

# Instruction Manual

# POWERTEX

CE 0082

EN 341:1992 Class C

## RESCUE DESCENT DEVICE AR010

EC type examination carried out by CETE APAVE SUDEUROPE, BP 193, 13322 Marseille, France - 0082

Rescue descent device is a component of personal protective equipment against falls from a height - descender devices class C and conforms to EN 341.

Rescue descent device is destined for descending people from a height.

Rescue descent device can be used during industrial works on a height when:

- in the consequence of accident, injured or even unconscious worker is not able to rescue himself, or

- after arresting a fall by fall arrest system, the worker hangs away from any permanent construction elements.

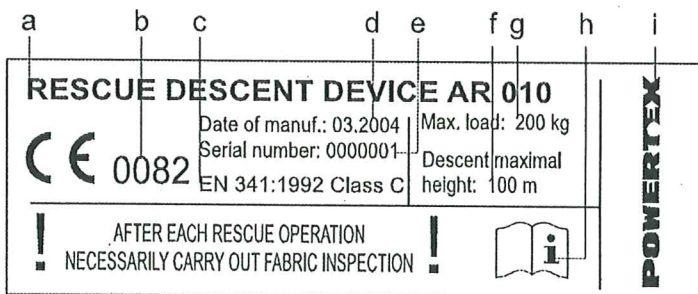
Admissible (maximal) load of the device is 200 kg. Maximal height of a descent is 100 m.

In both cases rescue operations must be carried out to evacuate injured person to the ground using rescue descent device.

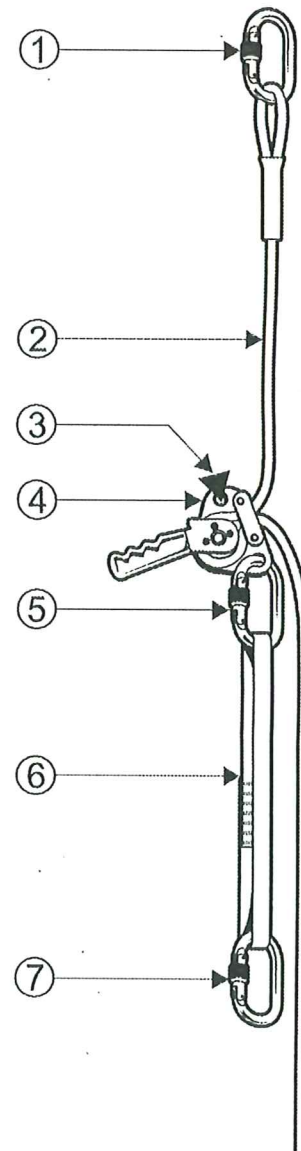
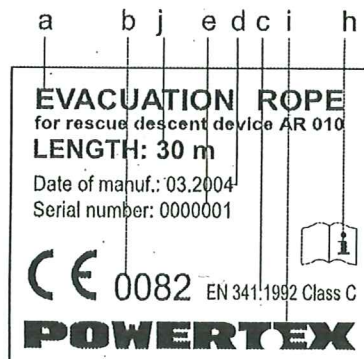
Rescue descent device consists of:

- ① snap hook of the evacuation rope
- ② 11 mm evacuation rope
- ③ indicator of position
- ④ descender
- ⑤ descender snap hook
- ⑥ webbing sling connector
- ⑦ rescue snap hook

### DEVICE MARKING



- a - device type  
b - CE mark and number of notified body which is responsible for controlling manufacture process (art. 11)  
c - European standard number/year/class  
d - month/year of manufacture  
e - serial number of the device  
f - admissible, maximal length of descent height  
g - admissible maximal load of the device  
h - caution: read the manual  
i - marking of the manufacturer or distributor of the device  
j - length of the evacuation rope

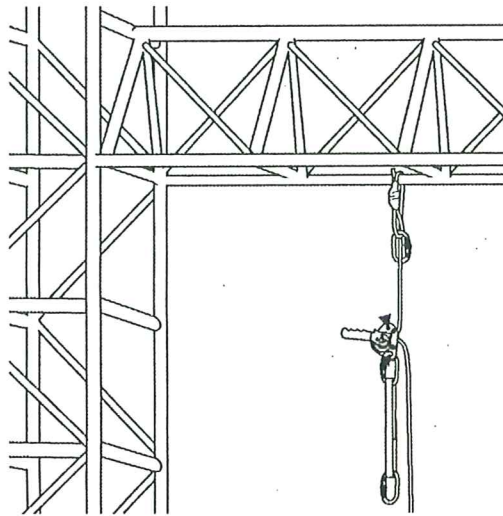


### TIME OF USE

Rescue descent device can be used for a five years. After this period detailed manufacturer's inspection must be carried out by a manufacturer or his authorized representative.

## GENERAL RULES OF A RESCUE OPERATION - RESCUER ACTIVITIES

A. Attach evacuation rope to the structural anchor point by the rope snap hook above the place of rescue operation - pict. 1.



pict. 1

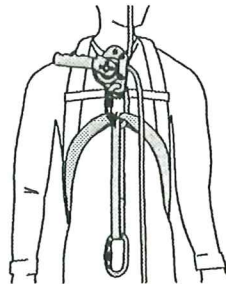
### ATTENTION:

Structural anchor point for attaching the evacuation rope of rescue descent device must have static resistance min. 15 kN.

The shape of the structural anchor point should not let self-acting disconnection of the rope. It is recommended to use certified and marked structural anchor point complied with EN 795.

B. Drop the evacuation rope and make sure the end of the rope is on the ground.

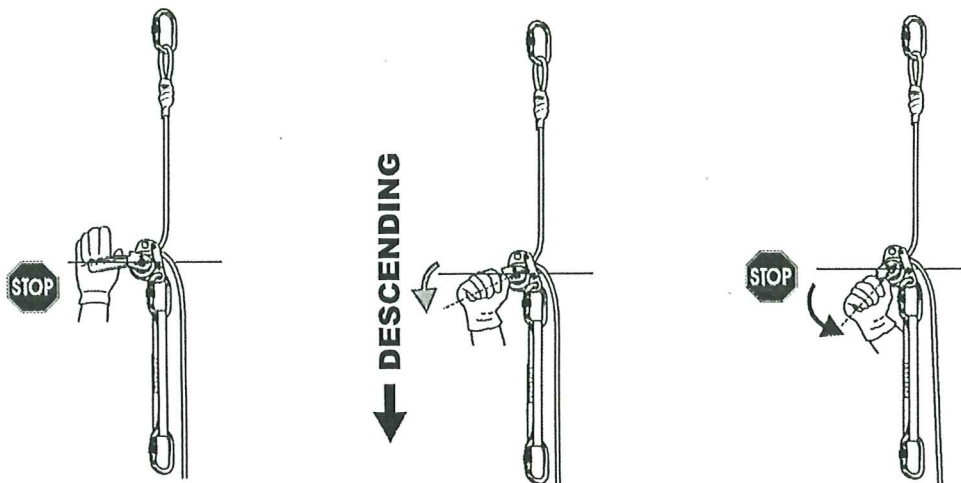
C. Attach descender snap hook to front attaching buckle of a safety harness - pict. 2..



pict. 2

D. Hang on the evacuation rope.

E. Pull down the handle of descender to the midpoint, start descending in the direction of injured person. The speed of descending is controlled by a position of the handle of descender. Entire pulling down the handle causes the stop of descender. Release of the handle also stops the descender - pict. 3.



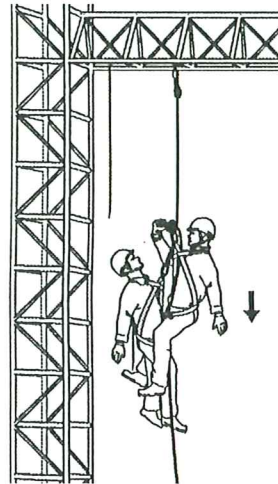
pict. 3



- F. After descending to the level of injured person, take hold of him with your legs and attach his safety harness to the descender with rescue snap hook. The rescue snap hook must be attached to front or back attaching buckle of injured person safety harness - pict. 4.
- G. Cut off a rope or webbing of device on which injured is hung.
- H. Descend to the ground with injured - pict. 5.



pict. 4



pict. 5

**ATTENTION:** The rescue descent device can be used only by a trained person. Only properly and regularly rescue training guarantees successful rescue operation.

Using the rescue descent device in connection with fall arrest system must be compatible with manual instructions of the fall arrest systems and obligatory standards:

- EN 361- for safety harness.
- EN 362 - for connectors.
- EN 354 - for lanyards
- EN 795 - for anchorages.

#### **OUT OF SERVICE**

The rescue descent device must be withdrawn from use and sent to the manufacturer or his authorized representative to carry out detailed manufacturer's inspection when:

- the device was used in a rescue operation,
- any defects appear during annual or every day use inspection,
- the device is used for a five years.

#### **THE ESSENTIAL PRINCIPLES FOR USERS OF PERSONAL PROTECTIVE EQUIPMENT**

- personal protective equipment shall only be used by a person trained and competent in its safe use.
- personal protective equipment must not be used by a person with medical condition that could affect the safety of the equipment user in normal and emergency use.
- a rescue plan shall be in place to deal with any emergencies that could arise during the work.
- it is forbidden to make any alterations or additions to the equipment without the manufacturer's prior written consent.
- any repair shall only be carried out by equipment manufacturer or his certified representative.
- personal protective equipment shall not be used outside its limitations, or for any purpose other than that for which it is intended.
- personal protective equipment should be a personal issue item.
- before use ensure about the compatibility of items of equipment assembled into a fall arrest system. Periodically check connecting and adjusting of the equipment components to avoid accidental loosening or disconnecting of the components.
- it is forbidden to use combinations of items of equipment in which the safe function of any one item is affected by or interferes with the safe function of another.
- before each use of personal protective equipment it is obligatory to carry out a pre-use check of the equipment, to ensure that it is in a serviceable condition and operates correctly before it is used.
- during pre-use check it is necessary to inspect all elements of the equipment in respect of any damages, excessive wear, corrosion, abrasion, cutting or incorrect acting, especially take into consideration:
  - in full body harnesses and belts - buckles, adjusting elements, attaching points, webbings, seams, loops;
  - in energy absorbers - attaching loops, webbing, seams, casing, connectors;
  - in textile lanyards or lifelines or guidelines - rope, loops, thimbles, connectors, adjusting element, splices;
  - in steel lanyards or lifelines or guidelines - cable, wires, clips, ferrules, loops, thimbles, connectors, adjusting elements;
  - in retractable fall arresters - cable or webbing, retractor and brake proper acting, casing, energy absorber, connector;
  - in guided type fall arresters - body of the fall arrester, sliding function, locking gear acting, rivets and screws, connector, energy absorber;
  - in connectors - main body, rivets, gate, locking gear acting.
- after every 12 months of utilization, personal protective equipment must be withdrawn from use to carry out periodical detailed inspection. The periodic inspection must be carried out by a competent person for periodic inspection. The periodic inspection can be carried out also by the manufacturer or his authorized representative.
- In case of some types of the complex equipment e.g. some types of retractable fall arresters the annual inspection can be carried out only by the manufacturer or his authorized representative.
- regular periodic inspections are the essential for equipment maintenance and the safety of the users which depends upon the continued efficiency and durability of the equipment.
- during periodic inspection it is necessary to check the legibility of the equipment marking.
- it is essential for the safety of the user that if the product is re-sold outside the original country of destination the reseller shall provide instructions for use, for maintenance, for periodic examination and for repair in language of the country in which the product is to be used.
- personal protective equipment must be withdrawn from use immediately when any doubt arise about its condition for safe use and not used again until confirmed in writing by equipment manufacturer or his representative after carried out the detailed inspection.
- personal protective equipment must be withdrawn from use immediately and destroyed (or another procedures shall be introduced according detailed instruction from equipment manual) when it have been used to arrest a fall

- a full body harness is the only acceptable body holding device that can be used in a fall arrest system.
- the anchor device or anchor point for the fall arrest system should always be positioned, and the work carried out in such a way, as to minimise both the potential for falls and potential fall distance. The anchor device/point should be placed above the position of the user. The shape and construction of the anchor device/point shall not allowed to self-acting disconnection of the equipment. Minimal static strength of the anchor device/point is 15 kN. It is recommended to use certified and marked structural anchor point complied with EN795.
- it is obligatory to verify the free space required beneath the user at the workplace before each occasion of use the fall arrest system, so that, in the case of a fall, there will be no collision with the ground or other obstacle in the fall path. The required value of the free space should be taken from instruction manual of used equipment.
- there are many hazards that may affect the performance of the equipment and corresponding safety precautions that have to be observed during equipment utilization, especially:
  - trailing or looping of lanyards or lifelines over sharp edges,
  - any defects like cutting, abrasion, corrosion,
  - climatic exposure,
  - pendulum falls,
  - extremes of temperature,
  - chemical reagents,
  - electrical conductivity.
- personal protective equipment must be transported in the package (e.g.: bag made of moisture-proof textile or foil bag or cases made of steel or plastic) to protect it against damage or moisture.
- the equipment can be cleaned without causing adverse effect on the materials in the manufacture of the equipment. For textile products use mild detergents for delicate fabrics, wash by hand or in a machine and rinse in water. Plastic parts can be cleaned only with water. When the equipment becomes wet, either from being in use or when due cleaning, it shall be allowed to dry naturally, and shall be kept away from direct heat. In metallic products some mechanic parts (spring, pin, hinge, etc.) can be regularly slightly lubricated to ensure better operation. Other maintenance and cleaning procedures should be adhered to detailed instructions stated in the manual of the equipment.
- personal protective equipment should be stored loosely packed, in a well-ventilated place, protected from direct light, ultraviolet degradation, damp environment, sharp edges, extreme temperatures and corrosive or aggressive substances.

IT IS THE RESPONSIBILITY OF THE USER ORGANISATION TO PROVIDE THE IDENTITY CARD AND TO FILL IN THE DETAILS REQUIRED.

THE IDENTITY CARD SHOULD BE FILLED IN BEFORE THE FIRST USE BY A COMPETENT PERSON, RESPONSIBLE IN THE USER ORGANIZATION FOR PROTECTIVE EQUIPMENT.

ANY INFORMATION ABOUT THE EQUIPMENT LIKE PERIODIC INSPECTIONS, REPAIRS, REASONS OF EQUIPMENT'S WITHDRAWN FROM USE SHALL BE NOTED INTO THE IDENTITY CARD BY A COMPETENT PERSON.

THE IDENTITY CARD SHOULD BE STORED DURING A WHOLE PERIOD OF EQUIPMENT UTILIZATION.

DO NOT USE THE EQUIPMENT WITHOUT THE IDENTITY CARD.

ALL RECORDS IN THE IDENTITY CARD CAN BE FILLED IN ONLY BY A COMPETENT PERSON.

## IDENTITY CARD

MODEL AND TYPE OF EQUIPMENT			
REF. NUMBER			
SERIAL NUMBER		DATE OF MANUF.	
USER NAME			
DATE OF PURCHASE		DATE OF PUTTING INTO OPERATION	

### PERIODIC EXAMINATION AND REPAIR HISTORY

	DATE	REASON FOR ENTRY PERIODIC EXAMINATION OR REPAIR	DEFECTS NOTED, REPAIRS CARRIED OUT AND OTHER RELEVANT INFORMATION	NAME AND SIGNATURE OF COMPETENT PERSON	PERIODIC EXAMINATION NEXT DUE DATE
1					
2					
3					
4					