

Wild Country Zeros

General Information.
PLEASE READ AND UNDERSTAND THIS INFORMATION BEFORE USING THIS PRODUCT. PLEASE RETAIN THIS INFORMATION FOR FUTURE REFERENCE.

Zeros are manufactured using a patented revolutionary new design which integrates the axle and stem termination in one unit. This allows the production of camming devices of extremely small dimensions. Because Zero cams are different it is vitally important that these instructions are read and understood before this equipment is used, please retain this information for future reference.

Under European Union regulations (Directive 89/686/EEC) Climbing & Mountaineering Equipment are classed as Personal Protective Equipment (PPE) and as such we are required to supply the following instructions. Adhere strictly to the following advice and recommendations, if in doubt please contact Wild Country Ltd.

The information in these instructions is not exhaustive and cannot be substituted for comprehensive instruction by trained and competent persons.

This product should only be used by trained and competent persons or the user should be under the supervision of a trained and competent person.

Climbing & mountaineering are hazardous. Even correct selection, maintenance and use of correct equipment cannot eliminate the potential for danger, serious injury or death.

It is the users responsibility at all times to ensure that he or she understands the correct and safe use of any equipment supplied by Wild Country Ltd. uses it only for the purposes for which it is designed and practices all proper safety procedures. The manufacturer or supplier will not accept any responsibility for damage, injury or death resulting from misuse.

Wearing a climbing helmet will help protect your head from injury if you fall. When using belay techniques we recommend the use of appropriate gloves. Foresee & take appropriate action in situations where rescue may be required.

Use.
This product is designed as a Frictional Anchor for climbing and mountaineering purposes for use in normal climatic conditions and in temperatures not exceeding 50°C.

WARNING : Be aware that not all sizes of Zero cams comply with EN12276 and are therefore classed as progression equipment. Progression equipment must only be used for direct aid, this means it must only be subjected to static loads not exceeding the strength as marked on the device. See specification chart for complete details.

This product should be used as instructed. It may be used in conjunction with any appropriate item of PPE covered by the aforementioned directive of suitable specification with due consideration to the limitations of each individual piece of equipment and of the belay system as a whole. No alterations or markings should be made to it.

The safety that this product provides depends upon its strength, the quality of the rock anchorage used and the integrity of the belay point. The strength will be reduced through age and general wear and tear dependant upon the amount of use to which it is put.

The following will cause a further reduction in strength:
a) high impact load (or static load in the case of progression equipment for sizes Z1, Z2) /fall arrest
b) corrosion
c) internal/external abrasion of textile components caused by grit penetration and rock abrasion.
d) cuts in textile components

e) prolonged exposure of textile components to ultra violet radiation
f) placement and/or loading over tight radii
g) sharp edges of rock or equipment

See maintenance and obsolescence for more details.

WARNING :

Be aware that this equipment can be damaged in a fall or, in the case of progression equipment, may deform when weighted with a static load approaching the rated strength and consequently should always be examined for defects before reuse. If this equipment exhibits signs of wear, defect, or deformation or if there is any doubt about its serviceability, replace it. It is recommended that any equipment involved in a serious fall or weighted sufficiently to cause deformation of the axle in the case of progression equipment should be replaced. Where practical a history of use and inspection record should be kept.

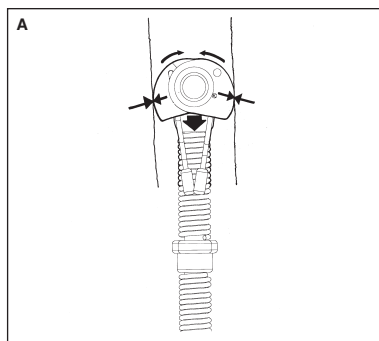
The security provided by this product is totally dependant on the skill off the user. The user should have the experience to assess the following:

- The optimum position for the product in the crack.
- The reliability of the rock.
- The frictional qualities of the rock.
- The expected direction of loading.

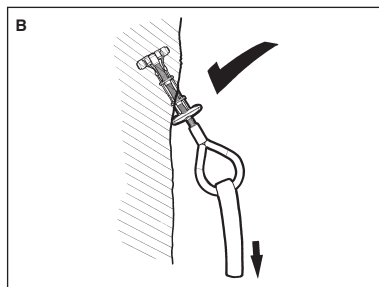
Placing and removing this device.

Warning : Never rely on a single Zero placement to protect you from a fall, even using a series of placements of Zeros will not protect you if the individual pieces are loaded beyond their stated strength.

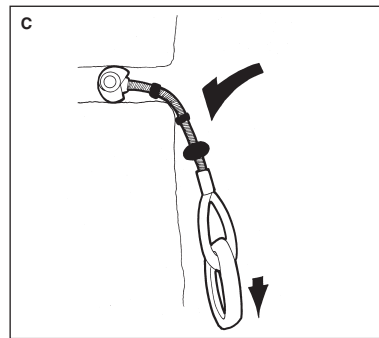
General Placement : It is vitally important that all the cams make contact with the sides of the crack preferably in the middle 1/2 of their expansion range (i.e. the cams should be between 1/4 to 3/4 open). Refer to strength rating in specification chart. You should note particularly that when using Zeros rated as progression equipment their expansion range is very small and therefore the margin of error is equally small. When placing progression equipment inspect the placement carefully to ensure that all four cams are in contact with the crack as stated above paying particular attention to the two rear cams which will be difficult to see. Always ensure the direction of loading is in the plane of rotation of the camming mechanism (see diagram A).



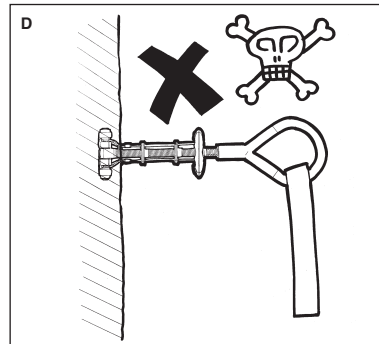
Vertical Cracks : As a general principle in order to obtain the maximum strength from Zeros they should always be placed with the stem in line with the anticipated direction of loading. This will ensure that the force of the fall will be transmitted directly to the cams in their plane of rotation and will avoid adverse torsional forces on the stem (see diagram B).



Horizontal Placement : Zeros may be loaded over an edge as long as the stem makes contact with the edge in its flexible section, however, this may cause damage to the cable the triggers wires and trigger wire guides (see diagram C).



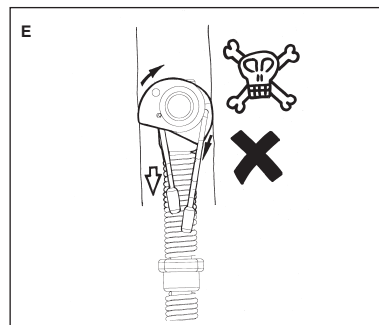
WARNING : The strength of Zeros placed in the vertical shallow ("bottoming") cracks where it is impossible to align the stem in the direction of the anticipated load will be seriously compromised (see diagram D).



In cracks other than vertical or horizontal the user must exercise extreme caution and must be able to assess the direction of loading in the event of a fall. **YOUR LIFE DEPENDS ON CORRECT PLACEMENT.**

Be aware that the climbing rope can cause the product to move. Use an extension sling of suitable length to minimise this if the dedicated sling is not long enough. You should note that the dedicated double loop sling is made from 10 mm Dyneema which was developed exclusively for Wild Country, the sling strength when 3 sigma tested as a single loop sling is 12kN.

Never place this product with mis-aligned cams as it will not hold a fall (see diagram E).



Caution : When removing Zero take care to avoid exerting excessive force on the trigger mechanism, due to the miniaturisation of the components (particularly with Zero rated as progression equipment) the trigger mechanisms are rated at only 45 kgs. Ensure the cams are fully retracted before removing the cam from the crack, **do not use the trigger to pull a jammed Zero from a crack.**

Temperature.

Always keep products made wholly or partially from textile elements below 50°C as the performance of the nylon from which they are made may be affected at temperatures above this. Tests down to -40°C show no permanent change in the performance of this material although nylon may stiffen while at temperatures below 0°C.

Sea Water.

It is essential that this equipment is cleaned as soon as is practical after exposure to sea water or any saline environment (e.g. when used on sea cliffs).

Chemicals & Corrosive Reagents.

Avoid all contact with chemical reagents as they will affect the performance of this product (e.g. vehicle battery acid, bleach etc.). Discard this product immediately if contact has or is suspected to have occurred (the product may be permanently weakened without showing any signs).

Maintenance.

This product is not user maintainable with the exception of cleaning and lubrication (where relevant).

Inspect your cams for the following, they may require cleaning and lubrication as detailed below:

Ensure that the unit operates smoothly throughout its complete range of movement. Ensure that when the trigger is released from any position the cams instantly return to their fully expanded position.

Note : The tolerance between cams and axle on Zero has been designed to minimise seizure due to the ingress of dust and grit. Therefore you must expect more movement on the axle of Zero cams than you would normally expect from Wild Country Friends. This is designed in and is not a fault.

Also check for the following:

Metal Components : corrosion, burrs, cracks, distortion, broken or frayed cables, excessive wear, deformed stem or axle.

Flexible Stems : particularly check that the stem is straight and not suffering from deformation, abrasion or broken filaments of wire. Also pay particular attention to, and inspect more frequently, those items classified as progression equipment (Zeros sizes Z1 and Z2).

Textile Slings : check for broken stitches, cut or worn threads.

In addition to the normal inspection required before use this product should be thoroughly examined at least once every three months by a competent person. If any defects are found as detailed above or are suspected this product should be withdrawn from use immediately.

Servicing.

The camming mechanism must be lubricated periodically and after any cleaning, disinfection and drying process. This will ensure smooth operation and resistance to corrosion. A paraffin based lubricant should be sprayed between the cams and directed at the axle and springs. Operate the Cams several times to ensure even penetration of the lubricant. Allow to drain and then wipe off any surplus lubricant. Avoid contamination of the Dyneema sling with the lubricant. If this occurs refer to cleaning.

Cleaning.

First rinse the product in clean cold water of domestic supply quality. If still soiled rinse in warm water (maximum temperature 40°C) with pure soap. Thoroughly rinse and dry naturally in a warm ventilated room away from direct heat.

Disinfection.

A suitable disinfectant is one which contains quaternary ammonium compounds reinforced with chlorhexidine in sufficient quantities to be effective. Soak the product for one hour at dilutions recommended for general use using water of domestic supply quality not exceeding 20°C, then rinse thoroughly with cold water.

Dry naturally in a warm ventilated room away from direct heat.

Storage.

After any necessary cleaning store unpacked in a cool, dark, dry, ventilated place away from sharp edges, pressure, corrosives or any possible causes of damage. Wet equipment should first be allowed to dry as detailed above.

Obsolescence.

This product will deteriorate over time in the course of normal use and because of this we are required by directive 89/686/EEC to give an obsolescence date. It is difficult to be precise but a conservative estimate for this product is that it has a lifespan of 5 years from date of first use for metal components or 5 years from date of first use or 5 years from date of first storage for textile components, however, please note that the following factors will further reduce the safe working life:

Metal Components : normal use, exposure to chemical reagents, heat contamination, high impact load or failure to maintain (clean/lubricate) as recommended. See above (use)

Textile Components : most textile materials used in safety equipment are known to degrade gradually with time even when stored in ideal conditions. Additionally normal use, rope burn, exposure to chemical reagents, exposure to elevated temperatures, high impact load, prolonged exposure to UV light, including sunlight, abrasion, cuts or failure to maintain (clean) as recommended will cause further reductions in strength. See above (use).

On textile elements (where fitted) check stitching for broken, cut, pulled or worn threads and inspect buckles (where fitted) for cracks, distortion, burrs or corrosion.

WARNING :

The safe working life of Zeros may be as little as one use in extreme circumstances. You should note that for Zero cams classed as progression equipment the axle is designed to bend as it approaches its rated strength, this is for your safety. If on inspection of your Zero cam the axle is distorted or bent it should be withdrawn from use immediately.

Transportation.

Care should be taken to protect this product against risks such as those detailed under obsolescence. It is recommended that a rucksack or other suitable bag or container is used during transport.

Markings.

The CE mark must be affixed to all Personal Protective Equipment (PPE) used for climbing and mountaineering in accordance with European Union Directive 89/686/EEC. The CE mark has been affixed to this product following type examination and testing by an accredited notified body to the relevant European Standard. The notified body for Wild Country products is :

SGS (UK) Ltd.,
(notified body No. 0120),
202b Worle Parkway,
Weston Super Mare,
BS22 6WA, UK.

In addition to the information accompanying this product the following information is marked on it:

Rated Strength : Minimum breaking strengths in kilonewtons (kN) at 1/2 expansion (refer to specification chart).

Size : Refer to specification charts for available sizes, expansion ranges & colour codes.

Expansion range in millimetres.

0120CE : Notified body number and CE mark

Wild Country Ltd. : Name of manufacturer/supplier.

Made in Britain : Country of origin.

Three digit code : Traceable batch/date code including year of manufacture.

Rated Strengths : In addition the rated strength(s) are marked in accordance with the applicable reference standard as required.

Specification Tables.

Zeros. Size	Expansion Range (mm / inch)	Nominal Weight (g)	Minimum Strength (kN)	Cam Stop Strength (kN)	Sling Colour Code
Z1	5.5 - 7.8 / 0.22 - 0.31	25	3	3	Purple
Z2	7.0 - 9.8 / 0.28 - 0.39	32	4	4	Green
Z3	8.5 - 12.2 / 0.33 - 0.48	44	6	6	Silver
Z4	10.3 - 16.0 / 0.41 - 0.63	50	6	6	Gold
Z5	13.0 - 19.0 / 0.51 - 0.75	66	9	9	Blue
Z6	17.0 - 24.0 / 0.67 - 0.94	70	9	9	Red

NB : All weights include dedicated colour coded sling.

NB : Z1 & Z2 are classed as progression equipment (static loads only). Z3, Z4, Z5, Z6 are CE approved and conform with EN12276.



CERTIFICATE NO
93/2678
96/7545

0120 CE

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F328B/QA/3/Oct. 2006.

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