Instructions for use

Continuous safety system for climbing parks SAFE-link self-securing system

Typ SSB 01

Technical changes are subject to change
Proper use
The SSB safety system is exclusively for securing instructed persons, in combination with a safety harness according to EN 361 or a climbing harness according to EN 12277, against falling when using a climbing course in a commercially operated and supervised adventure park or an educational high-rope course. Use of the equipment is always in combination with suitable attachment points: a horizontal or slightly angled taut textile rope or wire. This rope and the fixings must be correctly and carefully planned and designed by a qualified person. There is a danger of death if the strength of the rope and fixings is not sufficient. Components (ropes, attachment rings etc) that are clearly defined as reliable attachment points must be equipped with a mechanical identification point „TWEEZLE“. The continuous SSB safety system allows the SSB hooks to be suspended from these points without the safety devices being able, or having to be disconnected.

Any other use is improper. BORNACK will not be liable for any resulting damage. The user bears the risk.

Features
• SSB safety karabiner hooks (2 x), forged from a high-strength patented aluminium special alloy with...
• Self-locking snapper with key-lock
• Abrasion protection against premature wear and tear
• Self-locking safety lock plate
• Insert pin for cow-tail connector
• SSB safety mechanism, high quality stainless steel CNC turned parts, exchangeable components in each SSB karabiner hook consisting of...
• SSB sleeves
• Control pistons
• SSB sleeve head with shaping template (to differentiate various courses)
• Safety pin to block the locking plate against unauthorised unlocking of the snapper
• Insert and fixing for the Bowden cable
• Bowden cable as a control element between the two SSB hooks
• SSB (cow-tail) Y connectors consisting of...
• Strong Dyneema 15.0mm harness with sewn end connectors (loops)
• Rigging plate made of forged aluminium with sewn cow-tails and attachment loops for safety harness connecting elements. Additional attachment loops for rescue operations
• Textile protective tube as abrasion protection and to take the Dyneema harness and Bowden cable
• Optional: connector strap made of 30mm band to fix into the anchor knot in the rigging loop and then in the attachment loop of the safety harness

Accessories
TWEEZLE identification point
• TWEEZLE for clamping onto horizontal 10 / 12 mm safety ropes
• TWEEZLE-8 for climbing/abseiling safety devices

Application
• Securing persons when climbing a climbing course

Approval
• Conformity with EC directive 89/686/EEC
• Product certification according to EN354 „connectors“ and EN362 „karabiner hooks“
• Prototype testing and production monitoring through TÜV, Product Service; Ridlerstr. 65, D-80339 Munich CE0123
Quality inspection

• Quality assurance by the manufacturer
  Production monitoring through the notified authority (cat. III)
• Quality assurance system of the manufacturer

Compulsory inspection before each use!

If any slight defects are established during the inspection of the device before it is used, this device may no longer be used. A device that is defective in any way may only be tested and/or repaired in an authorised BORNACK workshop.

Visual inspection:
• Check whether the SSB safety system is complete and in perfect condition: SSB hooks, SSB mechanism, SSB cow-tail etc.
• Metal parts are not deformed, split, corroded or worn; especially due to abrasion to the ropes
• All screw and rivet connections are tight: rivet heads are not worn
• All textile parts (apart from protective tubing) are not damaged (cut, worn etc) and the seams are fully intact and not damaged
• The locking plate is not deformed and stops (blocks) the snapper being opened
• The SSB system is safe and correctly fixed to the safety harness

Functional test:
• All moving SSB parts are free
• The self-locking function when releasing the snapper works
• The locking plate prevents the snapper from being unintentionally opened
• When inserting the SSB hook into the TWEEZLE identification point, the Bowden cable unlocks the second hook (and vice versa). The hook locks.
• Both hooks may never be unlocked at the same time!
Application

Preparation

- Read the operating manual or follow personal instructions provided by a supervisor
- Familiarise yourself with the mechanisms to lock and unlock the SSB hooks

“Before use” inspection: the mechanisms are each released with the Bowden cable. Ensure the system is approved by a responsible supervisor! In case of any doubt; do not use the SSB systems and/or ropes!

An overview of the SSB

- TWEEZEL
- SSB 01 hook
- SSB 01 Cowtail
- Attachment loop for connector
- x³-blade with attachment loop for rescue

Knotting the connecting element to the anchor

1) Select the right length of connecting element depending on the body size. Keep slack ropes to a minimum.
2) Slide the band loop through the attachment loop on the SSB
3) Slide the other end of the band loop through the loop that has been created and pull it tight

- Protective plate
- Snapper
- Locking plate
- Mechanism
- Support bolts

- Now repeat steps 1) and 2) on the harness loop
Using the SSB safety system

• Brief check
  • SSB lock works (only one hook can be opened at a time!)
  • SSB safety system is safely secured to the harness
• Opening the SSB hook
  • Take the SSB hook in your hand so that the locking plate lies in the palm of your hand and the hook snapper can be operated with your index finger
  • Press the closing plate with the ball of your hand - the hook snapper is released
  • Press the hook snapper back with your finger
    - hook is open
  • Place the open hook on the rope or remove it
• Locking the SSB hook using the TWEEZLE
  • Slide the SSB hook placed on the rope above the TWEEZLE
  • Insert the SSB hook in the TWEEZLE centring point
  • Firmly press the SSB hook into the centring point and pull it back out - the SSB mechanism operates the Bowden cable
    = the SSB hook automatically locks and can no longer be removed from the rope
    = the other SSB hook is released and can be repositioned

In order to use the SSB system, the whole course must be equipped with Tweezle identification points at all transfer points.

CAUTION
• At least 1 SSB hook must be locked in at all times
• Do not twist or cross the SSB cow tails
• Regularly undo any twists + crossovers
Safety provisions

• There is a risk of fatal injuries if the safety provisions are not observed.
• The safety system and devices should no longer be used, even in the case of slight damage.
• The high-rope course on which the SSB system is used must correspond with EN 15567-1.
• The operability of the SSB system must be guaranteed for the authorised body size on the high-rope course.
• Users must be taught how the SSB system works before use.
• The high-rope course operators must ensure that the fall stress imposed on the participants and for the structure according to EN15567-1 always remains under 6kN. The use of shock absorbers may be necessary.
• After a fall, the SSB system must be tested and taken out of use if required.
• Note a description of the attachment on the harness.
• Users must inform the operating staff and wait for instructions if they identify any damages/functional faults.
• Damaged PSA or PSA and/or safety equipment that have been subject to a fall or are of dubious condition should be taken out of service immediately. The equipment should then be inspected by an expert or the manufacturer.
• Autonomous modifications or repairs are prohibited.
• The protective equipment and safety devices may only be used by trained persons who are familiar with the material and know how to use the equipment safely, and have also been informed of the associated risks.
• The equipment may only be used under supervision on the high-rope course and not before the respective instructions have been given.
• Accessories from other manufacturers may only be used if approved by BORNACK; they may not impair the function or safety of the protective equipment.
• Clothing and shoes should be suitable for climbing in all weather conditions.
• The harness should be set to the personal body size (including appropriate clothing).
• Only use when completely healthy.
• The SSB safety system can only be used with attachment equipment (rope or attachment point). This attachment equipment must be suitable with respect to the load capacity and arrangement (high rope course).
• In catching systems it is imperative for safety that, every time before the system is used, steps are taken to check that the required free space below the user has been adequately calculated so that in the case of a fall, the person does not hit a protruding obstacle or the ground.
• Possible falling path when all required PSA components are used properly: length of connector (cow tail) + rope deflection (under strain) + braking path energy absorber (max. 175 cm) + body height + safety reserve 1 m = possible falling path.
• Protect the safety ropes, harnesses and accessories against the effects of heat (e.g. welding flames or sparks) and chemicals (acids, lyes, oils, etc.) and mechanical effects (sharp edges etc).
• Directives BGR 198, 199 of the Employers Liability Insurance as well as the local safety regulations and the relevant industry-specific accident prevention regulations need to be observed.
• Trees as supports are „moving supports” and can lead to premature wear around the area of the rope guides and may exert an extreme strain on the rope through the end rope points. Special checks are required after stormy conditions etc.
• An emergency plan (rescue plan) needs to be drawn up by the responsible person, stating how a person who has fallen can be safely and quickly rescued from the hanging situation and first aid administered. Rescue actions like this need to be performed within 10 to 30 minutes. BORNACK can assist you here by drawing up tailored rescue plans and incorporating your rescue plan into the training courses.
• In order to rescue a person, the authorised and instructed rescuer requires a rescue TWEEZEL.
Safety provisions

Storage
- Dry the wet PSA before putting it into storage.
- Store in a dry, dark place.
- Do not store the textile components and harnesses close to radiators or heat sources.
- Do not allow the safety equipment to come into contact with aggressive substances (oils, greases, acids, chemicals, etc.)
- Store safely and transport in a carry case or bag

Maintenance and care
- Regularly clean and oil the moving parts of the hook with WD40.
- Dry the wet PSA in the air and not on artificial heat sources. Rub metal components dry with a cloth.
- Carefully brush soiled textile components or clean with lukewarm water and a little mild detergent. Then rinse thoroughly. Other detergents are prohibited and can destroy the material!
- Protective equipment that is looked after will retain its function for longer!

Repair
- For liability reasons, repairs may only be performed by the manufacturer.
- Only original parts from the manufacturer may be used.

Inspection
- Perform a visual and functional test before each use.
- Textile components such as connectors may only be used for a maximum period of 10 years from the production date (refer to label for year of manufacture)
- Warning: PSA and safety systems in climbing parks are used very frequently. Heavier wear and tear should be expected. The test cycles should be aligned to suit this!
- Regularly get the attachment devices, harness and connecting elements (at least once per year) to be tested by an expert and allow the test result to be entered in the inspection card.

Identification
This rope protection equipment identification plate contains the following information:
- Manufacturer with contact address
- Type designation of the device
- Series no. (FA.No. or Batch-No.)
- SN if necessary, unique numbering
- Production date
- EN standard with year
- CE-symbol
- Pictogram “read instructions of use“
- If necessary, the date of the next due inspection
Information

If the goods are sold in other foreign countries, the dealer must ensure that the instructions of use are supplied in the respective national language. The respective translation needs to be authorised by BORNACK.

If you have any further questions relating to the safe use of this rope protection equipment or further services by BORNACK, such as

- Hazard analyses
- Emergency plans
- Training courses
- Inspections by experts

please contact the following e-mail hotline with your enquiry:

hotline@bornack.de

We will be happy to help you!