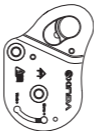




FALL ARRESTER

Manual

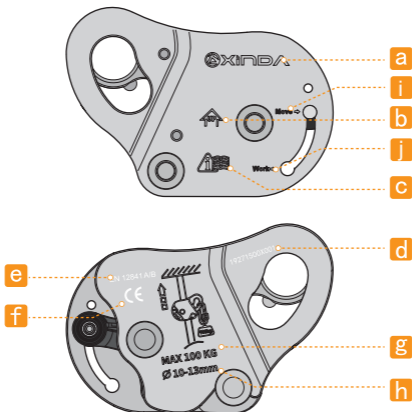


WARNING :

- Activities involving the use of this equipment are inherently dangerous and can lead to severe injury or even death. You must be responsible for your actions and decisions.
- Read and understand the instructions before use.
- Before using this product, it is essential to have got adequate training, understood and mastered the basics and techniques.
- This product must not be used beyond its limits, nor be used for any purpose other than for which it is designed.



Marking



a: The name of the manufacturer or the brand

b: Direction

c: Logo

to remind the user to read the instructions

d: Tracking code

e: Used standards

f: CE certification marking

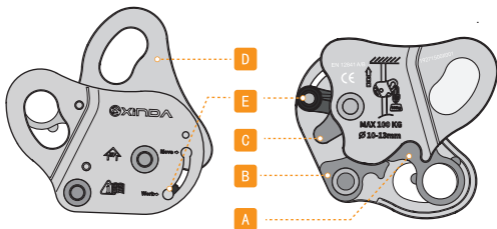
g: Work load limit

h: Diameter of the compatible rope

i: free mode

j: lock mode

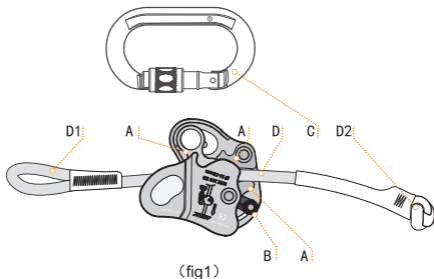
Nomenclature



A: safety catch
C: stop pin

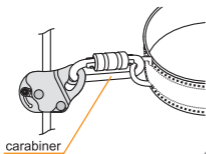
B: keeper
D: side plate

E: mode lever

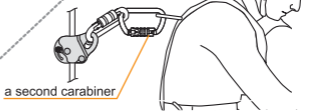


A: Locking device
C: Oval carabiner(screw/twist locking)
D1: Sewn termination(hook-up point)

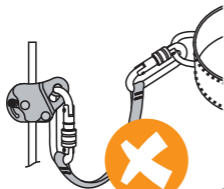
B: WORK mode and MOVE mode
D: Static rope lanyard/no-cut lanyard
D2: Sewn stop knot.



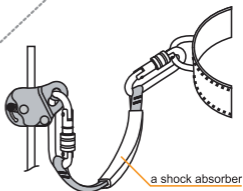
(fig2)



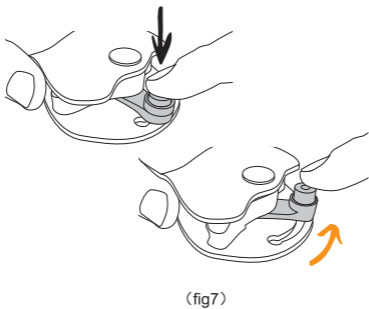
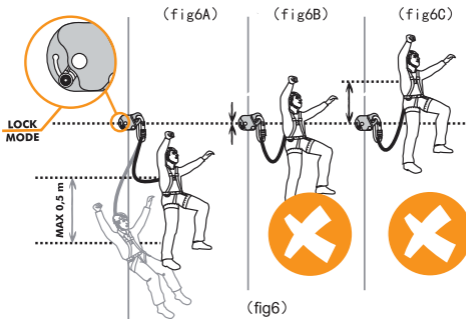
(fig3)

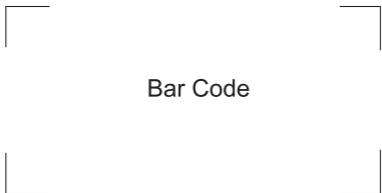


(fig4)



(fig5)





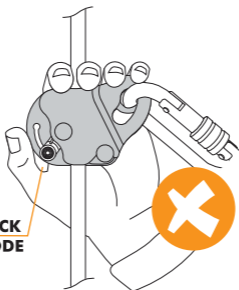
 **XINDA**®

The logo for XINDA, featuring a stylized 'X' inside a circle with a red swoosh, followed by the word "XINDA" in a bold, black, sans-serif font with a registered trademark symbol (®).

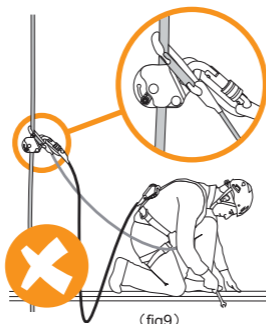
PICC 

The text "PICC" followed by the CE mark, enclosed in a rectangular box.

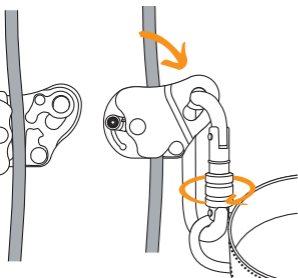
**LOCK
MODE**



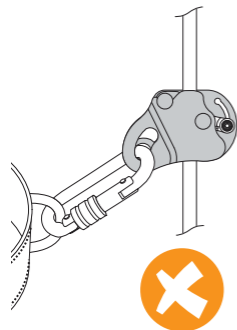
(fig8)



(fig9)



(fig10)



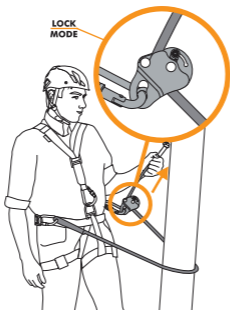
(fig11)



(fig12)



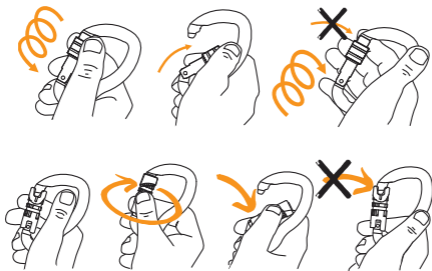
(fig13)



(fig14)



(fig15)



(fig16)



It is for XINDA fall arrester XXX. This manual illustrates how to use, maintain, store and inspect the equipment. This manual includes specific and general instruction of fall arrester, and the general instruction also applies to other metal equipment. "Cross sign" in the manual means inappropriate operation. There are many kinds of misuses which can not be all covered in this manual. Only the illustrated ways are allowed. Any misuse may lead to severe injury or even death.

※ Product details and application

Fall arrester belongs to PPE (personal protective equipment) which is designed for climbing, caving, canyoning, rope access and rescue. XINDA fall arresters are designed and tested based on European rope access techniques.

Acceptable temperature: $-20^{\circ}\text{C} \sim 50^{\circ}\text{C}$.

Compatibility:

The safety of fall arrester depends on the compatibility with the other elements

of the system. Verify that every part of the system works well with each other such as the connection with rope and carabiner.

Specific information

The product is a:

-a fall arrester:

-self-locking type and certified to EN 353-2;

-to be installed on the safety rope, which automatically locks on the rope under static/ dynamic load, certified to EN 12841/A.

-a positioning device:

-to adjust the distance between user(with a safety belt) and the anchor point, certified to EN 358;

-to be inserted on the working rope, locking under load in one direction(WORK mode) and sliding freely in the opposite direction(MOVE mode), certified to EN 12841/B, EN 567 and UIAA 104.

Warning: when working at height, always have at least a spare safety rope with inserted a fall arrester device conforming to EN 12841/A or EN 353.

when positioning the device, ensure that:

-anchor points of working and safety ropes are placed above the user and certified to EN 362;

-carabiners have a locking system and are certified to EN 362;

-rope between the anchor point and user should not go loose.

-remaining in a safe position, check if the device works well every time you use it;

-the device performance may differ from what is specified in the norms if you use different ropes.

-humidity, snow, ice, mud, dirt, etc. greatly reduce and even nullify the performance of the devices.

A: Locking device B:WORK mode and MOVE mode C:Oval carabiner(screw/twist locking) D:Static rope lanyard/no-cut lanyard D1:Sewn termination(hook-up point) D2:Sewn stop knot.See fig.1.

Function modes

Choose appropriate mode before installing the device.

-MOVE mode: the device can slide up and down freely. In this case, the fall arrester can be connected directly to harness via a carabiner. See fig.2.

A second carabiner may become necessary in place for a 90°rotation of the device.See fig.3.

Warning: No simple longes are allowed to use between device and harness in this mode because there may be a risk of death! See fig.4;

If the distance between safety rope and working rope implies the use of a longe, only a longe fitted with a shock absorber certified to EN 355 can be used.

See fig.5.

WORK mode: the device only moves in one direction(upward) and you should not overpass the device! Choose a longe of proper length so the height of a potential fall will always be less than 0.5m. See fig.6.

The selection between MOVE mode and WORK mode is made by moving the lever. The lever has a locking button; Push down the button to lock and unlock.

-Move the lever to a desired position-check if the button spring backs and locks the lever movement. See fig.7.

Warning: like other systems and self locking knots. e.g. "Prussik". The fall arrester blocks only if the load is applied to the carabienr: never load the device IN ANY OTHER WAY. as for example in fig .8 and 9: the device will move along the rope. Risk of death!

Use	Mode	Lanyard/rope type and diameter	Risk of death
fall arrester EN353-2 EN12841/A	MOVE MODE	static rope lanyard diameter 10-13mm	DO NOT USE SIMPLE LONGES (fig.4)
positioning EN385 EN12841/B	WORK MODE	static rope lanyard diameter 10-13mm	DO NOT OVERPASS (fig.6B-6C) AND MAKE SURE THAT HEIGHT OF A POTENTIAL FALL IS LESS THAN 0,5m (fig.6A) LOAD DEVICE ON CARABIENR ONLY(fig.8-9)
EN567		static rope lanyard diameter 10-13mm no-cut lanyard diameter 12mm	

Anchor point

See fig.10:

- select function mode(MOVE or WORK) by operating the lever;
- open the device by rotating anti-clockwise the revolving face;
- insert the device on static rope lanyard or no-cut lanyard;
- close the device by rotating clockwise the revolving face;
- hook up the oval carabiner(screw/twist) to the device eyelet and to the harness;
- screw up firmly its safety sleeve;
- check if the device in MOVE mode slides freely upward and downward and in WORK mode only slides upward and locks downward.

Warning: Do not insert device on the rope in any other way. fig.11.

Risk of death!

Used as a device	Correct ways of use	Incorrect and dangerous ways of use
MOVE mode	Figs.2-3-5-12-13	Figs.4-11
WORK mode	Figs.14-15	Figs.6B-6C-8-9-11

Safety check

Make sure:

-the device is suitable to the intended purpose;
 -the ropes(static rope lanyard): do not show any signs of damaged threads, stiffening, variations of diameter, cuts, wear or seams coming apart.

Be careful of cut or loose threads!

-metal parts: have not suffered from mechanical deformations, do not show any signs of cracks or wear, especially check that:

-the points where the rope passes through are free from mud, sand, etc. and that there are no lubricant substances;
 -the inner levers and springs work well;
 -the selection lever is working as said in the norms;
 -the carabiner works properly, in particular verify that the locking system is all well. See fig.16.

Additional safety information ;

- The user's health and body condition must be fit for working at heights. Unconscious suspension at height can lead to severe injury or even death. Ensure that a rescue procedure is in place.
- In a rope access system, it is essential to use a back up device and check the required clearance below the user in order to avoid any impact with the ground or with an obstacle in case of a fall.
- In the industrial use, the breaking load of a single anchor point must be 12kN at least or meet the standards of EN 795.
- In a safety system, the weakest component determines the strength of the whole system.
- Avoid that the rope and other braided fabric rub against sharp edges or rough surfaces.
- A risk assessment is needed and protection measures should be taken before use.

Working alone is not allowed and you should have a rescue plan and the means to implement it in case of encountered difficulties.

Life span, regular inspection and retirement

- No storage limit for the metal in the proper environment; the plastic parts of the equipment can be stored up to 10 years.

- The equipment may need to be retired only after one use because of misuse, accidents or compatibility problems.

- The practical lifespan depends on the type and intensity of usage, harsh environment (marine environment, extreme temperatures, sand and mud etc). Equipment check has great effect on the lifespan.

The comprehensive inspection is required once every 12 months minimum, apart from normal check before use, during use and after use. The greater the intensity of use, the more checks are needed. Record the results of the inspection.

- The inspector must be competent or authorized by the manufacturer.

- Inspections included:

- Check if the products are free of corrosion, melting, cracks, wear, deformation or stain;

- Check if the attachment points are overworn (0.5mm at most);

- Check the effectiveness of the springs and pivots;

- Check if the cam teeth are worn greatly;

- Check the functionality of the ascender;

- Check if the markings are illegible;

You should maintain or retire the equipment, or hand to the manufacturer for further inspection when the results are negative such as deformation, malfunction of the pivots.

- Information included on the inspection manual Model number/data matrix/ purchase date/manufacture date/first time to use/standards/inspection date/ records (malfunction, condition, user's usage record) /results and suggestions (to retire the equipment or not)/next inspection date/inspector's data (name and contact)

- When to retire your equipment:

- You don't know its usage history;

- You doubt about its performance, strength or safety;

- It fails to pass PPE inspection;

- Malfunctions are found;

- It fails to meet updated regulations or standards;

- It has been subjected to a major fall or load;

How to retire your equipment:

Mark it with irremovable labels or destroy it as to prevent further use.

For instance, drill or cut it. Or return it to the manufacturer for disposal.

Responsibilities

- You are responsible for your actions and decisions. If you can not take the responsibilities, don't use it.
- Only qualified person or the person under supervision of a competent and experienced party can use this product.
- You must take training course including theory and practice, basics for working at height, proper ways to use and relevant safety system knowledge before use.
- When it is resold to other countries or regions, the instruction manual must be made in local languages.
- XINDA is not responsible for any direct or indirect non-quality induced consequences.

Storage and transport:

Remaining fluid and other stain on metal equipment must be rinsed and dried and then stored in a dry environment, 10°C-30°C. The equipment must not come into contact with abrasion, loading, chemicals, sharp edges or heat source etc as those are inherently harmful. Metal equipment must be specially stored in the container and transported in compliance with storage requirements. The use and storage of the product is suggested to be taken care of by accountable people.

Maintenance:

Proper maintenance and storage can extend the lifespan of the equipment and also guarantee the user's safety.

-Cleaning: Use clean water(20°C) and soft brush to rinse the external and internal of the product. No high-pressure water. No industrial-grade cleansers. Rinse afterwards and dry it naturally. No heat drying.

-Long time use of the equipment will reduce the lubrication of the parts such pivots. Lubricating oil or grease is suggested to be in use.

Warning: No modification, alternation or improper maintenance is allowed. It can only be repaired in the XINDA factory.

Traceability:

The code is used for product tracing.

Meaning: For instance, 18096500X47: 18 096: Manufactured on the 96th day of 2018; 500X: Batch and quality inspection; 47: Product increment.

Limited warranty:

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.