欣达 锁扣 使用说明书
型号 HH-9774/A-3105

ver.202608/A

警告

○使用本设备的相关活动本身存在固有风险，可能导致重伤甚至死亡。您必须为自身的行为和决策负责。

○使用前请阅读并理解本使用说明。

○使用本产品前，您必须接受足够的培训，掌握相关基础操作与技术知识。

○本产品不可超极限使用，也不可用于设计用途以外的其他场景。

○若您对本手册存在疑问或理解困难，请联系欣达。

地址：中国浙江省金华市东阳市白云街道望江社区新潮路19号

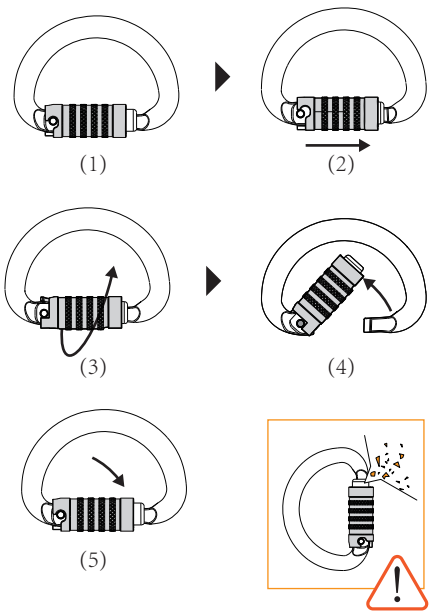
浙江冰峰户外用品有限公司

电话：+86 400-8856993

通过ISO9001质量管理体系认证

贴条码处

打开方式

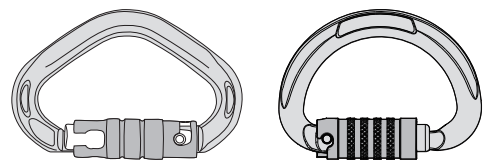


安全注意事项

这份说明书将向您解释如何正确使用您的装备。这里只描述确定无误的技术和使用方法。警告标记将告知您使用该装备时的潜在危险，但并不详尽无遗。您有责任阅读每一条警示且正确使用您的装备。任何错误的使用都将造成额外危险。如果您有任何疑问或对于理解这些文件有困难的话，请联系欣达。

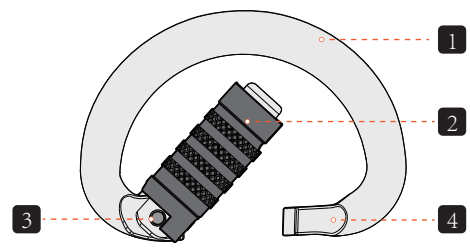
	表示有产生严重伤害或死亡的风险
	表示有潜在意外或伤害风险
OK!	表示正确的使用方法
	表示错误的使用方法

类别

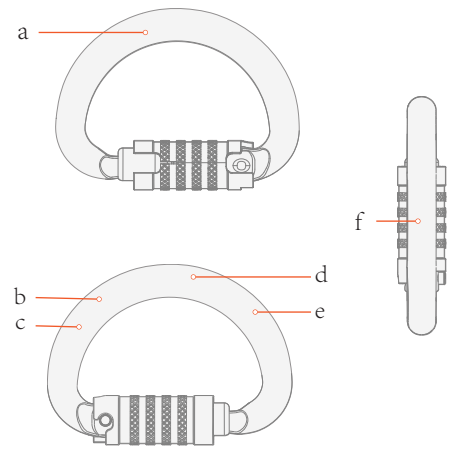


A-3105　　HH-9774

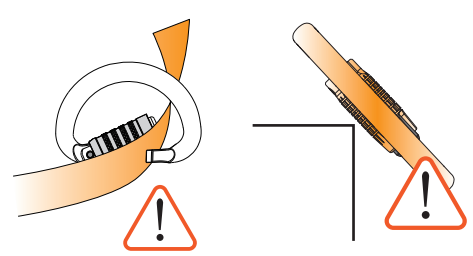
部件名称



标记说明



注意事项



使用说明

适用范围

用于高空坠落保护的个人保护设备（PPE）。

半圆形锁扣，设计用于三向受力，是为有高空坠落风险的活动而设计的。

使用该产品时，不可超出其负荷限制，也不可用于设计之外的用途。

⚠警示：严禁用于工业起重吊装作业。

适用工作温度：-20℃ ~ +50℃

带锁闭机构主锁

三段锁：锁筒可自动锁闭；抬起并旋转锁筒可解锁；

部件名称

(1)主体；(2)锁门；(3)锁门转轴；(4)鼻头

材质：铝合金

标记说明

A:负责生产厂商名称或上市的品牌名称；**B:**提醒用户使用产品前必须阅读说明书的提示**LOGO**；**C:**执行标准 ；**D:**最小断裂负荷；**E:**产品编码；**F:**产品独立编码

强度参数说明

MBS = 最小破断载荷

每款主锁均经过 10kN 出厂验证拉力测试。

备注：拉力测试采用 10mm/12mm 标准钢销；扁带、杆件造成非主轴偏心受力时，实际破断强度会下降。

额定工作载荷（WLL）建议取最小破断载荷的 1/10～1/5，需同步遵循绳索作业相关规范。

警示：主锁承受拉力状态下禁止开启锁门。

型号	主轴最小破断载荷 (kN)	副轴最小破断载荷 (kN)	开门主轴最小破断载荷 (kN)	锁门开口宽度 (mm)	总长 (mm)	总宽 (mm)	EN12275 分类	UIAA 认证	材质
A-3105	22	18	10	27	114	74	/	/	AL
HH-9774	20	15	7	25	110	72	/	/	AL

配件适配说明

1.主锁用于防坠落、作业定位、限位、救援全套防护系统，配件匹配才能保障安全。 丝扣锁适合恶劣工况；自动锁适合频繁开合、易剐蹭场景。

2.铝合金主锁轻便，适合大多数需要灵活操作的场景；钢制主锁自重更大、强度更高、更耐磨耐用。

安全检查规范

每次使用前检查

- 检查锁门、弹簧、锁身、锁鼻无磨损、裂纹、变形、锈蚀；
- 锁鼻孔无杂物，锁闭机构启闭顺畅。

备注：表面防护涂层磨损会加速金属氧化锈蚀。

使用过程检查

- 确认主锁完整扣接配套装备；
- 锁门完全闭合无异物卡阻；
- 载荷仅作用于主梁，杜绝挤压、交叉受力、杠杆受力等不良受力工况。
- 警示：异物卡阻、撞击都可能导致锁门意外解锁。

锁扣的方向

没有锁扣是不可损坏的。

半圆形锁扣在关闭锁门、上锁套锁定时，在三个方向上同时受力或者在主轴上受力时的拉力最强（见图示）。锁扣在其他方式下受力是危险的，并且会降低其强度。锁扣应与一个闭合的连接点相连。

打开/闭合

锁扣必须在其锁门闭合并且锁套已上锁的情况下使用。

使用自动上锁锁扣时，每次关闭都必须检查确保已完全上锁。

注意：环境中的粉尘、泥沙等杂质会对锁门的上锁系统造成影响，可能会导致锁门无法闭合。

附加安全须知

○使用者身体条件必须符合高空作业要求；高空悬空失去意识会造成重伤、死亡，作业前必须制定完整救援方案。

○攀登作业需考虑滑轮效应：坠落冲击会使上方锚点载荷放大 1.7 倍。

○工业场景单锚点最小破断载荷≥12kN，符合 EN 795 标准；锚点位置需高于人体连接点位。计算坠落安全距离时需计入主锁长度，防止坠落撞击地面或障碍物。

○整套防护系统的承载极限由强度最弱的配件决定。

○避免绳索、编织扁带与锐边、粗糙表面摩擦。

○使用前完成风险评估并落实防护措施。

○禁止单人独立高空作业，提前制定可落地的救援方案

b）锁门开合、旋转动作顺畅无卡顿；

c）产品标识文字清晰可辨；检测出现变形、锁门失灵等不合格情况，需维修、送厂复检或直接报废。

检测台账必填内容

产品型号、追溯码、采购日期、生产日期、首次启用时间、执行标准、检测日期、缺陷与维修记录、检测结论（继续使用 / 报废）、下次检测日期、检测人员的姓名及联系方式。

强制报废条件

- 产品使用历史无法追溯；
- 对设备强度、安全性能存在任何疑虑；
- 未通过个人防护装备专项检测；
- 锁闭、承重功能出现故障；
- 不符合现行法规、标准；
- 承受重大坠落冲击或超负荷载荷。

报废处理方式

粘贴永久性不可擦除报废标签，或钻孔、切割破坏设备杜绝二次使用；也可寄回厂家统一处置。

责任说明

○使用者对自身操作、判断承担全部责任，无力承担安全责任禁止使用。

○仅限持证专业人员，或资深专业人员全程监护下使用本品。

○使用前完成理论 + 实操培训，掌握高空作业基础、装备配套安全规范。

○外销至其他国家 / 地区时，说明书需配套当地语言版本。

○非产品质量问题造成的直接、间接损失，欣达不予承担。

储存与运输

金属设备冲洗干净污渍并且完全晾干，存放于干燥的环境；储存、运输期间禁止接触磨料、重物、化学品、锐边、热源。金属主锁单独收纳于专用容器，全程遵循储存环境要求，建议专人统一管理存放。

维护保养

规范保养存放可延长设备寿命、保障使用安全

- 磨损修复：金属尖锐物划伤、表面粗糙、细微划痕可用砂纸打磨；磨损 / 划痕深度严禁超过 1mm。
- 清洁：20℃清水搭配软毛刷内外冲洗，禁止高压水枪、工业强清洁剂；清水冲洗后自然阴干，严禁高温烘烤。
- 长期使用后转轴润滑会损耗，需定期涂抹润滑油 / 润滑脂。 警示：严禁私自切割、打磨改装设备，所有维修仅可返回欣达原厂处理。

产品追溯规则

追溯码用于产品全流程溯源；

示例编码释义：26 = 生产年份；096883500J = 生产批次及质检编号；47 = 产品流水编号

有限质保

欣达提供 3 年的质保，质保仅覆盖原材料、生产制造缺陷。 质保免责范围：正常使用磨损、外力变形、氧化锈蚀、私自改装、误用、存放不当、保养缺失、超出设计用途使用等。

INSTRUCTION FOR USE CARABINERS

TYPE HH-9774/A-3105

ver.202608/A

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.

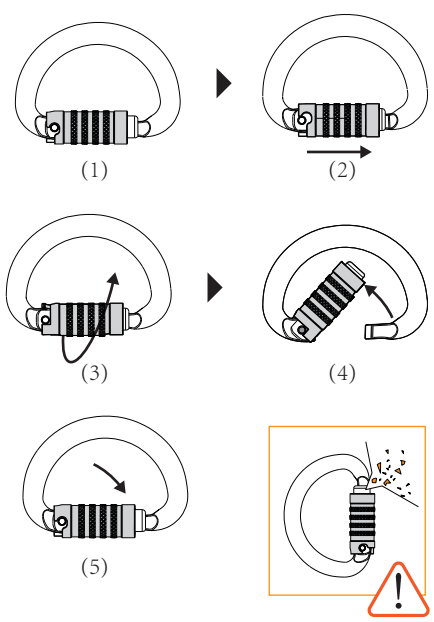
○This product must not be used beyond its limits, nor be used for any purpose other than for which it is designed.

If you have any doubts or difficulties in understanding this manual, please contact XINDA.

Zhejiang Bingfeng Outdoor Product Co., LTD
Phone number: +86 400-8856993
No.19 Xinchao Road, Wangjiang Community, Baiyun Street, Dongyang City, Jinhua City, Zhejiang Province, China.

设备检测记录表 EQUIPMENT RECORD					
产品(Product):					
型号(Model&type):	品牌Trade name 欣达(XINDA)	型号识别码(ID number):			
生产厂家 Manufacturer: 欣达XINDA	产地: 中国	联系方式 +86 400-8856993 info@xindaoutdoor.com www.xindasafety.com			
生产日期 / 报废期限 Year of manufacture/life expiry date		采购日期 Purchase date	首次使用日期 Date first put into use		
其他备注（文件编号等） Other relevant information(e.g. document number)					
定期检验与维修履历 PERIODIC EXAMINATION AND REPAIR HISTORY					
日期 Date	检查项目 Inspections	记录事由 Reason for entry (periodic examination or repair)	缺陷记录、维修内容及相关说明 Defects noted, repairs carried out and other relevant information	检测人员签字 Name and signature of competent person	下次检测到期日 Periodic examination next due date

How to Open

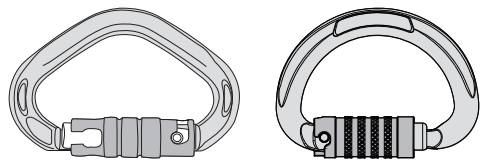


Safety precautions

This manual explains how to use the equipment and only appropriate techniques anduses are described. Warning signs tell the potential risksbut they don' t covereverything. 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.

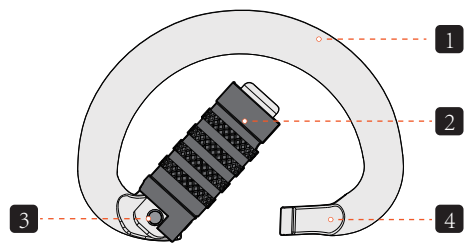
	Risk of severe injury or death
	Risk of accident or harm
Ok!	Appropriate way of
	Incorrect way of use

Category

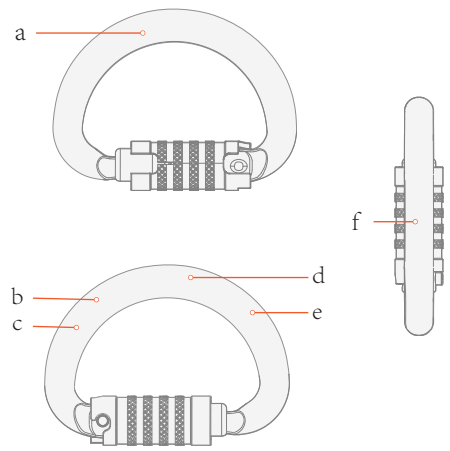


A-3105 HH-9774

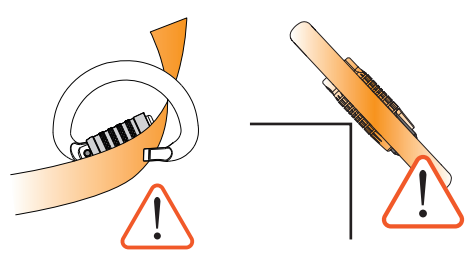
Nomenclature



Marking



Important Notes



Instructions for Use

APPLICATION:

Personal Protective Equipment (PPE) for fall protection at height.

This semi-circular carabiner is engineered for three-way loading, intended for activities with fall-from-height hazards.

Do not exceed its load limit during use, and never deploy it for applications outside its designed scope.

⚠Warning: Do not use for industrial lifting operations.

Acceptable temperature: -20℃~50℃.

CARABINER WITH LOCKING SYSTEM:

Triple action gate: The cylinder can be self locking. Lift and turn the cylinder and unlock.

PART NAMES

(1) Main Body; (2) Door Lock; (3) Door Lock Hinge; (4) Nose

MATERIAL: Aluminum Alloy

MARKING DESCRIPTIONS

a): Name of the manufacturer or brand name under which the product is marketed; b): Logo reminding users to read the instruction manual before using the product; c): Applicable standards; d): Minimum breaking load; e): Product code; f): Unique product code

STRENGTH:

MBS stands for minimum breaking strength.

Each carabiner has been proof-tested under 10kN.

Note: Two steel pins(10mm or 12mm) are used in the pulling tests of carabiners. The breaking strength will be lower under off-spine loading such as webbings or bars.

WLL(Working Load Limit) is suggested to be 1/10-1/5 of the MBS, which is also based on the rope access standards or regulations.

⚠Warning: Do not unlock the door while the main lock is under tension.

No.	Major MBS (kN)	Minor MBS (kN)	Opening MBS(kN)	Gate opening dia(mm)	Outer length (mm)	Outer width (mm)	EN12275	UIAA	Material
A-3105	22	18	10	27	114	74	/	/	AL
HH-9774	20	15	7	25	110	72	/	/	AL

COMPATIBILITY:

○Carabiners are used as connecting elements in personal fall protection systems, i.e. fall arrest, work positioning, rope access, restraint and rescue systems. Good compatibility means good functional interaction. Different shaped carabiners are suited to different equipment and environment. Screw gate carabiners are for harsh environment; Auto lock carabiners work well when they are frequently opened and closed and come into contact with foreign objects.

○Aluminum carabiners are lighter and fine for most situations and the environment where handiness is required. Steel carabiners are heavier, stronger and more durable.

SAFETY CHECK

Before each use:

Verify that the condition of the gate, the spring, the main body, the nose are free of wear, cracks, deformation, corrosion…Verify that there are no foreign objects in the eye and the locking system works well.

Note: The wear of the coated surface will accelerate the process of oxidation and corrosion.

During each use:

Verify that the carabiner is clipped into other equipment; Verify that the gate closes well and no other foreign objects will obstruct the locking system; Verify that the load is on the major axis; Verify that there is no complicated loading such as leverage pressure, extrusion or cross loading.

Warning: Any foreign objects or shocks might unlock the carabiner.

CARABINER LOADING ORIENTATION

○No carabiner is indestructible.

When the gate is closed and the locking sleeve secured, this semi-circular carabiner achieves its maximum tensile strength under three-way simultaneous loading or loading along its main axis (see diagram). Loading the carabiner in any other orientation poses hazards and drastically reduces its strength. The carabiner shall only be connected to a closed anchor point.

OPENING & CLOSING

The carabiner must only be used with its gate fully closed and locking sleeve engaged.

For auto-locking carabiners, verify full lock engagement every time after closing the gate.

Note: Dust, sediment and other debris from the working environment may interfere with the gate locking mechanism and prevent full closure of the gate.

ADDITIONAL 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.

○The pulley effect should be taken into consideration when climbing. Any impact on the climber will increase the loading on the top anchor by 1.7times.

○In the industrial use, the breaking load of a single anchor point must be 12kN at least or meet the standards of EN 795. The position of anchor should be higher than the user's connection. In a fall arrest system, it is essential to take the

ment; the plastic parts of the equipment can be stored up to 10 years and the rubber parts can be up to 3 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 you need. Record the results of the inspection.

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

○Inspections included:

a).Check if the products are free of corrosion, melting, cracks, wear, deformation or stain(the spine's wear can not be over1mm);

b).Check if the gate works or rotates well;

c).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 gate.

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:

a).You don't know its usage history.

b).You doubt about its performance, strength or safety.

c).It fails to pass PPE inspection.

d).Malfunctions are found.

e).It fails to meet updated regulations or standards.

f).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

1).You are responsible for your actions and decisions. If you cannot take the responsibilities, don't use it.

2).Only qualified person or one under supervision of a competent and experienced person can use this product.

3).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.

4).When it is resold to other countries or regions, the instruction manual must be made in local languages.

5).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. The equipment must not come into contact with abrasion, load, 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.

1).Wear treatment: You can polish the carabiner surface with sandpaper when it is worn by sharp metal (like hangers), becoming rough or having cracks.

Note: The depth of the wear or cutting nick cannot be over 1mm!

2).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.

3).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.

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

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.