

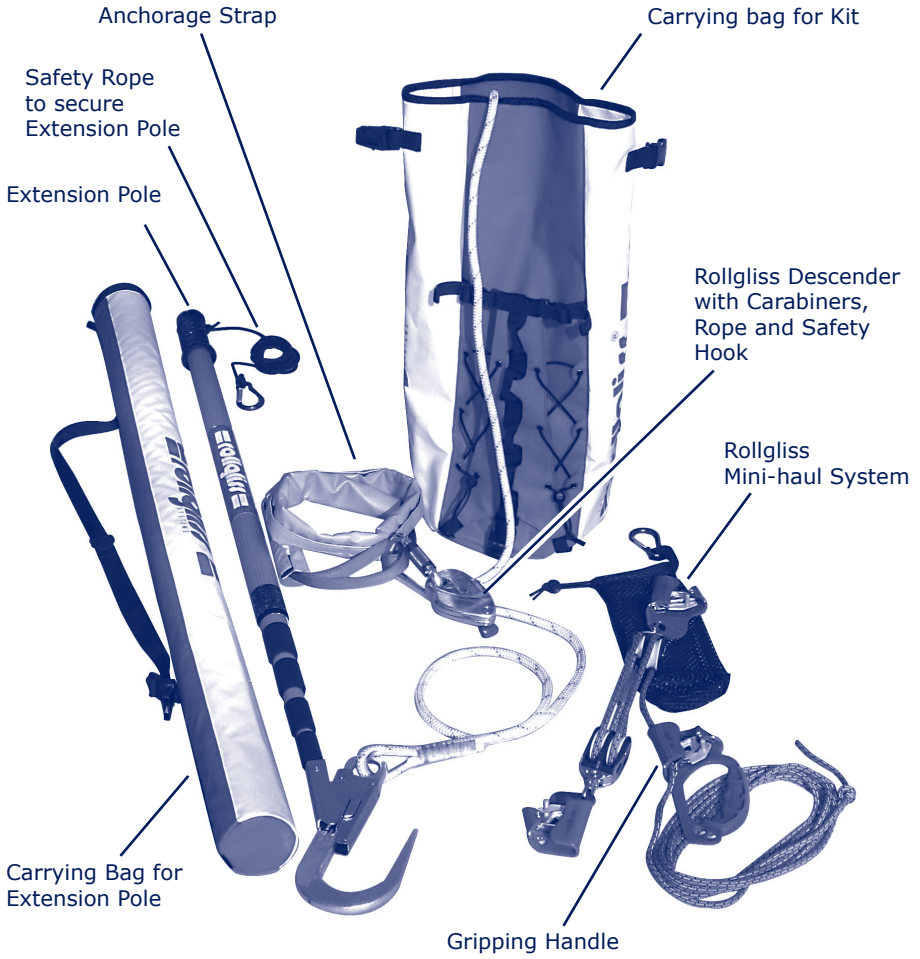


## Rollgliss® Rescue Kit



### Installation and Operating Instructions

**IMPORTANT:** Rescuers of people suspended at height must always protect themselves from the risk of injury and falls. This kit is a highly effective system for performing a rescue. However simply owning the kit itself is not a replacement for effective rescue training. As with any tool, its effectiveness is highly dependent on the people using the equipment. Only people who have been trained in the use of this product should attempt to use it to perform a rescue. Ongoing practice in performing a rescue to ensure completion with a high degree of personal safety is highly recommended.



## Description

Although available for use for rescue professionals, the Rollgliss® rescue kit has been designed as a **peer rescue system** for use in industrial environments. The kit has been designed specifically to enable a rescue to be performed by a person or persons where rescue is not part of their normal job function. It is to be used by the rescuer(s) to remove a person from danger without putting themselves at risk by descending to them.

Unlike many rope rescue systems, the Rollgliss® rescue kit does not require complex knots to be tied or improvised haul systems to be set up. The use of knives is also not required to remove the casualty from their existing fall arrest system, making the system even safer. Most importantly, the user can either be raised OR lowered to safety.

## Kit Components

This rescue kit is a system for performing a rescue of someone suspended at height. The kit includes the following components:

- 1 x Rollgliss® Lory R250 descender with carabiners, rope and safety hook
- 1 x Extension pole
- 1 x Rollgliss® mini-haul system
- 1 x anchorage strap
- 2 x carry bags (1 for the pole and 1 for the remainder of the kit)
- 1 x usage instructions

## Usage Instructions

### Prior to completing the rescue:

**Seek medical assistance/support** - Once someone has taken a fall and is suspended, complete an immediate mental risk assessment. Even if the person is not injured or is not unconscious, it is recommended medical attention/assistance be immediately sought. Follow your site rescue plan and notify appropriate personnel that if required, you are going to perform a rescue.

**Teams work best** - Although a rescue using this device can be performed using one person, a second person is highly recommended to assist. The rescue should always be performed above the location where the person is suspended. If access to the location for anchoring the system can be achieved without fall protection equipment, use this approach first.

If fall protection equipment is the only option, the rescuer must be a suitably trained/competent person to work at height. They should put on an approved full body safety harness, ensuring it is correctly adjusted, and commence the climb/descent to the location. The rescuer shall remain fully protected from a fall at all times using the appropriate combination of twin lanyards, SRLs lifelines or other suitable equipment.

The second person should wait at the bottom of the work area to assist with the descent and/or instruct and direct medical support when it arrives, or to administer first aid.

**Communication** - Keep verbal contact with the person suspended at all times. Ongoing communication will enable you to maintain an understanding of their physical condition and to determine if they are deteriorating. Try to get them to remain as calm as possible but to keep moving their legs while trying to move into a position that is as comfortable as possible.

**Suspension Trauma** – Following a fall, it is important that the person suspended is removed from the situation as quickly and safely as possible to reduce the chance of any impact from orthostatic intolerance, more commonly known as suspension trauma. Depending on the nature of the fall, the type of equipment in use and the casualty's physical condition prior to and during the fall, the most severe effect of extended suspension can be death.

Suspension trauma can occur when blood circulation is impeded from a lack of movement of the legs during suspension. This lack of circulation is increased in risk by the restrictions of the harnesses leg loops. Therefore, rescue must be performed as quickly as possible to avoid this condition. It is important to understand the special conditions present post rescue and the first aid considerations necessary for workers experiencing suspension trauma.

# Using the Kit

## Step 1

**Anchorage** - Identify a suitable anchorage location for the anchorage strap. Such a location should be rated for at least 3,300 lbs. (15 kN). Remove the anchorage strap from the larger kit bag and position as directly above the person to be rescued as possible. This therefore avoids the potential for the system components to come into contact with sharp edges or other obstacles that will prevent correct functionality of the equipment. Once the positioning of the strap has been completed, secure it in place by attaching the carabiner on the descender to the strap or other suitable anchorage connector.



## Step 2

**Set the Rope Distance** - Lower the large safety hook located at the end of the rope down towards the D-ring of the person to be rescued. This may be a frontal or dorsal (back) D-ring, however the dorsal is recommended as it is usually the easiest to reach and cannot be interfered with by the rescuee.



If the length of rope from the descender is insufficient to reach the rescuee, more rope can be fed through the descender by slowly rotating the red handle upwards, while pulling the rope through the descender. When the correct length has been attained, rotate the red handle back to its original position.

### Step 3

**Set the Pole length and hook** - Once the rope length has been determined, retrieve the hook and keep it to one side.

Remove the adjustable pole from the bag and secure the safety rope at the base of the pole to the structure to prevent it being dropped during the rescue.

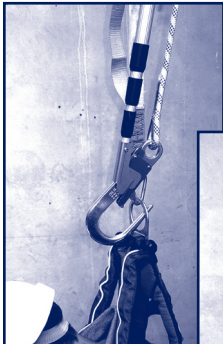


Extend the pole using the adjusters to a sufficient length to reach the person to be rescued. Retrieve the pole and then connect the hook to the end in the open position.



### Step 4

**Connection** - While holding the rope along the length of the pole to prevent the hook from disengaging, lower the pole to the suspended worker.



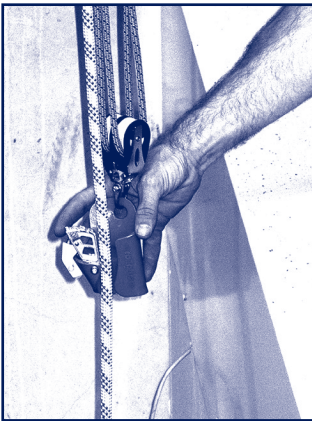
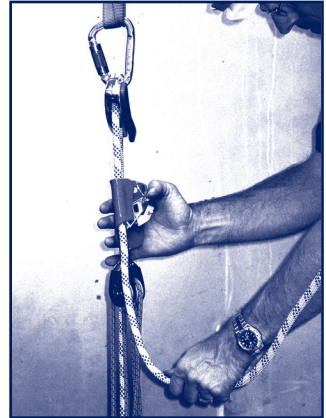
Fit the hook into the D-ring of the safety harness. Once the D-ring is well within the hook throat, pull the pole upward to release the latch. The hook should now be secured on to the person to be rescued. Retrieve the pole and place it in a secure location out of the immediate work area.

## Step 5

**Remove Slack** - Pull the excess/loose rope back through the descender until no slack remains. This part of the rope is known as the free end.

## Step 6

**Install the Haul System Top** - Remove the mini-haul system from the storage bag. Retract the locking mechanism on the top ascender to enable the rope to slide through it. Place the free end of the rope (haul side) within the top ascender and lock the mechanism in place. The top ascender is the one with the free end of the mini haul rope.



## Step 7

**Install the Haul System Bottom** - Retract the locking mechanism on the bottom ascender to enable the rope to slide through it. Place the ascender over the tight rope (load side) between the descender and the suspended worker's D-ring and lock the mechanism in place. Attach the gripping handle to the free end of the mini-haul system rope.

## Step 8

**Raise the rescuee** - While holding the gripping handle in one hand, pull the free end of the haul system. The pulleys will travel together to lift the person to be rescued in an upwards motion. During this action, the person will be held up by the descender. If it is necessary to repeat this step, the ascenders can be re-positioned simply by moving the top ascender up towards the descender and sliding the bottom ascender down towards the rescuee. This step may be required to be performed multiple times to enable sufficient slack to be created in the rescuee's primary fall arrest device.

At this time, the decision on whether to raise or lower the person being rescued needs to be made. There are many factors to reaching this decision such as:

- Obstacles below the person
- Level/nature of injury
- Location of medical assistance
- Time of suspension

In most cases, it will be easiest, quickest and safest to lower the person; however this can only be determined in the specific circumstances faced during the event.

## **Step 9**

***Secondary system in place*** - DBI-SALA always promotes the use of both a primary and secondary system of protection while working at height. This also applies to person being rescued. If the person being rescued is retained in position by a self-retracting lifeline (SRL), then if there is sufficient length in the lifeline, the motion of raising them should unlock the device and allow them to be lowered to the ground with both the rescue device and SRL in place to protect the person from further fall.

If the person has been retained by a deployed shock absorbing lanyard, the raising motion will allow their lanyard to be unhooked from the anchorage and to be lowered, however this will not enable a secondary device to remain in place. Once again, there may be insufficient time to attach a secondary device, however this underlines the importance of ensuring the person is properly retained prior to removing their lanyard.

Either way, prior to the descent, the mini-haul system pulleys must be removed from the rope. Loosen the locking mechanisms of the ascenders by sliding them on the haul rope, then unlock the mechanisms and remove the ascenders from the rope

## **Step 10**

***Lower the person being rescued to safety*** – Prior to lowering the rescuee take the free end of the rescue rope and loop it through a second carabiner (not provided in kit) attached to the anchor strap. The rescuer will maintain a grip on the free end during the descent



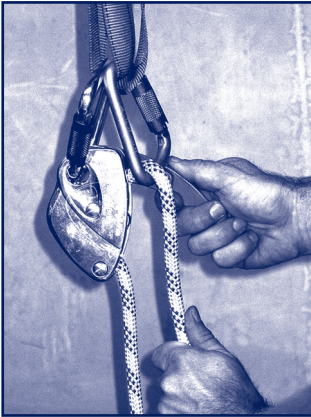
and will help control the descent speed with their grip on the free end of the rescue rope.

**NOTE:** *The use of a second carabiner is optional. You may decide it is not required for your application*



With the other hand, lift the red handle on the descender to commence lowering the person to the ground.

**IMPORTANT:** *Be sure to keep fingers, hair, other rope and other materials well away from the descender device during this motion to prevent entanglement.*



Note that this is a friction descent device and the rate of descent of the person is controlled by the operator within a band of adjustment. The device has a dead-man handle feature that will prevent the rescuer from descending if the rescuer lets go of the handle at any time. In addition, if the rescuer opens the handle too far the device will lock off. To unlock the device and continue descent, the rescuer must move the handle back to its original position tight against the descender.

**WARNING:** *During descent the casualty can reach a significant speed and care needs to be taken to ensure the lowering action is gentle to avoid the possibility of any further injury.*

In addition, if the person is still attached to an SRL, the device may lock off prematurely again, requiring steps 6 to 9 to be repeated, increasing the length of time the rescuer remains suspended.

### **Step 11**

**First Aid** - The person at the bottom of the working platform should now be able to touch the rescuer. The second rescuer should grab the rescuer's legs in each hand and ensure they are kept in a bent position. Do not bring the person's legs together – it will be very uncomfortable for them while still suspended in the harness.

Once the rescuee's buttock also reaches the ground, the second rescuer should move behind them and ensure they remain seated upright until medical help arrives. If the rescuee has been suspended for some time, this is the period they can be most severely impacted by a sudden rush of blood to the heart, causing blackout and/or death. Only trained medical staff should attempt to treat the person. The casualty should be kept calm and whether conscious or unconscious their neck should be supported and kept in an upright position to minimize spinal injury and ensure the airway is kept open. Any open, bleeding wounds should be attended to as a matter of urgency.

## Inspection

After the rescue is complete, inspect the system. Check the entire rope for any cuts or knots. Inspect all metal parts for any deformations or cracks. Inspect all labels to make sure they are present and legible. Clean any parts that have become soiled or coated with foreign materials. Carefully pack all items into their appropriate bags so everything is ready for any future rescues.

## Summary

The Rollgliss® Rescue Kit is an effective tool to enable a rescue to be completed from a fall from height. It is a complete rescue system, however all person's using the equipment **MUST BE** trained to ensure that it can be used correctly and effectively.

Always remember these key principles:

- Always seek medical and rescue support as first action
- Always take the safest option. Avoid putting someone in a position where there is a need to rescue the rescuer or place their life in danger.
- Maintain constant and positive communication between the person being rescued, the medical support people and the rescue team. This will reduce panic, lessen the risk of injury and enable medical conditions to be treated as quickly and as accurately as possible.
- Repeat rescue training frequently using this equipment to ensure you are always prepared for any fall from height event requiring a rescue.

# 9.0 INSPECTION AND MAINTENANCE LOG

**SERIAL NUMBER:** \_\_\_\_\_

**MODEL NUMBER:** \_\_\_\_\_

**DATE PURCHASED:** \_\_\_\_\_

INSPECTION DATE	INSPECTION ITEMS NOTED	CORRECTIVE ACTION	MAINTENANCE PERFORMED
Approved By: _____			
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## WARRANTY

Equipment offered by DBI-SALA is warranted against factory defects in workmanship and materials for a period of two years from date of installation or use by the owner, provided that this period shall not exceed two years from date of shipment. Upon notice in writing, DBI-SALA will promptly repair or replace all defective items. DBI-SALA reserves the right to elect to have any defective item returned to its plant for inspection before making a repair or replacement. This warranty does not cover equipment damages resulting from abuse, damage in transit, or other damage beyond the control of DBI-SALA. This warranty applies only to the original purchaser and is the only one applicable to our products, and is in lieu of all other warranties, expressed or implied.



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This instruction manual is available for download at [www.capitalsafety.com](http://www.capitalsafety.com)