

-Designers, Manufacturers and Suppliers of

Personal Protective Equipment

## **Users Manual**

English Version 2.2

# TORQ Range of Inertial Reel Fall Arresters

Thank you for purchasing this **TORQ Inertial Reel Fall Arrester**. Please take time to familiarize yourself with the correct use and operation.

It is imperative that this **TORQ Inertial Reel Fall Arrester** is only used for its intended purpose and that it is subject to an annual recorded thorough examination by a competent person.

To avoid personal injury, prior to using this **TORQ** Inertial Reel Fall Arrester or training others to use it, CAREFULLY READ and understand these instructions. If there is anything you do not understand DO NOT use the **TORQ** Inertial Reel Fall Arrester, contact the supplier or **Abtech Safety** for further details.

Certain information in this manual is governed by law and is subject to change without prior notice. Great care has been taken to ensure that the information is correct at the time of publication. However, it is the user's sole responsibility to ensure that they fully comply with all legal requirements. **Abtech Safety** will not accept liability for any inaccuracy or incorrectly stated legal requirements.

**Abtech Safety** operates a policy of continual improvement and reserve the right to change specifications without notice. The Manufacturer and / or their recognised agents, directors, employees or insurers will not be held liable for consequential or other damages, losses or expenses in the connection with or by reason of or the inability to use the **TORO Inertial Reel Fall Arrester** for any other purpose.

**Note**; training should only be delivered by a suitably qualified and competent person.

## Warning

In order to obtain optimum safety and performance please study and understand these instructions and receive adequate training by a trained and competent person before using this device. If in any doubt whatsoever about the safe use of this device seek the advice/supervision of a trained and competent person or contact the supplier. Please retain this information for future reference.

The consequences of improperly using the device, not following instructions or markings may be serious injury or death.

## Rescue Planning

The end user(s) should anticipate and plan rescue and recovery activities before use as part of a planned Risk Assessment for each use event and in the event of a fall or other scenario where rescue and recovery may be required. Speed of rescue and recovery must be considered as post fall injury can result if suspension time following a fall is prolonged.

The TORQ Inertial Reel Fall Arrester is a component part of a Fall Arrest System and may be issued to anyone who needs to use it on a personal issue basis. These User Instructions must be issued to the end user of this device who must maintain a record of the annual thorough examination on the Inspection Form provided.

## Warning

All work at height including the use of Personal Protective Equipment (PPE) as a control measure is subject to a suitable and sufficient risk assessment.

## System Requirements and Limitations of Use

This **TORQ Inertial Reel Fall Arrester** is intended for use as a Fall Arrest (Fall Arrest Block) or Recovery (Rescue, Recovery Block) device and is not intended for use for work positioning.

Warning: This TORQ Inertial Reel Fall Arrester must not be used where the terrain and/or anchorage point is unstable (e.g. grain silo's, shifting sand, powder, sludge, etc) as a slow descent will not activate the braking system.

## Maintenance

This **TORQ Inertial Reel Fall Arrester** has no user serviceable parts and must not be disassembled or adjusted except by the manufacturer or approved service agent. User maintenance is limited to pre-use inspection, cleaning, drying and storage as described in these User Instructions. When maintenance is required consult the supplier/manufacturer. Do not tamper with or adjust any part of the device. The device must not be marked in any way.

Wire specification: 5mm 7X19 Galvanised Steel Wire to BSEN12385:2002

Model Type Specifications:

Model No.	AB2.5T	AB6T	AB10T	AB15T	AB15RT		
Line length	2.5m	6m	10m	15m	15m		
Line type	45mm Webbing	Galv. Wire	Galv. Wire	Galv. Wire	Galv. Wire		
Standards	BS EN360 2002 ANSI/ASSE Z359.14-2012	BS EN360 2002 ANSI/ASSE Z359.14-2012	BS EN360 2002 ANSI/ASSE Z359.14-2012	BS EN360 2002 ANSI/ASSE Z359.14-2012	BSEN360 2002 BSEN1496 2006 ANSI/ASSE Z359.14-2012		
Weight	1.00kg	4.75kg	6.25kg	8.75kg	10.40kg		

## Temperature/Climatic Conditions

This **TORQ Inertial Reel Fall Arrester** may be used in normal climatic conditions within a temperature range of +54°C to -40°C; it is not intended for use outside these limits. Harsh environments may produce a harmful effect.

## **Electrical Hazards**

Due to the highly conductive nature of the materials used in the construction of this **TORQ Inertial Reel Fall Arrester** use Extreme Caution when working near unprotected high voltage sources. If in doubt, ask!

Use caution when using the equipment around moving machinery.

## Chemical Contamination

Avoid prolonged exposure to corrosive chemical reagents. If contamination occurs refer to Cleaning and Disinfection.

## Sharp Edges, Abrasion, Cutting

Wire rope or webbing should not be allowed to pass over a sharp edge without an edge protection device in place. In the event of a fall arrest, the wire rope or webbing may be damaged.

## General Operation, TORO Inertial Reel Fall Arrester

The mechanism in this device is activated by centrifugal force acting on the brakes. This action is produced by the inertia of a fall rapidly spinning the internal drum which in turn causes the brakes to lock and arrest the fall. Slow reeling of the line will not activate the brake. If the brake locks – due to a fall – the mechanism will reset if the load is removed. In a fall arrest situation the mechanism will limit the force acting on the body to less than 6kN

## Compatibility of Components

This TORQ Inertial Reel Fall Arrester may only be used with appropriate items approved to the requirements of CE certified PPE in line with the requirements of European Directive 89/686/EEC and the American National Standards Institute (ANSI). This device is not intended for use for any other application other than the purpose for which it is designed. The end user must read and understand the User Instructions supplied with other items of PPE to be used in conjunction with this device. If in doubt about the compatibility of other items of PPE to be used, consult the supplier. Full body harnesses used with this device must conform to BS EN361.

## **Anchorage Point**

Select a stable anchorage point with a minimum strength of 10kN (e.g. I beam, RSJ, Eye Bolt or Tripod).

## Pre-Use Inspection

If the **TORQ Inertial Reel Fall Arrester** is known to have arrested a fall it must be removed from service immediately, marked or tagged at 'UNUSABLE' and disposed of or serviced in accordance with the manufacturers recommendations.

Before each use check (a) that the brake operates correctly (b) that the block is securely anchored level with or above the user (NEVER below) (c) that all components to be used in conjunction with this device are approved and in good condition (d) avoid where possible anchoring the device in such a position that could result in a 'pendulum/swing fall' (this may occur if the device is positioned at  $> 30^\circ$  from the vertical in relation to the end user).

Extend the wire rope or webbing fully (wearing suitable protective gloves) and inspect along its length for damage, such as (a) broken wires (b) frayed wires/webbing (c) soiling and/or corrosion (d) kinks and twists in the wire (e) inspect the swage/stitching for damage, cracks, etc. (f) check the connector(s) being used as per the User Instructions supplied with the connector (g) check that the Overload Indicator is not exposed (red line on karabiner).

Retract the wire rope or webbing slowly; during retraction give a sharp sudden tug in order to activate the braking mechanism. This check should be carried out along the full length of the rope or webbing at approximately 20% increments. If the braking system is not activated or if any of the above criteria fail then the device must be removed from service.

Check the device housing for signs of mechanical deformation, cracks, or chemical contamination and/or other defects. Check labels and tags for absence or illegibility.

## Warning

This TORQ Inertial Reel Fall Arrester must be used by persons who are medically fit to do so. If you have any medical condition, are recovering from any medical condition or suffer from any physical or mental disability you must seek professional medical advice before using this arrestor block.

## In Use

Avoid the risk of a 'pendulum/swing fall' injury by working wherever possible as close to and directly below the anchorage point.

Ensure there is sufficient clearance below and around the user so that in the event of a fall obstructions (such as the ground) may be safely avoided (3m + height of user).

If used on the horizontal or incline, ensure the hazard of a pendulum fall is considered and ensure sufficient fall distance is correctly calculated. If in doubt contact the manufacturer.

This **TORQ Inertial Reel Fall Arrester** is of sturdy construction, however, all items of PPE should be handled with care and not dropped. When is use, care should be taken to avoid damage, which may be caused by items coming into contact with the device and the fall arrest system.

This **TORQ Inertial Reel Fall Arrester** is designed to protect ONE person. Only ONE person may be connected to this Fall Arrestor Block at any time.

Attach the **TORQ Inertial Reel Fall Arrester** line connector to the D ring on the users harness marked with an 'A', either front sternum or rear dorsal for fall arrest or extended overhead attachment point for rescue and recovery operations.

Although this device will function horizontally extreme caution must be practiced when using the device at more than 30° from vertical (see above).

Uncontrolled reeling may result in lock up. The wire rope must be paid back into the device slowly. In the event of the lockup consult the supplier or manufacturer for advice.

## Recovery TORO AB15RT

Release the winding handle docking mechanism.

Pull out the winding handle locking pin. Turn the winding handle anticlockwise while pushing down on the handle shaft in order to engage the winding gear.

Release the locking pin and ensure that the winding handle is locked in gear.

The person can now be raised or lowered by winding the handle clockwise or anticlockwise.

There should be direct or indirect visual contact or some other means of communication with the person at all times during the process.

The lifting/lowering function may be used for lifting/lowering loads up to 150kg.

The lifting facility should only be used if an unhindered lifting process is possible and that it shall not be used if obstacles present as hazard.

Ensure there is no slack line when the device is in rescue mode.

When retrieving an individual to an upper level ensure that the anchor point allows clearance from the access point to enable the retrieved individual to climb or be lifted clear of the access point.

## Cleaning, Drying, Storage and Transportation

The TORQ Inertial Reel Fall Arrester casing and wire should be cleaned using water of domestic supply quality at <40°C. A mild, neutral pH soap/disinfectant may be used in the event of extreme soiling, or if the device has been exposed to hazardous environments (e.g. drains, biohazards, etc).

This device should be stored in a cool, dry, clean, chemically neutral environment away form sources of heat and exposure to UV light.

Care should be taken during transportation in order to avoid hazards that may result in damage to the device or injury to person(s).

## Lifespan

This **TORQ Inertial Reel Fall Arrester** should be subject to a thorough examination at least once a year by a trained and competent person (this must be an **Abtech Safety** approved service agent). In the event of an arrested fall the device should be immediately removed from service and returned to the supplier/manufacturer for service.

If the **TORQ** is regularly serviced, correctly stored and not subject to extreme environments or working conditions then the manufacturer recommends a 10 year life from date of first use. In the event of any doubt whatsoever please seek the advice of a trained and competent person or the supplier.

## **Product Details**

This manual must be provided to and retained by the user. The Product Code, Serial Number and date of Manufacture of this **TORQ Inertial Reel Fall Arrestor** should be entered on the back page of this manual for future reference and inspection records.

Note: The device serial number is laser etched into the block swivel connector.

## **About This Manual**

This User Manual is for English speaking countries only. If you require this manual in a different language, please Contact Abtech Safety. When this item is sold on, this manual must accompany it and be supplied in the language of the destination country.

## **Product Conformance**

**TORQ** Inertial Reel Fall Arrester all conform to BS EN360:2002 Personal protective equipment against falls from a height - retractable type fall arresters.

In addition the TORQ AB15RT conforms to BS EN1496:2006 Class A and B - rescue lifting device.

TORQ self retracting lifelines all conform to ANSI/ASSE Z359.14.2012 American National Standard - Safety Requirements for Self - Retracting Devices for Personal Fall Arrest and Rescue Systems.

These devices must be used in accordance with national regulations governing occupational safety.

The TORQ range is available in various line lengths to suit a user's specific requirement. The maximum working length is designated by the model number i.e. a TORQ AB6T has a maximum working length of 6m. The 15m device is also available as a Rescue/Recover version and is designated 15RT

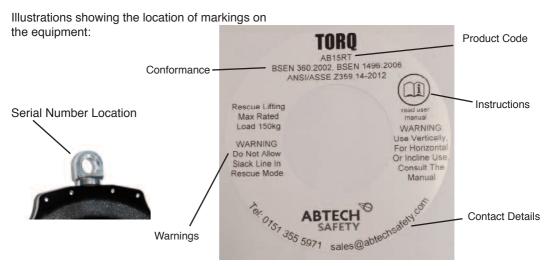
Average arresting force when dynamically tested in accordance with the ANSI Z359.14-2012 section 4.2.1

TORQ AB2.5T - 2.85kN TORQ AB6T - 2.60kN TORQ AB10T - 2.96kN TORQ AB15T - 5.25kN TORQ AB15RT - 5.25kN

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## EC DECLARATION OF CONFORMITY

Notified Body Issuing EC Certification SGS (UK) Ltd Worle Parkway Weston-Super-Mare Somerset **BS22 6WA** UK Notified Body Number 0120

## **Explanation of Markings**

CE Marking: Meets the requirements of European Directive 89/686/EEC. 0120CE Notified body number and CE mark

## All Abtech Safety TORQ conform to:

BS EN360:2002 Personal Protective Equipment against Falls from a Height, Retractable Type Fall Arrestors. ANSI/ASSE Z359.14-2012 - Safety Requirements for Self-Retracting Devices for Personal Fall Arrest and Rescue Systems

In addition to BS EN360: 2002 the 'TORQ AB I 5RT' conforms to BS EN1496:2006 Class A and B Lifting Device.

Production Code/Model Number (All Abtech Safety TORQ) yydddXXXX year of manufacture and traceable batch code e.g.(09 year, day of year, XXXX unique serial number) Book Pictogram: reminder to read and understand these user instructions. which should be retained for future reference

## Production Code/Model 'TORQ AB 1 5RT' BS EN1496 Recovery Block, Class A and B Lifting Device

150kg: Maximum working load/rated load

15m: Maximum lifting distance (line length)

Product Name	
Product Code	
Serial Number	
Date of Manufacture	

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Abtech Safety TORQ Range of Fall Arrestor Blocks Manual

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# SUPPLIER:...... DATE PURCHASED:...../..... USER NAME:........ DATE FIRST USED:...../...../

DATE	PASS/FAIL	COMMENTS/ACTIONS	NEXT INSPECTION DUE	PRINT NAME	SIGNED
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recommended by Abtech Safety. (Doc	safety. (Documentation of the equipment inspections shall be maintained by the program administrator.)	be maintained by the progr	am administrator.)
Type of Use	Conditions Of Use	Competent Inspection	Factory Service
Infrequent to Light	Good storage, indoor, clean environment	Bi Annual	Anually
Moderate to Heavy	Fair storage, extended outdoor use, dusty environments	Quarterly	Anually
Severe to Continuous	Poor storage, harsh conditions, prolonged outdoor use, all temperatures, dirty environment	Monthly	Bi Anually

SIGNED																		
PRINT NAME																		
NEXT INSPECTION DUE	/ /	/ /	/ /	/ /	/ /	/ /	/ /	1 1	1 1	1 1	1 1	/ /	/ /	/ /	1 1	/ /	/ /	1 1
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OWNER / HIRER DETAILS OR ADDITIONAL NOTES