

## Fall Protection Equipment Manufacturer

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# Instructions for Rescue Block and Tackle System.

### WARNING

Failure of the user to read and understand all instructions for use of this equipment may result in serious injury or death.

It is recommended that the user complete an approved rescue program before using the product, and must train and practice rescue scenarios regularly so as to be able to effect a rescue in a safe and timely manner.

It is recommended that any rescue be supervised by a competent person familiar with the equipment.

This equipment is designed to be used as an integral part of an approved rescue plan on any work site were work at height is being performed. The rescue plan must provide for the retrieval any worker, suspended as a result of a fall arrest, without delay in order to reduce the effects of suspension trauma.



All warning labels and instructions must be understood and followed by the user before using the product.

All users must understand the relevant regulations that relate to the rescue equipment in the jurisdiction in which it is being used.



Only trained and competent personnel should use these products.

All rescue equipment must be visually inspected by a competent person after each use or training session to ensure that the equipment has not sustained any damage or deterioration during its use. In addition the equipment should be subject to a full examination on an annual basis by an independent competent person.

Rescue equipment must not be altered or modified in any way, without prior permission from Safety Direct Ltd.

The length of the Rescue Block and Tackle System must be greater than the height of the anchor above the lower surface to which the rescued worker will be lowered to.

The anchorage for the Rescue Block and Tackle System should be directly above the fallen worker and should be rated for a minimum of 22.2 kN (5,000 lb.).

Any part of the equipment exhibiting deterioration, damage or deformation must be removed from service immediately and inspected by a competent person before being returned to service.

Only auto-locking carabiners should be used in conjunction with the system.

### **Usage Instructions**

The Rescue Block and Tackle System is designed for the rescue of a single worker and has a maximum load rating of 136 kg (300 lb) and has a maximum deployed length as indicated by the model or part number.

The Rescue Block and Tackle System consists of two double pulleys which are arranged that they are only free to rotate in one direction. The system can be used to hoist the rescued worker and affords a 4:1 reduction in the load necessary to lift the worker. The system includes a right hand ascender with an attached lanyard.

When the worker is lowered the pulleys do not rotate and act as a friction brake in order to reduce the effort needed to hold the worker at any point during the rescue the maximum force needed to hold a 91 kg. (200 lb.) worker is approximately 14 kg. (31 lb.). The ascender should be attached to the free part of the operating rope and when hoisting the worker should be slid up the rope and then used to pull down on the operating rope. The carabiner in the end of the ascender lanyard should be anchored either to the operator or to a convenient anchor point.

In order to effect the rescue the upper pulley block should be anchored using the carabiner to a load rated anchor. The lower block should be attached using the carabiner to the rear Dorsal Dring. Tensioning the block and tackle will remove the load from the fall arrest lanyard and allow the worker to be released from the lanyard. The worker can then be lowered to the surface below using the ascender to control the descent.

### Inspection

All systems should be inspected after each use and before the system is placed in storage. The inspection should include all the carabiners, which should be subjected to a function test, The rope ascender and its attached lanyard should be inspected for any evidence of wear or deterioration. The two double pulleys should be checked to ensure that they lock in the lowering direction and turn freely when the rope is being hoisted. A detailed record of these inspections should be kept in a log.

When an inspection reveals any defects the system must be removed from service immediately and be tagged to preclude any further use. The system should not be returned to service until it has been reworked or repaired by the manufacturer.

The Rescue Block and Tackle System should be removed from service immediately if an inspection reveals any of the following:

- a) there is evidence of any corrosion or deformation of the hardware components or connectors, including cracks, sharp edges, chemical attack, excessive heat exposure or alteration in any way.
- b) if a function test shows that the pulleys do not lock up and release automatically when the rope is pulled or released.
- c) the rope has become adulterated with paint, bitumen, solvent or other chemical reagent.
- d) the rope has any kinks or knots in its operating length.

Only persons or organizations authorized in writing by Safety Direct Ltd. shall make repairs to lanyards.

#### **Care and maintenance**

Maintenance of the lanyard should be carried out in accordance with the instructions provided by Safety Direct Ltd.

All Rescue Block and Tackle Systems should be stored in a clean, dry environment, with limited exposure to the following:

- 1 sunlight and UV radiation.
- 2 excessive heat.
- 3 harmful fumes.
- 4 corrosive chemicals or environments.

If necessary the rope can be cleaned by the use of a mild soap solution and warm water and a sponge. The use of harsh detergents or chemical solvents is not recommended. After washing, rinse the rope in clean water, and hang the rope to air dry away from direct heat and then carry out a further inspection.

The one way pulleys are sealed and cannot be serviced or repaired.

#### **Product Design Parameters.**

Maximum Operating Length: As specified on the product label, actual rope length is five times the maximum operating length

#### **WARNINGS**

The following situations should be avoided when using the Rescue Block and Tackle System:

- 1) The system should only be used for rescue purposes and should not be used for hoisting equipment.
- 2) When the system is not in use it should be stored in the fully raised position.
- 3) Connecting components attached together must be compatible in order to reduce or eliminate the possibility of "roll out".
- 4) The anchorage point should be directly overhead wherever possible to eliminate any swing situation.

In case of any issues or interpretations arising out of the use of these products or these instructions please contact Safety Direct Ltd. for clarification.

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