightening Zipline

A. Using the turnbuckle to tighten.
   a. Get the line as tight as you can before starting to tighten with the turnbuckle as the amount of adjustment is limited to the turnbuckles length and it pays to leave some length as the system will stretch a little after use. Leaving length will allow you to retighten.
   b. Tune the zipline by tightening the turnbuckle, by twisting the center section of it.
   c. Tighten the line until it 'appears' to be level of straight.
   d. You can remove your (6) nails used to hold the cables in position during installation.



Test the Zipline

When the Zipline set-up is complete and before a rider takes the first ride you should perform two tests

A. Load Stress Test
   Test your installation 1.50m from each end of the cable one of two ways. Note: Look and listen for any issues.
   a. Either suspend maximum 113kg (250lbs) from the rope attached to the trolley <u>OR</u>
   b. Throw a rope over the cable and have a 113kg person lift their weight off the ground.
B. Course Speed Test
   The test weight should never hit the finish point u-clamps. With 113kg (250lbs) weight attached to the trolley, launch the trolley down the course. The test weight should slow down past the midpoint as the sag or dipping in the cable comes to play. It should continue to slow down and come to a gentle stop just short of the first u-clamp, simply adjust the cable tension (loosen the turnbuckle) or if more speed reduction is required, adjust attachment heights: raise finish point or lower start point.

Seat Installation

The fixed swing seat is directly connected to the rope with the carabiner in the kit and fixed to the bottom. Ensure you screw any carabiners closed.

Final Tuning and Turnbuckle Safety Back-up

- After the course speed test, your zipline cable may stretch a little (which is normal) and requires some additional tensioning by using the turnbuckle.
- Check the tightness of all nuts, bolts, clamps, the turnbuckle, and the trolley.
- Extra cable should be coiled up out of the way.
- Check the rope knot on the bottom of the seat and make sure the knot will not pull through the seat.