QUICKJUMP RIPCORD ACCESSORY

Installation & Inspection Procedures

NOTE TO INSTALLERS

Always Read Instructions Before Use

The Installation & Inspection Procedure Manual contains information relating to the proper use of the QUICKjump RipCord Accessory and includes all product registration and warranty information. This document may only be removed by the end user. Ensure that this Manual is readily available to operators at all times.

Head Rush Technologies QUICKjump RipCord Accessory Installation & Inspection Procedure Manual
P/N 02070008001

ACCESSORY OF THE QUICKjump

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Thank you for your purchase of the QUICKjump Free Fall Device. This attachment accompanies a specialized webbing accessory, the RipCord, designed specifically for the QUICKjump. With proper installation and use the RipCord will enhance the free fall experience for your riders.

IMPORTANT SAFETY NOTICE

Recreational Descent Is A Dangerous Activity

Read Before Installation & Operation

Failure by the operator to heed any and all instructions, warnings and cautions for the correct installation, operation, care and maintenance of the QUICKjump Free Fall Device and/or RipCord accessory may result in serious injury and/or death.

QUICKjump Free Fall Device Models QJ150-12A, QJXS150-8A, QJXL150-20A and associated equipment is designed and specified for use as a rapid descent device.

NOT SUITABLE FOR CLIMBING

The QUICKjump Free Fall Device is not suitable for use as a belay device for climbing nor for use as personal protective equipment against a fall from height. Because of the large initial free fall and the rapid descent rate, this device is unsafe for any use other than the intended use stated above.

Use of the QUICKjump Free Fall Device and/or RipCord accessory for any purposes other than that intended by the manufacturer is not permitted and may result in serious injury and/or death.

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Owners and Operators of the QUICKjump Free Fall Device and/or RipCord accessory are responsible for the safety and supervision of any person using the QUICKjump Free Fall Device and/or RipCord accessory and are required to assure that proper installation and operation procedures are followed at all times. Proper installation requires careful design and planning using QUICKjump and non-QUICKjump components. Owners and Operators are encouraged to seek the advice of their installer or a qualified engineering professional regarding the instructions in QUICKjump Operator Manual and the RipCord Installation and Inspection Procedures.

These instructions must be made readily available to the operator at all times. Prior to installation and use, all owners and operators must have read and shown to have understood all instructions, labels, markings, and safety information pertaining to the installation, operation, care, and maintenance of the QUICKjump Free Fall Device system, its component parts, and all associated hardware. Failure to do so can result in death, serious injury and equipment damage.

Symbols Used in this Document

The following safety symbols are used throughout this manual to highlight potential dangers. One or more precautions may be associated with practices and procedures described within this manual. Failure to adhere to any precautions highlighted can result in death, serious injury and equipment damage.

Ensure that you read and understand all safety related procedures related to the working environment and the task you are undertaking.

WARNING

Indicates a potentially hazardous situation that, if not avoided, could result in serious injury or death.

CAUTION

Indicates a potentially hazardous situation that, if not avoided, may result in injury or equipment damage.

DESCRIPTION

The RipCord comes in 2 possible lengths and these lengths necessarily change the proper installation height for the QUICKjump device. Below is a table that outlines the proper installation heights and window of operation for the QUICKjump with the RipCord webbings. Please refer to the QUICKjump Operator Manual for full specifications, including weight range and installation details. Within the same device the webbings are interchangeable* following the proper procedure for on site webbing change.

	QUICKjump	QUICKjump XL
No RipCord Standard Install		
Minimum Install Height	Blue Handle Black Webbing	Purple Handle, Black & White Webbing
	8.0 m (26 ft)	10.0 m (33.0 ft)
Maximum Install Height	Blue Handle Black Webbing, Lime RC	Blue Handle Black Webbing, Lime RC
	12.5 m (41 ft)	20.0 m (65.5 ft)
1.5m Rip Cord (Neon Lime)		
Minimum Install Height	Blue Handle Black Webbing, Lime RC	Purple Handle, Black & White Webbing, Lime RC
	9.5 m (31.2 ft)	12.5 m (40.5 ft)
Maximum Install Height	Blue Handle Black Webbing, Lime RC	Purple Handle, Black & White Webbing, Lime RC
	14.0 m (46 ft)	21.8 m (71.0 ft)
3.0m Rip Cord (Neon Orange)		
Minimum Install Height	N/A	Purple Handle, Black & White Webbing, Orange RC
		14.2 m (46.6 ft)
Maximum Install Height	N/A	Purple Handle, Black & White Webbing, Orange RC
		23.0 m (75.0 ft)

RipCord webbings are NOT interchangeable between the QUICKjump and QUICKjump XL Devices. Furthermore, the ripcord webbings are NOT designed or intended for use in any other device. These webbings have been specifically engineered for safe use in only the QUICKjump line of devices. Both devices can utilize a 1.5 m RipCord but the webbings are different as indicated by the handle color and color of the main webbing line. Installation of the wrong webbing in the wrong device can result in improper operation and potentially hazardous or dangerous fall conditions. Riders MUST meet the operational and safety guidelines set forth in your Operators Manual. Please double check and verify the safety limits set forth in the Operator Manual before live operation.

COMPOSITION

The RipCord webbing is a proprietary auxillary webbing for the QUICKjump device and QUICKjump XL device only. These webbings are NOT COMPATIBLE with the zipSTOP Zip Line Brake, TRUBLUE Auto Belay or any other devices other than the QUICKjump Free Fall Devices. Despite the outward appearance and elastic nature of the RipCord it should not be confused with a bungee cord or similar device. The RipCord utilizes a fully continuous webbing from beginning to end and includes the necessary structural redundancy while maintaining the continuity of the webbing resulting in the ONLY safe and approved way to extend the free fall distance of the QUICKjump device. The RipCord is also not designed to offer a bounce sensation but rather just a dampening effect with the additional “free fall” sensation it provides. The RipCord (bungee section) is factory Sealed and sewn on both ends and is not designed for internal inspection or dissection. As mentioned in the Inspection Procedure, any RipCord that is exposed and no longer sealed should be taken out of service immediately. This should not be confused with the OPA section that includes a zipper for daily inspection of the OPA.

INSTALLATION

Before placing the RipCord webbing into service the first time a measurement of the retracted length needs to be made. With another person extend and allow the webbing to relax at least 5 times and then measure the relaxed length of the webbing from the tip to the tail of the neon colored outer webbing (figure 1). This length (referred to as the Base Length) will serve as the baseline for wear of the elasticity of the RipCord going forward. Because of the varying levels of humidity and the effects of temperature and climate on the RipCord it is essential to establish the Base Length onsite at the location the RipCord webbing will be installed. The outer webbing will not be static when measured and will have a slightly relaxed appearance when the inner webbing is pulled to its static extent.

Figure 1

Below is the as measure from the Factory and a spot for the Base Length measurement.

Factory measurement

Base Length

To install the RipCord, please refer to the webbing installation instructions in the QUICKjump Operator Manual.

SERVICE LIFE

Service Life: The expected service life of the RipCord webbing is up to 1 year or when worn.**

Additionally, the RipCord Webbing can increase the loading and fatigue of the reaction spring assembly in the device when exposed to extremely high cycling usage. This is normal wear and tear for the QUICKjump device and an expected wear point. In the case of RipCord use, this additional fatigue could result in additional resistance and a slowed “free fall” effect following 40,000 cycles within an operational period. With these cyclic loads the operational period on these devices will be lower than one year and require shorter recertification intervals. This does not create an unsafe condition but can affect rider perception and appeal due to a slower ride. If radically slower decent rates are observed the device should be immediately be removed from service and sent to the nearest recertification center.

If your installation is seeing more than 30,000 riders in a year feel free to contact us regarding more frequent recertification intervals to ensure that your operation experiences minimal downtime and your customers experience maximum satisfaction. In any case, the device must be recertified following 40,000 cycles within an operational period.

** Varying weather, use, humidity, and UV conditions can affect the expected service life of the RipCord significantly. In some conditions it may be necessary to replace the webbings more frequently than 1 year. Refer to your Operator Manual for proper procedures to replace the webbing assembly.

Daily Inspection

Before operation, the RipCord webbing should be fully extended and inspected at full extension. This inspection is in addition to the normal webbing inspection indicated in your Operator Manual for the QUICKjump device. Both inspections can take place simultaneously but there are key inspection elements for both products independent of each other mandating both procedures be followed.

INSPECTION PROCEDURES

1. Inspect the full length of the exposed 2" elastic portion of the webbing for defects.
2. Stretch the webbing to its full extension and inspect for balling or bulging within the elastic portion of the webbing. This inspection requires that the operator feel the length of the elastic portion of the webbing as well as to visually inspect it while its fully extended and will require additional help or assistance. It is impossible to detect any balling up or bulging with the webbing in the contracted position.
3. Inspect and measure the length of the extended elastic portion of the webbing. This requires the inner webbing be pulled tight from the handle and above the RipCord section. It is not uncommon for Base Length to actually shrink within the first few hundred cycles. Any large jump in the length of the contracted unit can indicate a significant loss of elasticity. A small loss in elasticity over time is expected and within the operational safe limits of the RipCord. Please contact us at freefalldevice.com for further information or troubleshooting regarding Base Length checks. If the outer webbing ever fully extends when the inner is pulled tight it can indicate a problem with the inner elastic portion of the webbing. The complete webbing MUST immediately be removed from service should this occur.
4. Inspect the carabineers and attachment loops
5. Inspect the Overload Protection Assembly (OPA) and jacket. Refer to the Operator Manual.
6. Test complete retraction and full extension of the RipCord

The RipCord should be removed from service and replaced with a new one if:

- The Ripcord demonstrates any sign of tears, brittle or stiff webbing, cuts, visible abrasion damage, torn sewing joints or other visual or functional defects.
- Base Length has grown more than 20% of it's original installed length
- The webbing when fully extended exhibits any balling up or bulges within the neon webbing.

- The webbing exhibits any significant fading or cracking.
- The outer neon webbing is no longer relaxed and is pulled to full extension when the inner elastic portion of the webbing is fully extended. This can indicate a critical failure within the RipCord and that the device is now relying on the redundancy. The RipCord MUST be removed immediately from service in this case.

FAILURE TO MAKE DAILY INSPECTIONS AND/OR REPLACE THE COMPLETE WEBBING WHEN ANY SIGNS OF WEAR ARE PRESENT MAY RESULT IN SERIOUS INJURY OR DEATH OF A PARTICIPANT.

Any indication of the webbing or unit being out of specification mandates the immediate removal of the webbing or device from service.

MANUFACTURER'S DETAILS

Replacement RipCords and other related products can be purchased at store.headrushtech.com or from an Authorized Head Rush Technologies Distributor.

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