

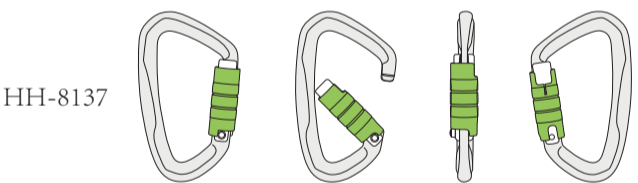
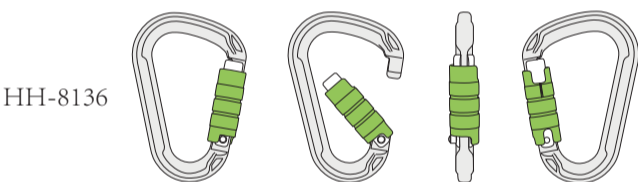
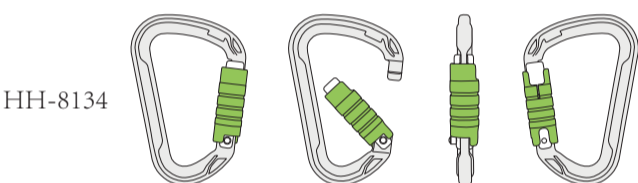
D型主锁
carabiner

Safety precautions

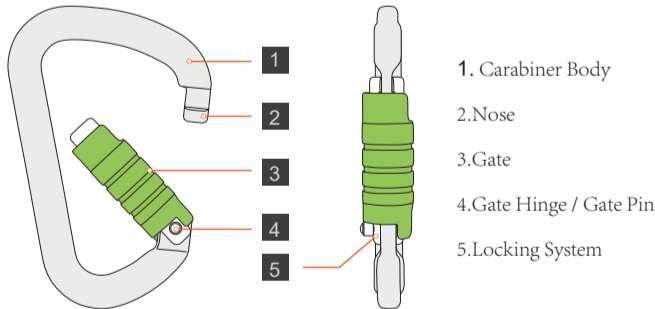
This manual explains how to use the equipment and only appropriate techniques and uses are described. Warning signs tell the potential risks but they don't cover everything. Please read every each warning carefully and use your equipment properly. Any misuse might lead to danger. If you are in doubt, please contact XINDA.

	Risk of severe injury or death
	Risk of accident or harm
OK!	Appropriate way of use
	Incorrect way of use

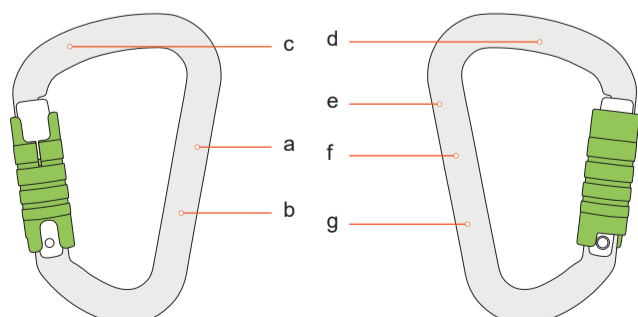
Classification



Nomenclature

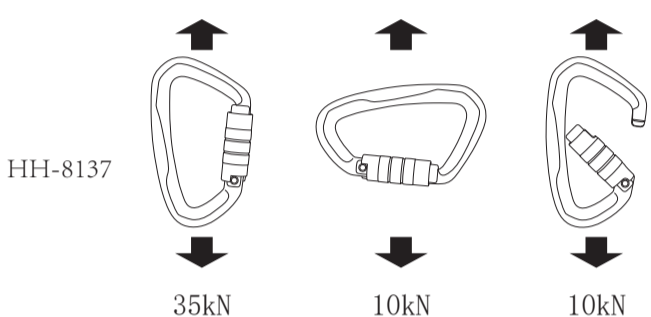
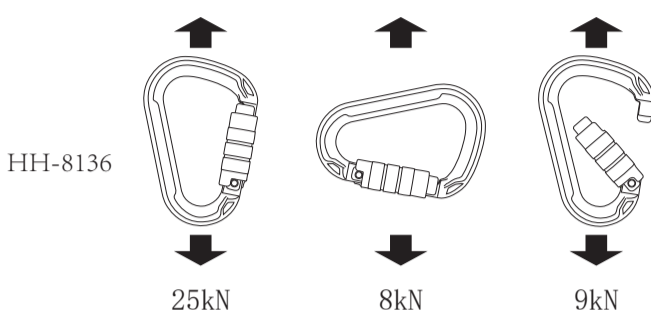
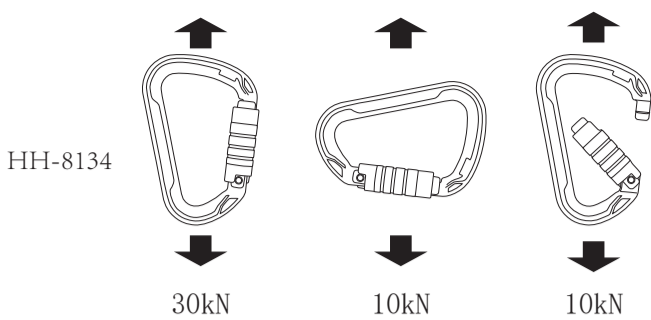


Marking

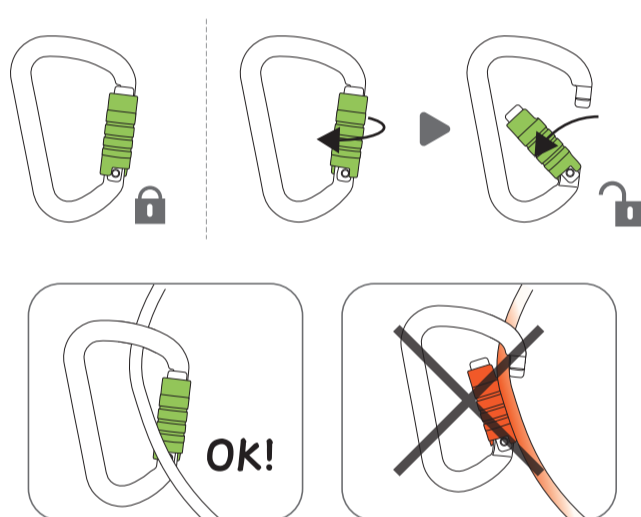


- a: Manufacturer's name or Brand name;
- b: Product Model;
- c: Date of Manufacture;
- d: Unique Product Code;
- e: Read Instructions Logo (Reminder to read the manual before use);
- f: Breaking Strength;
- g: Applicable Standard.

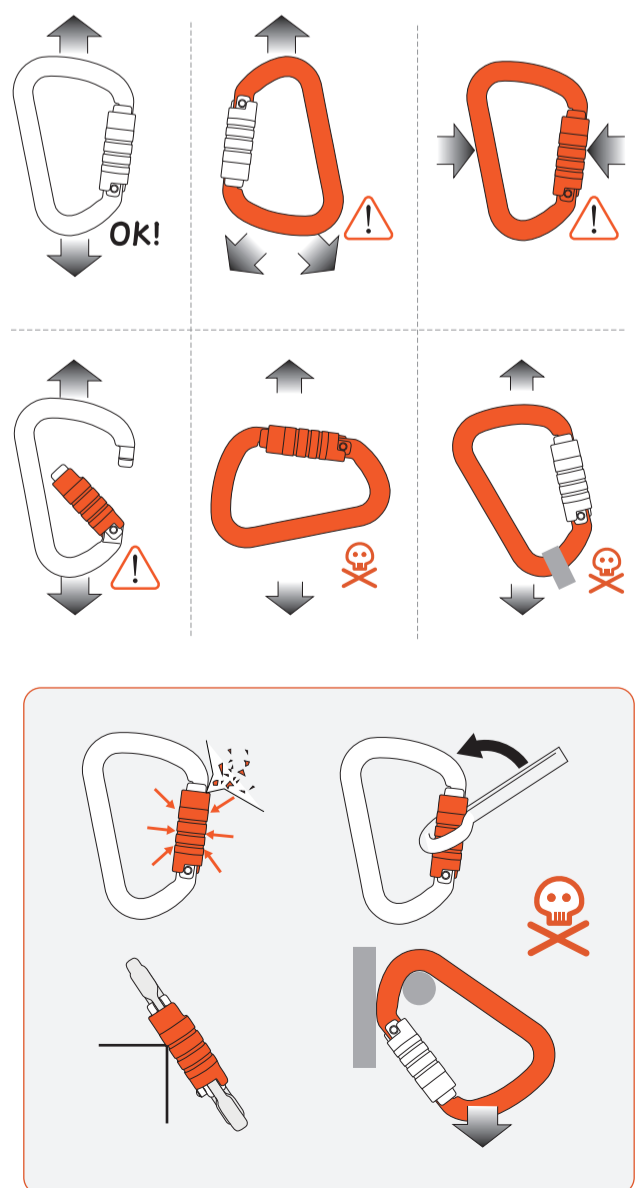
Breaking force



Instaling



Attention



Application

The carabiner is a connecting device used in climbing, caving, river tracing, rope work, and rescue to connect components and systems. It belongs to personal protective equipment for fall prevention.

Warning: Carabiners cannot be used for large-mass industrial lifting purposes! The product meets part of the requirements of personal protective equipment regulations in China's fire rescue industry standards.

Operating environment temperature: -20°C to 50°C.

Responsibility

Warning

Activities involving the use of this equipment are inherently dangerous.

You are responsible for your own actions, decisions and safety.

Before using this equipment, you must:

- Read and understand all Instructions for Use.
- Get specific training in its proper use.
- Become acquainted with its capabilities and limitations.
- Understand and accept the risks involved.

Failure to heed any of these warnings may result in severe injury or death.

This product must only be used by competent and responsible persons, or those placed under the direct and visual control of a competent and responsible person.

You are responsible for your actions, your decisions and your safety and you assume the consequences of same. If you are not able, or not in a position to assume this responsibility, or if you do not fully understand the instructions for Use, do not use this equipment.

Safety check

Your safety depends upon the integrity of your equipment.

It is recommended a detailed inspection at least once every 12 months.

Before each use :

- Check that the gate can rotate normally without obstruction;
- Check that the gate spring works properly;
- Check that the body, gate, and nose have no excessive wear, no deformation, cracks, or signs of corrosion;
- Check that there are no foreign objects inside the hinge and that the gate can close properly;
- Check that the locking system works normally.
- Note: Dust, sand and other impurities in the environment may affect the locking system of the gate, possibly causing the gate not to close.

Note: Once the coating on the surface of the carabiner is worn, oxidation and corrosion of the carabiner will accelerate.

During each use:

- Check whether the carabiner is correctly clipped to other equipment;
- Check whether the gate closes properly, and that no other object interferes with the gate and the locking system;
- Check whether the carabiner is loaded on the major axis. Do not allow complex loading situations between the carabiner and other equipment, such as lever loading, squeezing, or lateral loading.

Warning: Any foreign object or vibration may cause the locking system of the gate to open; impacts and vibrations may cause the gate to open.

Main Material: Aluminum alloy.

Carabiner Strength

The carabiner is marked with the Minimum Breaking Strength (MBS). When the pulling force approaches or reaches this load, plastic deformation or fracture will occur, which also means that the carabiner can no longer be used.

Note: In standard tests, the carabiner bears the load at two steel rods with diameters of 10mm or 12mm. When the carabiner bears a wider contact area or point, the breaking load will decrease, such as wide webbing or flat surfaces. It is recommended that the Working Load Limit (WLL) of the carabiner be about one-fifth to one-tenth of the main axis MBS, depending on the rope you are using.

Open/Close

All carabiners are two-step auto-lock.

Two-step auto-lock gate: the sleeve can close automatically; to open, the sleeve must be rotated and then the gate opened.

Other Safety Information

The user's physical condition must be suitable for work at height. Unconscious suspension at height can cause serious injury or even death in a short time.

In climbing environments, the pulley effect on the carabiner should be considered. Any fall impact force F will bring a load of 1.7 times F to the top anchor point.

In industrial working environments, the minimum breaking strength of a single anchor point must reach at least 12kN or meet the EN795 standard.

During operation, the anchor point must always be higher than the user's position.

In a fall arrest system, the length of the lanyard must take into account the length of the carabiner. Pay attention to leave enough clearance distance to prevent the user from colliding with the ground or obstacles during a fall.

In a safety system, the strength of the system is determined by the weakest part of the system. Prevent ropes or other textile equipment from contacting sharp edges or rough surfaces.

Carry out risk assessment of the work environment before operation and take corresponding safety measures. Do not work alone; an emergency plan must be prepared before work to ensure rapid rescue in case of an accident.

Service Life, Periodic Inspection and Retirement of Equipment

Metal equipment stored in good environments has no storage time limit. If the metal product has other plastic components, the storage life of these plastic parts is 10 years, and the storage life of rubber parts is 3 years.

Due to improper operation, accidents, or compatibility issues between components, the product may be damaged after the first use.

The actual service life of the product depends on the environment of use, frequency, and severity of conditions (such as marine environments, extreme temperatures, sandy environments, etc.).

Whether the product has reached its service life limit depends on inspection of the equipment. In addition to inspections before, during, and after each use, PPE equipment must undergo a comprehensive inspection at least every 12 months. If used frequently, inspection frequency should be increased. The inspection results must be recorded in the equipment inspection form.

Warning: Long-term exposure to ultraviolet rays will reduce the strength of textile equipment such as webbing, stitching, and ropes.

Inspection must be carried out by manufacturer-authorized personnel or personnel qualified in PPE inspection.

Comprehensive inspection of carabiners includes:

Check whether the metal material is corroded, melted, cracked, excessively worn (body wear not exceeding 1mm), deformed, or contaminated;

Check whether the gate works properly and can rotate freely;

When markings on the carabiner are worn off and cannot be identified.

If any negative condition appears, such as deformation or hinge not rotating freely, the equipment must be maintained, scrapped, or sent to the manufacturer for further inspection.

Comprehensive inspection of webbing includes:

Check whether the webbing material and stitching have cuts, breaks, excessive wear, fraying, burns, discoloration, loose stitching, pulled-out threads, or chemical contamination; Pay attention to hidden areas of the webbing, such as the inner side of webbing loops where it contacts the carabiner.

If any negative condition appears, such as breakage, discoloration, or corrosion, the equipment must be maintained, scrapped, or sent to the manufacturer for further inspection.

You must retire your product when:

- The usage history of the equipment is unknown;
- If you have doubts about the performance, strength, or safety of the product;
- If the product cannot pass PPE inspection;
- If the product has functional problems;
- When the product cannot meet updated regulations or standards;
- After the product has borne a major load or suffered a serious fall.

How to retire your equipment:

Mark the product with an indelible mark or destroy it so it cannot be used again, such as drilling holes or cutting; or return it to the manufacturer for disposal. It is recommended that use and storage of the product always be managed by designated personnel.

• Maintenance: Proper maintenance and storage can extend the service life of the equipment and also ensure user safety.

• Wear treatment: If the carabiner surface has contacted hard sharp metal (such as hangers) or has been lightly worn, resulting in scratches or rough surfaces, sandpaper can be used to polish the surface smooth.

• Note: The wear or scratch depth of the carabiner surface must not exceed 1mm!

• Cleaning: Use clean water (20°C) and a soft brush to clean the surface or moving parts of the carabiner or webbing. Do not use high-pressure water to clean the equipment, and do not use any industrial cleaning agents. After cleaning, rinse with clean water and allow it to air dry naturally. Do not use heat sources to dry. After long-term use, the lubrication of the hinge of the gate will decrease; lubricating oil or grease can be applied to the hinge part.

Warning: Any unauthorized modification, part replacement, or repair of the product is prohibited. Repairs can only be carried out in the XINDA factory.

3-year guarantee

XINDA provides a 3-year warranty against any material or manufacturing defects. Exclusions: normal wear and tear, deformation, oxidation, modifications or alterations, misuses, incorrect storage, poor maintenance, uses for which this product is not designed.