



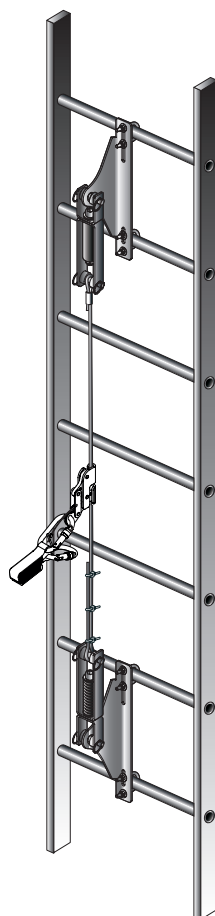
stopcable™ - EN353-1 / EN353-2

English GB

Vertical cable lifeline

Installation, user and maintenance manual

Original manual

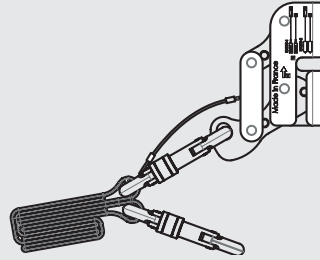


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F - stopcable™ fall-arrest equipped with an M10 connector and a shock absorber



G - Intermediate cable guide



H - Information panel

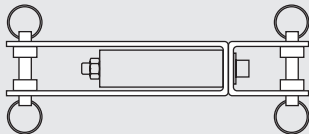


A - Upper and lower stainless steel anchor

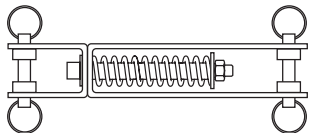
B - Upper and lower galvanised anchor



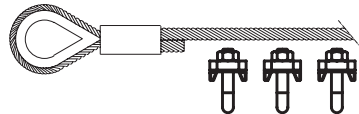
C - Shock absorber



D - Pre-tension indicator tensioner



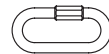
I - Cable for security line



J - Counterweights



K - Quick link

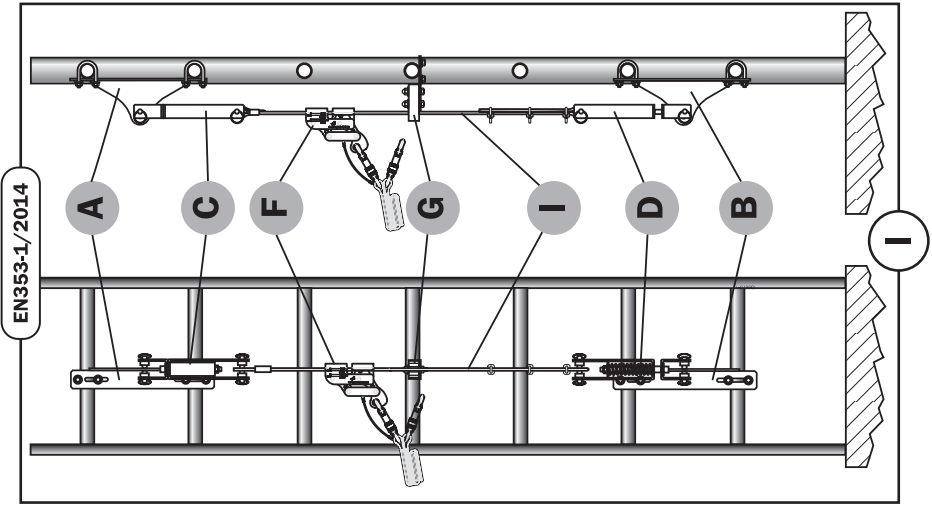
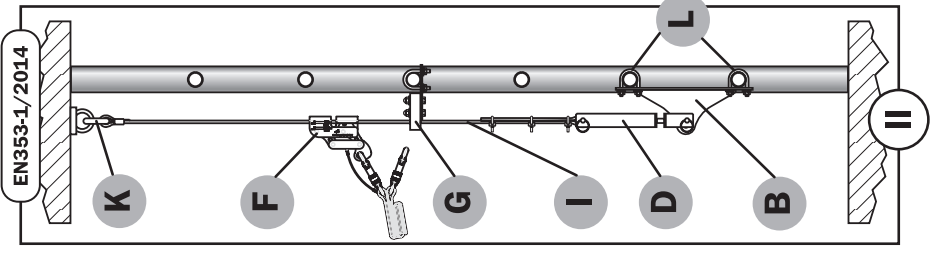
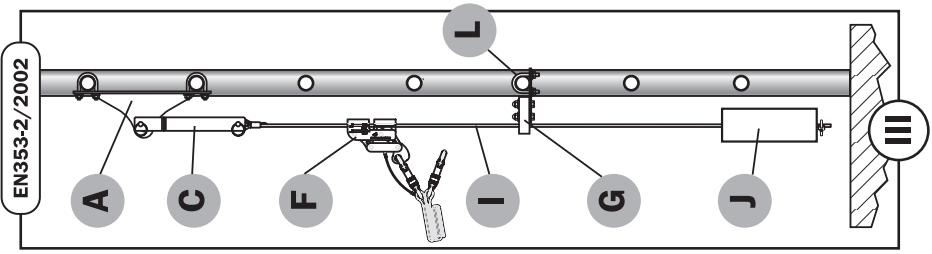
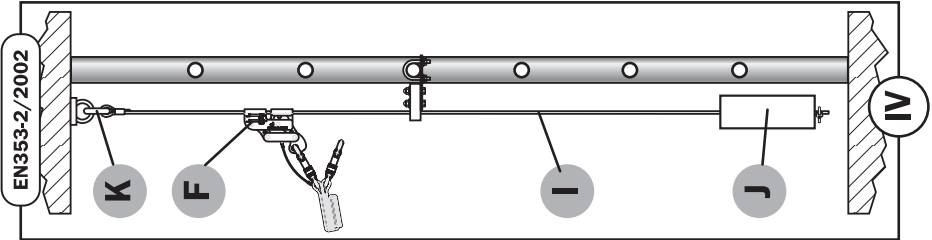


L - Ø 27mm cable clip



M - Ø 34mm cable clip





Preliminary note:


All instructions from this manual refer to a vertical lifeline made up of a fixed installation and an individual mobile fall-arrest device. All instructions that make reference to "PPE" (Personal Protective Equipment) refer to PPE against falls from height.

1. General warning

1. The purpose of the stopcable™ lifeline function is to manage serious risks of people falling. Therefore, it is essential for the safety of installation and using the equipment, and for its efficiency, to read this manual and strictly adhere to the instructions in it, before and during installation and when using the lifeline.
2. This manual should be delivered to the lifeline management user and remain available to any user and installer. Additional copies may be supplied by Tractel SAS upon request.
3. Use of the stopcable™ lifeline requires attachment to a complete fall-arrest harness. The system should establish a system which prevents or stops any falls from height under conditions which comply with the applicable safety regulations and standards.
4. The information panel, to be set up at each of the lifeline's access points, must be kept fully legible throughout the duration of use of the lifeline. Copies may be supplied by Tractel SAS upon request.
5. Each operator using a stopcable™ lifeline must meet the physical and professional ability requirements for working at heights. They must have received, under risk-free conditions, suitable prior training in theory and practice, involving PPE in accordance with safety requirements. This training should include comprehensive information on the chapters of this manual concerning the use of this device.
6. **As each lifeline system is made for a specific situation, any installation of a stopcable™ lifeline must be preceded by a specific technical study** of its installation, to be performed by a qualified technician, including the necessary calculations for the installation's and this manual's specifications. This study must take into account the configuration of the set up site and verify, in particular, the mechanical suitability and strength of the structure to which the stopcable™ lifeline must be secured. It must be entered into a usable technical file by the installer.
7. Installation of the lifeline should be carried out using appropriate means, under safety conditions which completely control any risk of falls for the installer, due to site conditions.
8. The operation, maintenance and management of the stopcable™ lifeline should be the responsibility of technicians who know the applicable safety regulations and standards for this type of hardware and for the equipment associated with it. Each user must have read and understood this manual. The first implementation must be checked by a qualified technician to check that the installation complies with the preliminary study file and this manual.
9. The user of the lifeline should check and ensure the continual compliance of this lifeline, and that of the PPE associated with it, in accordance with the safety requirements and with the applicable rules and standards in the country of use. They must ensure the compatibility of the associated PPE, with each other and with the lifeline.
10. The lifeline and the equipment associated with it should never be used if they are not clearly in good condition. In case of a visual observation of a defect, it is imperative to repair the defect observed before any further use. Periodic inspection of the stopcable™ lifeline and its associated PPE must be organised at least once a year as indicated in paragraph 14, under the guidance of a qualified operator who is trained for this purpose. This training can be provided by Tractel S.A.S. This inspection must be carried out in accordance with Directive 89/656/EEC and this manual's instructions.
11. Before each session of use, the user must carry out a visual inspection of the lifeline to ensure it is in good working order, that the associated PPE is as well, that they are compatible and that they are properly installed and connected.
12. The lifeline should only be used for protection against people falling, in accordance with this manual's instructions. No other use is permitted. In particular, it should never be used as a suspension system. It should never be used by more than one operator at a time and it should never be subjected to a force greater than that which is indicated in this manual.
13. It is prohibited to repair or modify the parts of stopcable™ lifeline or to install parts which were not supplied or recommended by Tractel SAS. Dismantling the stopcable™ lifeline carries serious risk of injury or property damage (spring effect). This dismantling should be reserved exclusively for a technician fully conversant with the risks of taut cable dismantling.
14. Tractel SAS does not accept any responsibility for the installation of stopcable™ lifelines carried out outside of its instruction.
15. When any point of a stopcable™ lifeline has been subjected to stress by an operator falling, the entire lifeline, especially the anchors, seals and anchoring points located within the fall zone, as well as personal protective equipment affected by the fall,

must be inspected before returning to use. This inspection shall be conducted in accordance with the instructions in this manual, by an operator who is trained for such a purpose. Components or non-reusable items should be discarded and replaced in accordance with the instruction manuals supplied by the manufacturers of these components or items.

16. Any stopcable™ lifeline which has not been regularly inspected over the last twelve months should not be used. It cannot be used again until after a new regular inspection, carried out by a skilled and competent technician who authorises its use in writing. If this inspection and authorisation is not carried out, the lifeline will be decommissioned and destroyed.
17. The maximum use load is 150kg per operator for stopcable™ lifelines.
18. If the mass of each operator in addition to the mass of their equipment and tools is between 100kg and 150kg, it is imperative to ensure that this total mass (operator + equipment + tools) does not exceed the maximum use load for each of the units which make up the system for preventing falls.
19. It is essential for the safety of the operator that the device or the anchor point are positioned correctly and that the work is carried out in a manner which minimises the risk of falls, as well as their height.
20. For the operator's safety, if the equipment is resold outside the original destination country, the reseller should supply: A user manual, instructions for maintenance, periodic inspection and repair, provided in the language of the country where the equipment will be used.
21. The stopcable™ lifeline should not be used for help and rescue operations.

 **NOTE:** For any special applications, please contact TRACTEL®.

2. Definitions and pictograms

2.1 Definitions

"User": Person or department responsible for the management and safe use of the product described in the manual.

"Technician": Qualified person in charge of the maintenance operations described and permitted by the user manual, who is skilled in and familiar with the equipment.

"Operator": Person using the equipment in accordance with its purpose.

"PPE": Personal protective equipment against falls

from height.

"Connector": Connecting element between components of a fall arrest system. It complies with regulation EN 362.

"Fall-arrest harness": A body gripping device intended to stop falls. It consists of straps and buckles. It is made up of fall-arrest attachment points marked with an A if they may be used alone, or marked with A/2 if they must be used in combination with another A/2 point. It complies with regulation EN 361.

"Mobile fall-arrest including a Flexible Anchorage Support": subsystem made up of a flexible anchorage support, a mobile fall-arrest with automatic blocking which is connected to the flexible anchorage support and to a connector or to a rope which ends in a connector. Installation of an energy dissipation function is allowed between the mobile fall-arrest and the anchorage support, or the incorporation of an energy absorber on the rope or anchorage support [EN 363].

"Mobile fall-arrest including a Rigid Anchorage Support": part of a system which stops falls, made up of a mobile fall-arrest and a rigid anchorage support

– The mobile fall-arrest and the rigid anchorage support constitute a product, that is to say that they are tested, certified and intended to be used together.

"Mobile fall-arrest": device supplied with an automatic blocking function, a guidance device, a connection element to connect with the anchorage element corresponding to the fall-arrest harness, which accompanies the operator alongside upwards and downwards changes, without requiring any manual adjustments, and which automatically blocks on the anchorage support in the case of a fall.

"Maximum use load": Maximum mass of the dressed operator, equipped with their PPE, their work uniform, their tools and the components which they need to carry out their work.

"Flexible anchorage support": connection element specified for a subsystem with a mobile fall-arrest. A flexible anchorage support may be a synthetic fibre cord or a metallic cable. It is intended to be connected to an upper anchorage point.

"Rigid anchorage support": metallic rail or cable under a tension fixed at the two ends and, if need be, all of the manufactured extremities, fixation points, connection parts, connectors, energy dissipation elements, tensioning and stoppage elements, intended to be used with a mobile fall-arrest.

"System for stopping falls": Equipment made up of the following elements:


– Fall arrest harness.


- Fall arrest with automatic retraction or energy absorber or mobile fall arrest on a rigid anchorage support or a mobile fall arrest on a flexible anchorage support.
- Anchoring
- Connection element


"System for stopping falls": Generic term which defines one of the following elements:

- Fall arrest harness.
- Fall arrest with automatic recallor energy absorber or mobile fall arrest on a rigid anchorage support or a mobile fall arrest on a flexible anchorage support.
- Anchoring
- Connection element

2.2 Pictograms

 **DANGER:** Placed at the start of the line, designed using instructions intended to avoid damage to operators, particularly fatal, severe or mild injuries, as well as environmental damage.

 **IMPORTANT:** Placed at the start of the line, indicates instructions intended to avoid fault or damage of the equipment, but not directly putting in danger the life or health of the operator or that of other people, and/ or being likely to damage the environment.

 **NOTE:** Placed at the start of the line, indicates instructions intended to ensure the effectiveness or usefulness of the installation, use or maintenance operation.

3. Functions and description


The stopcable™ lifeline is a piece of Personal Protection Equipment (PPE) against falls from height, including a vertical support anchorage made up of a cable, intended to secure the operator's movements on a metallic vertical ladder which is fixed and straight. It is manufactured and tested according to two versions respectively compliant with regulations EN 353-1/2014/EN 353 -2/2002. It includes an fall-arrest device, equipped with a connector, moving along the anchorage cable and automatically blocking in the case of the operator falling.

The stopcable™ lifeline may appear in one of the following four fitting versions (see page 3):

- I. Anchorage support fixed on upper and lower ends of the ladder,
- II.I. Anchorage support fixed on the upper end of the ladder and weighted away from the lower end of the ladder,

III. Anchorage support fixed on the upper end away from the ladder and fixed on the lower end to the ladder,

IV. Anchorage support fixed on the upper end away from the ladder and weighted away from the ladder at the lower end.

 **DANGER:** The stopcable™ lifeline cannot support more than one operator at a time. The operator secured from falling on the stopcable™ lifeline should not exceed 150kg including equipment.

stopcable™ lifelines break down into eight versions in accordance with the following installation and usage specifications:

Type of installation:

- Type R: installation on a rigid anchorage support according to EN353-1/2014
- Type F: installation on a flexible anchorage support according to EN353-2/2002


Type of cable:

- Type G: Galvanised rope for installations with moderate corrosion risk.
- Type S: Stainless steel rope when there is risk of salt spray corrosion, or offshore and in a chlorinated environment.


Option:

- Type A: line installation with an energy absorber line.

Designation	Description
RSA stopcable™	Lifeline on a rigid anchorage support with a stainless steel cable with an energy absorber line and mobile fall-arrest device with tear absorber
RS stopcable™	Lifeline on a rigid anchorage support with a stainless steel cable and mobile fall-arrest device with tear absorber
RGA stopcable™	Lifeline on a rigid anchorage support with a stainless steel cable with an energy absorber line and mobile fall-arrest device with tear absorber
RG stopcable™	Lifeline on a rigid anchorage support with a galvanised steel cable and mobile fall-arrest device with tear absorber
FSA stopcable™	Lifeline on a flexible anchorage support with a stainless steel cable with an energy absorber line and mobile fall-arrest device with tear absorber
FS stopcable™	Lifeline on a flexible anchorage support with a stainless steel cable and mobile fall-arrest device with tear absorber
FGA stopcable™	Lifeline on a flexible anchorage support with a galvanised cable with an energy absorber line and mobile fall-arrest device with tear absorber
FG stopcable™	Lifeline on a flexible anchorage support with a stainless steel cable and mobile anti-fall device with tear absorber

 **NOTE:** The stopcable™ lifeline must, following each of the above versions, be made up of elements taken from the table below:

Standard		EN353-1/2014		EN353-2/2002	
		I	II	III	IV
Upper anchor on the ladder	A	1	-	1	-
Lower anchor on the ladder	B	1	1	-	-
Line energy absorber	C	1	-	1	-
Tensioner	D	1	1	-	-
stopcable™ fall-arrest 150kg	F	1	1	1	1
Intermediate cable guide	G	A guide every 10m			
Information panel	H	1	1	1	1
Lifeline cable	I	1	1	1	1
Counterweights	J	-	-	1	1
Quick link	K	-	1	-	1
Dia. cable clip 27mm* with 2 nuts and washers	L	4	2	2	-
Dia. cable clip 34mm* with 2 nuts and discs	M				
* to be chosen according to rung diameter		+1 cable clip per cable guide			

 **IMPORTANT:** The structural anchor for docking of the upper end away from the ladder (versions III and IV) is not supplied with the stopcable™ lifeline. It should be designed and defined by the preliminary study and should have an R resistance higher than or equal to 12KN.

Before any use of the stopcable™ fall-arrest device, ensure that a specific rescue plan has been put in place in the case of a fall.

4. Associated equipments

System for stopping falls (EN 363):

- An anchorage (EN 795).
- An extremity connector (EN 362).
- An fall-arrest system (EN 353-1/EN 353-2).
- A connector (EN 362).
- An fall-arrest harness (EN 361).

5. Preliminary study

A **preliminary study** by a competent, specialised technician, particularly in material strength, **is required before installing the lifeline**. This study will be based on a calculation report and take into account the applicable regulations, standards and applicable best practice, as well as this manual, both for the lifeline and the associated PPE. This manual should therefore be given to the technician or research unit in charge of the preliminary study.

The technician or research unit should study the risks to be covered by the installation based on site configuration and activity to be protected by the stopcable™ lifeline against the risk of falls. Based on these risks, it must:

- define usage limits of the equipment in order to exclude any permanent deformation of the structure or deterioration of the interface (ladder) in the case of a fall, as well as any risk of operators colliding with elements in their surroundings in the case of a fall. The upper anchor and its two load-bearing rungs, or its anchor point away from the ladder, should be able to support all forces caused by a operators falling.
- define the fixing method (type, dimensions, material) for the upper end of the stopcable™ lifeline on the load-bearing structure, when the anchor support is not fixed to the ladder at this end.
- check the mechanical resistance of the ladder to which the lifeline should be fixed, and the compatibility of the ladder with the stopcable™ lifeline and its function.
- organise, if need be, the exit conditions at the ladder's upper end in accordance with safety and ergonomics priorities. For this purpose, make sure you have a second rope, connected to the operator's harness to allow them to connect to an anchorage point fixed to the place to which the ladder provides access.
- define the PPE to be used in order to ensure their compliance to regulations, and their compatibility with the stopcable™ lifeline, taking into account the site configuration and air draught required at all points of the usage area.
- establish a description of the stopcable™ lifeline's installation to be implemented with all its components, as well as a set up plan, in accordance with the site's configuration, describing, if need be, the secured access to the places which the ladder provides access. The preliminary study will take into account, where relevant, the presence of electrical equipment near the installation of the lifeline to ensure the protection of the operator from such equipment.

This preliminary study should be transcribed into a technical file containing a copy of this manual, which will be handed back to the installer with all the information required for its implementation. This file must be compiled even if the preliminary study is carried out by the installer.

Any change in the configuration of the area covered by the stopcable™ lifeline that could affect safety or use of the facility should include a revision of the preliminary study, before continuing use of the lifeline. Any changes to the installation should be carried out by a technician with the technical expertise for the installation of a new lifeline.

Tractel SAS is at your disposal to carry out the preliminary study needed to install your stopcable™ lifeline and to study any special stopcable™ lifeline installation. Tractel SAS can also provide you with the necessary PPE against falls from height, and assist you regarding existing installations or installation projects.

6. Clearance

The maximum clearance for the stopcable™ lifelines is:

- * For lifelines compliant with regulation EN 353 -1/2014 T = 2m.
- * For lifelines compliant with regulation EN 353 -2/2002 T = 2.60m.

7. Installation

The stopcable™ lifeline EN 353-1/2014 can be installed with a maximum angle compared to the vertical angle of 15° forward and 15° laterally. The stopcable™ lifeline EN 353-2/2002 can be installed with a maximum angle compared to the vertical angle of 15°.

The installer and project manager, if the latter is not the installer, must obtain this manual and the preliminary study and ensure that it addresses all the aforementioned points.

In particular, they must ensure that this study takes into account the applicable regulations and standards, both for the vertical lifeline and the PPE to be implemented.

The installation of the stopcable™ lifeline should be carried out in accordance with the prior study submitted to the installer. Furthermore, it must be preceded by a visual inspection of the site by the installer, who will check that the site configuration is consistent with that taken into account by the study, if she/he herself/himself is not the author. The installer should have the skills required to implement the preliminary study in accordance with the standard best practice.

Before performing the work, the installer must organise their work site so that installation work is carried out under the required security conditions, particularly in terms of Labour Laws. They will establish collective and/or individual protective measures necessary to that end. They shall verify that the equipment to be installed is compliant in type and quantity with the equipment described in the prior study.

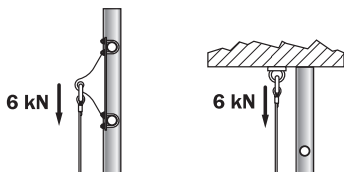
The work station enabling the implementation, if need

be, of an upper end anchor away from the ladder, should be secured in accordance with the applicable safety regulations.

The installation principles for each fixing version can be found on page 3. An EN 353-1 installation procedure is then illustrated from page 18 to page 28. Page 18 shows the equipment necessary to proceed with installation of the stopcable™ lifeline, not including the necessary tools, if need be, for the implementation of an upper end anchor away from the ladder.

To install the EN 353-2 lifeline, the lower anchor (A) will be replaced with the counterweights (J). See image on page 28.

Adding loads to the structure:



For all other configurations, the anchorage should support a load of 6kN minimum in the direction of the cable. If necessary, contact Tractel SAS.

8. Prohibited use

The use of stopcable™ lifelines in compliance with the instructions in this manual is a guarantee of complete safety. Nonetheless, it is important to warn the user against the following methods of incorrect handling and usage:

IT IS STRICTLY FORBIDDEN:

- to install or use a stopcable™ lifeline without being authorised, trained and recognised as competent or, failing that, without being under the supervision of user who is authorised, trained and certified to do so,
- to use a stopcable™ lifeline if any of the markings on the line, on the fall arrest device or on the information panel are no longer present or legible (see section 13)
- to install or use a stopcable™ lifeline that has not been previously checked,
- to use a stopcable™ lifeline that has not been subject to regular inspection during the previous 12 months by a technician who has authorised its return to use in writing (voir § 12),
- to use the stopcable™ lifeline for any other purpose other than the purpose described in this manual.
- to install a stopcable™ lifeline on a structure when the preliminary study (see section 5) has not been carried out or when the conclusion is that it would not be suitable for the installation of a lifeline;
- to install a stopcable™ lifeline in any manner other

- than that described in this manual;
- to use the stopcable™ lifeline after the life expectancy predicted by Tractel® (see section 15),
- to use a stopcable™ lifeline with more than 1 operator at any one time;
- to use the stopcable™ fall-arrest device with one person who has a mass, equipment and tools included, amounting to more than 150kg.
- to use the stopcable™ fall-arrest with a total load between 100kg and 150kg (total mass of the operator, their equipment and tools) if an element of the fall stop system has a weaker maximum usage load.
- to use the stopcable™ lifeline without having checked the compatibility of the stopcable™ fall-arrest device with the stopcable™ lifeline,
- to use a stopcable™ lifeline and fall-arrest device which have been used to support a falling operator,
- to use a stopcable™ lifeline as a means of suspension or to stay in a given position,
- to use a stopcable™ lifeline in hazardous surroundings,
- to use a stopcable™ lifeline in a highly corrosive atmosphere,
- To use a stopcable™ lifeline outside a temperature range of between -35°C and +50°C,
- to use a stopcable™ lifeline if the clearance is insufficient in case of a operator falling or if there is an obstacle located in the path of the fall,
- to carry out repairs on the stopcable™ lifeline or the fall-arrest device without having received training,
- to use a stopcable™ lifeline if you are not physically fit,
- to authorise a pregnant woman to use of a stopcable™ lifeline,
- to use a stopcable™ lifeline if, in the event of a fall by a person, a rescue plan has not been previously established,
- to use a stopcable™ lifeline if the safety function of one of the associated components is affected or interfered by the safety function of another component;
- to use the stopcable™ fall-arrest device with the connector placed in the opening between the small connecting rods and the body of the fall-arrest device,
- to carry out a dynamic approval test of the stopcable™ lifeline,
- to pull on the stopcable™ fall-arrest device in an attempt to disengage it from a potential obstacle,
- to connect or disconnect from the lifeline cable at a location other than that or those provided for this purpose,
- to pass the lifeline cable or the PPE ropes across sharp edges or corners forcing them to rub against hard surfaces,
- to install an EN 353-1/2014 stopcable™ lifeline on a ladder which has an inclination angle compared to the vertical angle of above 15°,
- to install an EN 353-2/2002 stopcable™ lifeline on a ladder which has an inclination angle compared to the vertical angle of above 15°,

- to use the stopcable™ lifeline by any other method of connection to the line other than the compatible stopcable™ fall-arrest device
- to use components other than the stopcable™ Tractel® components.

⚠ DANGER: The deviation angle of the stopcable™ line with the vertical angle should in no case exceed 15° forward, to the left or to the right in EN353-1/2014 and 1° in EN353-2/2002.

9. Information panel

A Tractel® signal board 146465 or 146475, in compliance with the model illustrated on page 17, is supplied with each stopcable™ anchorage cable. A board of this type should be fixed to each lifeline access point.

If additional access points are planned, Tractel® can supply the necessary number of models. The Tractel® board is drawn up in six languages, three languages on each side. We take care to position the information panel to display to the user and the operator the side of the panel containing the information in the language of the country where the site is located.

Any information to be shown on this board by the installer must be written in permanent marker or metal stamped characters, easily legible for the operator. Any damaged boards should be replaced before further use (see page 17).

10. Operation

The stopcable™ lifeline should only be used to protect against falls according to regulations EN353-1/2014 and EN353-2/2002. It should not be used for support at work. If support at work is required, use a separate system in accordance with EN358/1999.

The operator should directly connect their fall-arrest harness to the fall-arrest connector by a sternal or lateral ring, onto an fall-arrest anchorage point marked with an A if they may be used alone, or marked with A/2 if they must be used in combination with another A/2 point.

The operator should carry out an initial suspension test in a safe place, in order to ensure that the harness is in order and that it supplies the correct level of comfort and safety required for its planned use. If the harness comes loose during ascent or descent, it should be correctly readjusted from a safe place.

The user of the stopcable™ lifeline must, before beginning operations, obtain a copy of the mandatory preliminary study file from the installer. They should have knowledge of the contents of this manual and also the user instructions included with the stopcable™ device.

They should ensure that the personal protective equipment (PPE) for use with the stopcable™ lifeline complies with regulations and standards in force, is compatible with the installation and is in good working condition.

Any person who uses a stopcable™ lifeline must be physically able to work at height and have received prior training in its use in accordance with this manual, including a risk-free demonstration in combination with the use of the associated PPE.

The main stages of use concern the connection of the operator to the lifeline and their disconnection, as well as crossing the cable guides. The method of connection to the lifeline and crossing the intermediate cable guides should be explained with care and the operator's understanding of this method should be checked. Likewise, for use of the fall-arrest harness, as well as, if need be, for the safe passage to the areas to which the ladder provides access.

a) Connection/Disconnection:

The stopcable™ fall-arrest, although it is a part of the lifeline installation, can be easily set up and removed from the anchorage cable by following the manoeuvre indicated on page 16. The M10 connector passing through the stopcable™ fall-arrest ring, as well as the M10 connector hooked onto the absorber, are an integral part of the stopcable™ fall-arrest device, and they should never be separated. For the stopcable™ fall-arrest device, the M10 connector should be directly connected to the sternal or lateral ring of the fall-arrest harness.

👉 IMPORTANT: It is forbidden, at risk of putting the safety of the operator in serious danger, to use any other fall-arrest device than the stopcable™ model on the stopcable™ anchorage support.

⚠ DANGER: Before putting the stopcable™ fall-arrest device in place on the anchorage support, the operator must check that the reference engraved on the fall-arrest device (Section 13) is in accordance with the marking on the tensioner (D) or on the counterweights (J) located on the lower part of the stopcable™ lifeline.

👉 NOTE: The stopcable™ fall-arrest device is equipped with a safety system which does not allow you to set up the fall-arrest device in the wrong way on the stopcable™ lifeline.

b) Crossing the cable guides:

Crossing the intermediate cable guides should be carried out as indicated on page 15.

The stopcable™ lifeline must be used exclusively for protection against falls from height, and in no case should it serve as a means of suspension. It must be used exclusively in combination with CE certified PPE


and comply with applicable regulations and standards. A complete fall-arrest harness is the only operator body-gripping equipment which is acceptable for use with a lifeline.

The stopcable™ lifeline must never be used beyond the limits indicated in the preliminary study and in this manual.

A visual inspection of the entire lifeline system and of the associated PPE must be carried out prior to each use. In the event of a fault or damage being detected on the installation, it should be immediately withdrawn from use until the anomaly is rectified by a qualified technician. The area through which the lifeline is expected to travel should be kept clear of any obstruction.

The user, owner or manager of the building receiving a stopcable™ lifeline should set up an operator's rescue procedure in case of a fall at any point on the lifeline, and for all other emergencies, in order to evacuate the operator under conditions compatible with the preservation of their health.

The Labour Laws in certain countries prescribe that "where use is made of personal protective equipment (against falls from height), a worker must never be left alone so that they can be rescued in sufficient time compatible with the preservation of their health. ". TRACTEL® recommends that all operators comply with this requirement.

 **IMPORTANT:** At no time must the operator find themselves disconnected from the stopcable™ lifeline when they are in a location where there is a risk of falling. As a result, they must not access or leave the lifeline other than at the points provided for the purpose.

11. Maintenance and storage

If a stopcable™ fall-arrest device is dirty, it should be washed in clear, cold water and finished with a washing powder for delicate materials, using a synthetic brush.

If during use or washing, a stopcable™ fall-arrest device becomes wet, it must be left to dry naturally in the shade and far away from any source of heat.

During transport and storage, protect the equipment in packaging which is resistant to humidity against all danger (source of direct heat, chemical products, UV, etc.).

12. Checking, inspection and maintenance

Any installation of the vertical stopcable™ lifeline (EPI) should, before being used or reused after disassembly or repairs, as well as once every twelve months, have all the components inspected by a competent technician in order to ensure compliance with legal and safety standards, and especially the regulation EN 353-1/2014 (Anchorage support fixed at two extremities) or EN 353-2/2002 (Anchorage support weighted at its lower section). Tractel SAS recommends using an accredited inspection organisation for this purpose. This inspection is carried out on the initiative and under the responsibility of the user.

This inspection is to analyse the general good state of preservation and cleanliness of components (end anchors, cable, intermediary parts, tensioner, tension indicator, shock absorber, cable-grip, connectors and, particularly, the fall-arrest device). The lifeline and its components should always be kept clean, and free from harmful substances (paint, building waste, rubble, etc.).

In particular, check the legibility of the markings on all of the lifeline components.

Furthermore, the fall-arrest harness should be regularly inspected by a technician in accordance with regulations and standard EN 361.

When any point of a stopcable™ lifeline has been subjected to stress by an operator falling, the entire lifeline, especially the anchors, seals and anchoring points located within the fall zone, as well as personal protective equipment affected by the fall, must be inspected by a technician before returning to use.

13. Marking

All components (page 2) of the stopcable™ lifeline, excluding cable clips and connector EN 362 (L, M, K) as well as the fall-arrest device, have the same following markings:

- a: Trademark: TRACTEL®;
- b: Product designation,
- c: The reference standard followed by the year of application,
- d: The product reference: ex 010642,
- e: The CE logo followed by the number 0082, the identification number of the institution in charge of production control,
- f: Batch number,
- g: Serial number,
- h: A pictogram showing that the instruction notice must be read before use or installation;
- i: An arrow indicating the direction of use,
- m: Type of cable to be exclusively used:
l Ø 8 - 7x19: Stainless steel cable, diameter 8mm, 7

strands 19 wires/strand.

G Ø 8 - 6x19: Galvanised cable, diameter 8mm, 6 strands 19 wires/strand.

p: The maximum number of people simultaneously secured on the lifeline,

q: The figure represents the type of stopcable™ lifeline which the fall-arrest device can be installed on in accordance with the reference standard

v: Product mass,

w: The minimum and maximum use load,

ad: The references for usable (OK) or non usable (NO) stopcable™ fall-arrest devices following the type of installation of the lifeline and the reference standard.

All of these markings are not present on every component. But all have this shared marking.

14. Periodic inspection and repair

A regular yearly inspection is mandatory. However, depending on the frequency of use, environmental conditions and regulations of the company or the country of use, periodical inspections can be more frequent.

Regular inspections should be carried out by an approved and qualified technician and in accordance with the manufacturer's examination procedures as laid down in the manual TRACTEL® PPE Verification Procedures".

Verification of the legibility of the marking on the product is an integral part of the periodical inspection.

Following the periodical inspection, a certificate of return to service must issued by the approved and competent technician who performed the periodical inspection. This return to service must be recorded on the inspection sheet in the middle of this manual. This inspection sheet should be retained throughout the life of the product until it is scrapped.

After stopping a fall, this product must be subject to regular inspection as described in this manual. Any textile components of the product must be replaced, even if they show no visible defect.

15. Lifespan

The Tractel® textile PPE components such as harnesses, lanyards, ropes and shock absorbers, the Tractel® mechanical PPE, such as stopcable™ and Stopfor™ fall-arrest devices, the Blocfor™ automatic retraction fall-arrest devices and Tractel® lifelines can be used provided that counting from the date of manufacture they are subject to:

- normal use in accordance with the recommendations of use in this manual.
- a periodical inspection which must be carried out at least once a year by an approved and competent

technician. At the end of this regular inspection, it must be certified in writing that the PPE can be returned to service.

- strict compliance with the storage and transport conditions specified in this manual.

16. Disposal

When disposing of the product, it is mandatory to recycle the various components after sorting metallic materials and sorting synthetic materials. These materials should be recycled with specialised institutions. Disposal and disassembly, by separation of components, should be carried out by a technician.

17. Approval tests

Approval tests are carried out on the initiative and under the responsibility of the user. As all dynamic tests are potentially destructive, either totally or partially, in possibly non-detectable ways, without the absence of deterioration being necessarily conclusive, we strongly advise against carrying out dynamic approval tests on stopcable™ lifelines.

18. Equipment compliance

The Tractel SAS RD 619 company - Saint-Hilaire-sous-Romilly - F-10102 Romilly-sur-Seine France hereby declares that the safety equipment described in this manual:

- complies with the provisions of European Directive 89/686/CEE of December 1989,
- is identical to the PPE which was subject to the CE inspection issued by Apave SUDEUROPE, CS 60193, 13322 Marseille cedex 16 (No. 0082), and tested according to the EN 353-1/2014 Standard for the lower end fixed version, and in accordance with standard EN 353-2/2002 for the weighted lower end version,
- is subject to the procedure referred to in Art. 11B of the Directive 89/686/CEE, under control of an informed organisation: l'Apave SUDEUROPE, CS 60193, 13322 Marseille cedex 16 (N° 0082),

"WARNING": The safety of the operator is linked to maintaining the equipment's levels of efficiency and resistance.

However, the lifeline, as well as the anchor points, need to be carried out with personal protection equipment against falls from height, and each operator should be provided, at the very least, with a complete anti-fall harness, linking and connection equipment, and if necessary, a shock absorber, manufactured in accordance with European Directive 89/686 and used in accordance with Directive EN/656, plus any additional requirements associated to each country of use. All PPE components should be CE certified.

Upper and lower stainless steel anchor (without cable clips)

Ref: 032902

Upper anchor: The upper anchor should be able to support all forces caused by a person falling.

Lower anchor: Only intended to guarantee the cable's tension, allowing for the system to function correctly.

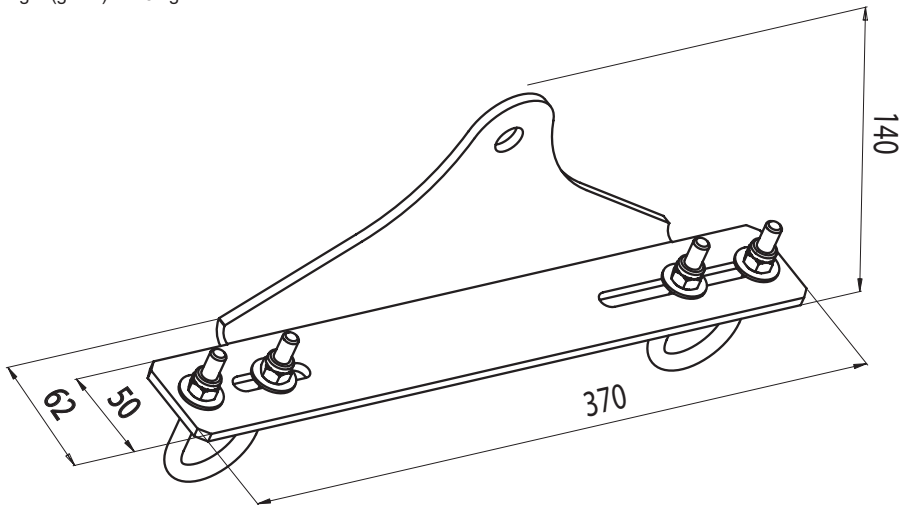
Upper and lower galvanised anchor (without cable clips)

Ref: 017872 (galva)

Fixed at the top or (and) at the bottom of the vertical cable, they are fixed with two cable clips on the rungs of the ladder.

Their design allows them to be adapted to several supports.

- Material: Galvanised steel or stainless steel.
- Resistance to breakages > 12 kN
- Weight (stainless steel): 2.07 kg
- Weight (galva): 2.15 kg

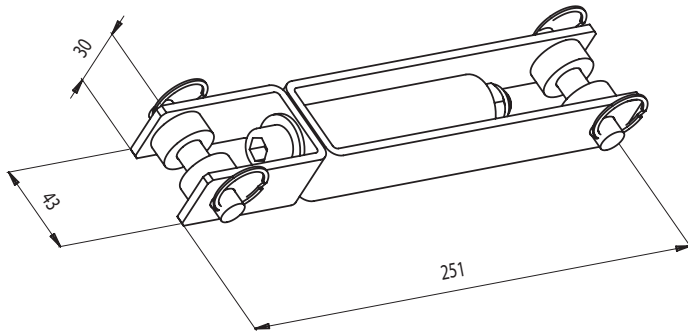


Energy shock absorber

Ref: 090049

This element was designed in order to dissipate the energy generated in the case of a fall and therefore protect the operator. If the stopcable™ fall-arrest device is not equipped with a shock absorber, the stopcable™ line should be mounted at the top. The absorber can only be used once. It should be replaced after a fall.

- Material: Stainless steel screed, elastomer absorber
- Resistance to breakages > 22 kN
- Weight: 0.860 kg

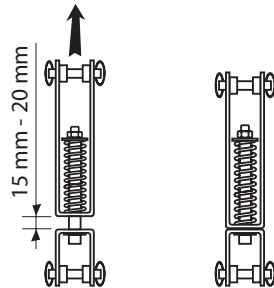


Tensioner for control of pre-tension

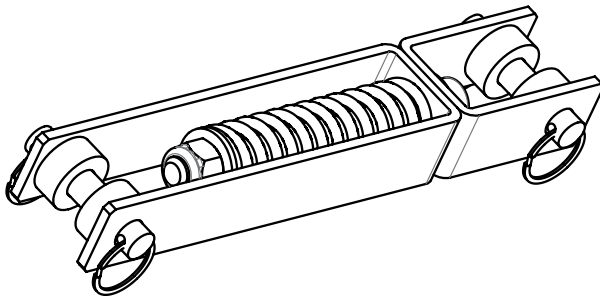
Ref: 261809

The tensioner for control of pre-tension allows you to extend the cable to a constant tension. When it is slack, a visible indicator shows that the system is out of service.

- Material: Stainless steel
- Weight: 0.893 kg



COMMENT: Adjustment between 15 and 20mm corresponds to a maximum load under tension of the lifeline of 50 daN.



Intermediate cable guide

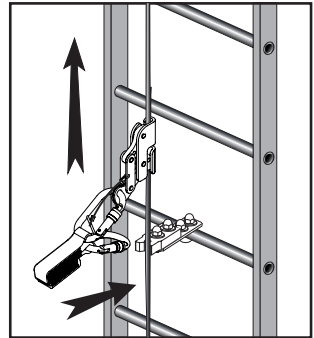
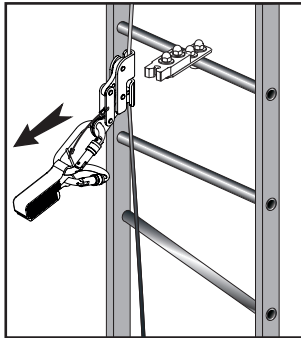
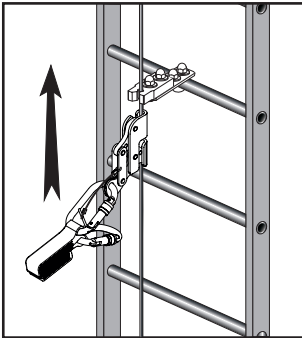
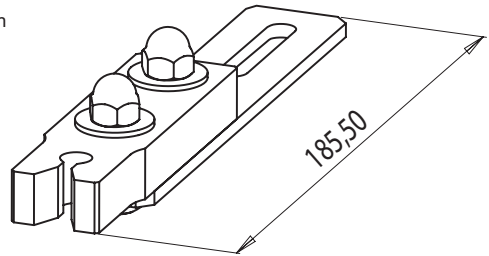
Ref: 108857

It adapts to the majority of installations.

The cable guides should be set up at intervals, with 10m between them and from the ends of the cable.

The cable guides limit the swaying of the cable.


- Material: Stainless steel and rubber
- Weight: 0.220 kg



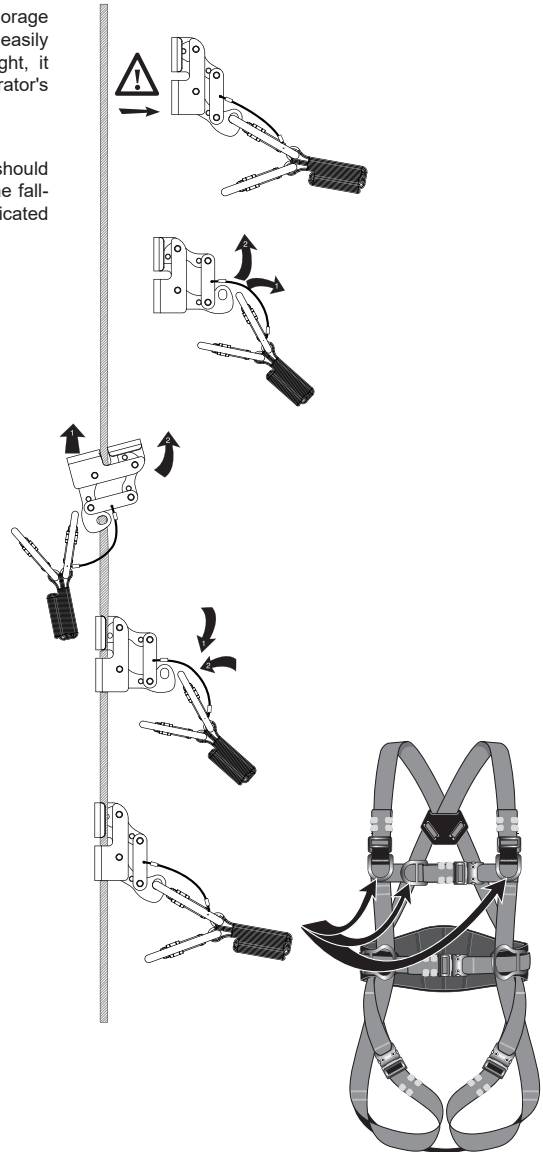
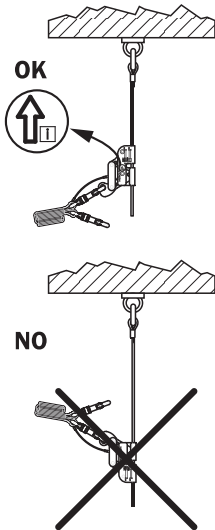
stopcable™ fall-arrest (equipped with a M10 connector and shock absorber)

Ref: 072272

Fall-arrest device on a rigid or flexible anchorage support. Thanks to its original design, it is very easily installed and taken down. Being particularly light, it slides on the cable without obstructing the operator's movements.

 **IMPORTANT:** The stopcable™ fall-arrest should only be used with the connector supplied with the fall-arrest. Always check the assembly direction indicated on the device, following the marker [i].

- Material: Stainless steel and tear strap
- Weight: 1 kg
- Resistance: 15 kN



Cable for stopcable™ lifeline

Cable of 3m equipped with a sleeved buckle Delivered with 3 stainless steel cable grips to connect to the other end.

Stainless steel cable 7x19 - ø 8mm

Ref: 018162

additional metre of stainless steel

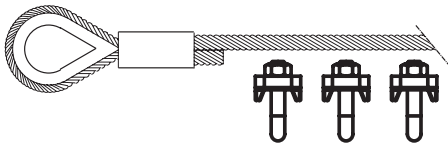
Ref: 025091

Galvanised cable 6x19 - ø 8mm

Ref: 037422

Galva metre supp

Ref: 025101



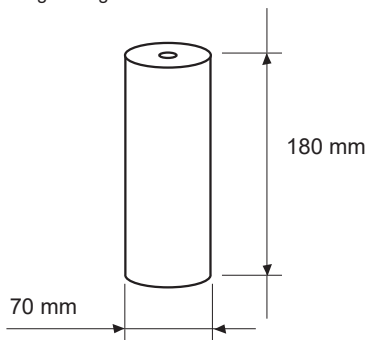
Counterweights

Ref: 129445

This counterweight should be used on the lower end of the installation when this end is not fixed to the ladder

– Material: Zinc coated stainless steel

– Weight: 7 kg

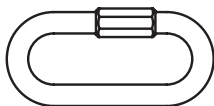


Quick link

Ref: 039822

– Material: Stainless steel

– Weight: 0.110 kg



Ø 27mm cable clip

Ref: 018132

The cable clips or stirrups allow you to connect the upper and lower anchors and the cable guides to the ladder rungs.

– Material: Stainless steel

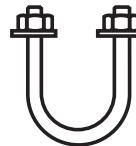
– Weight: 0.047 kg

Ø 34mm cable clip

Ref: 018142

– Material: Stainless steel

– Weight: 0.057 kg



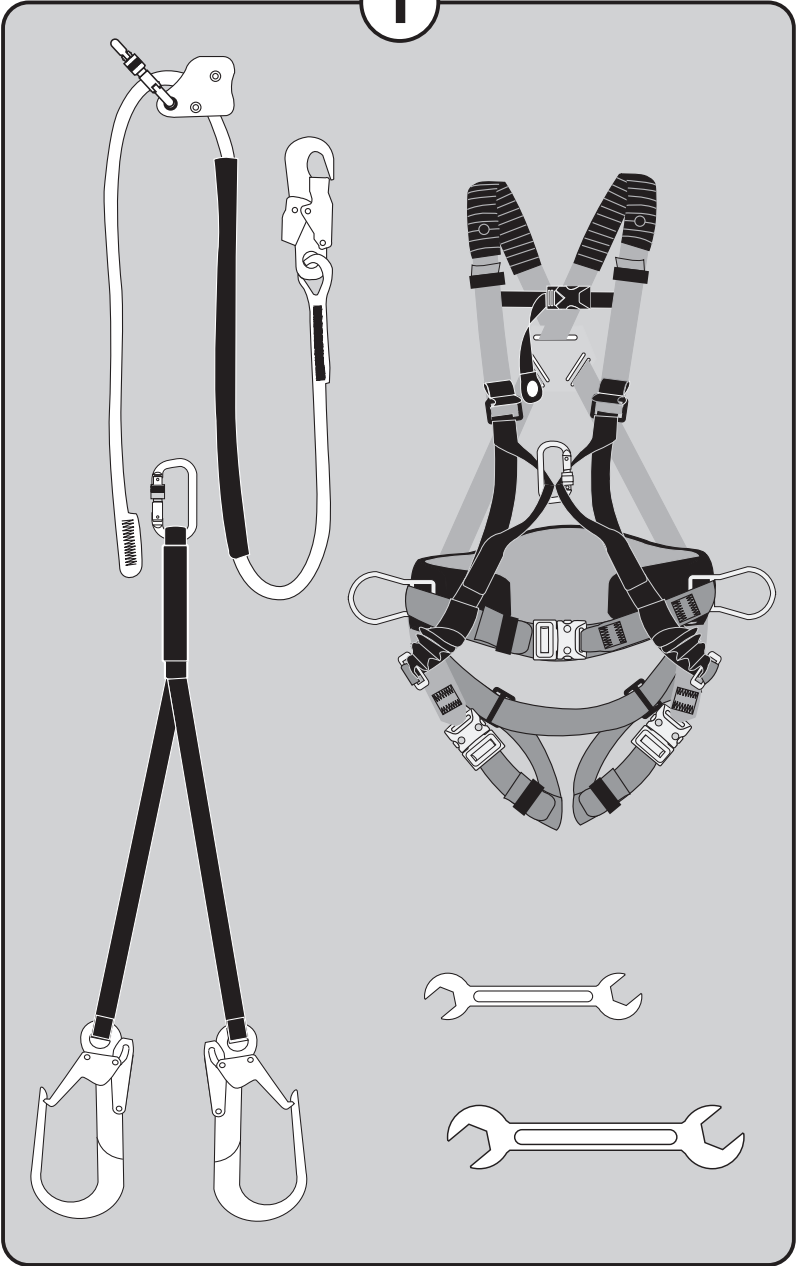
Information panel

Ref: 146465

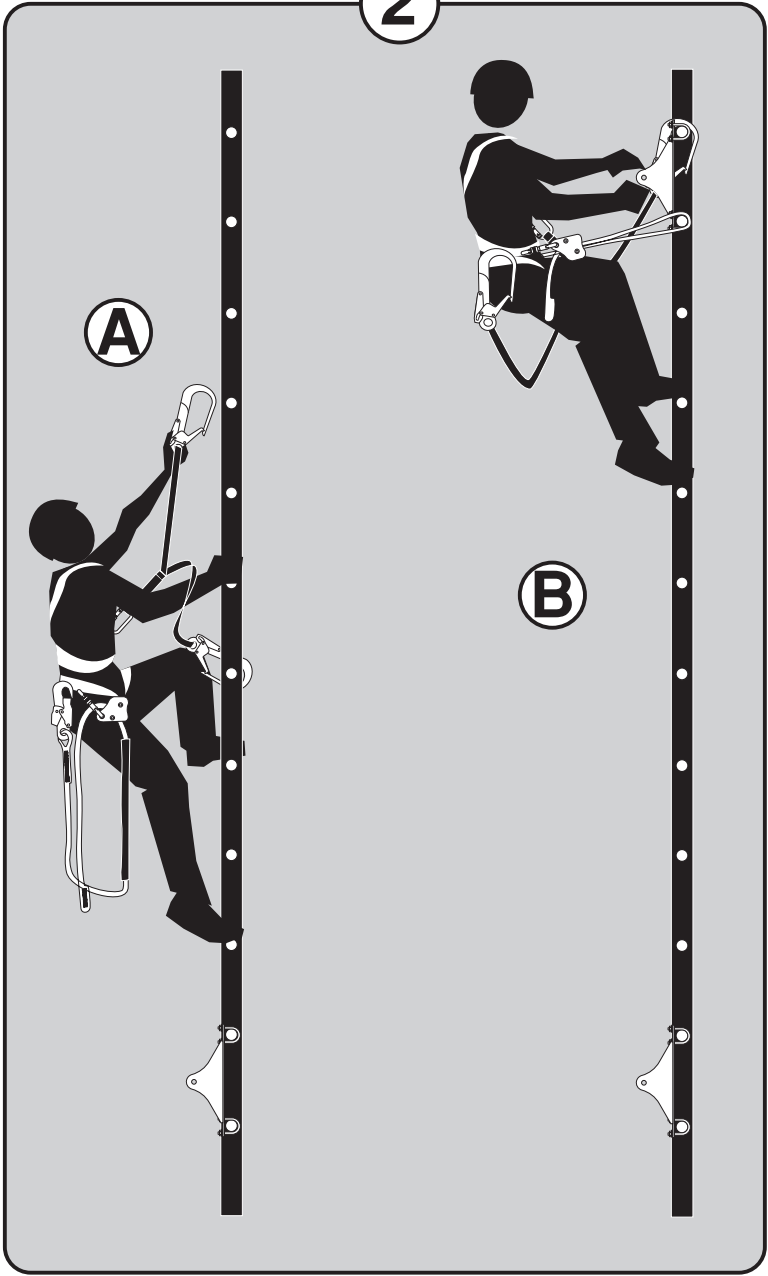
The information panel should be placed at the entrance of the safety line defined by the prevention plan. It should be completely compliant with the model described opposite here.

<p>150 kg</p> <p>INDICAZIONE CAPACITÀ TRACEL</p> <p>www.tractel.com</p>		<p>Maximal aantal gebruikers Número máximo de usuarios Numero massimo di utilizzatori</p> <p>d: </p> <p>w: 50 kg -> 150 kg c: EN 353-1: 2014 EN 353-2: 2002</p>	
<p>Het dragen van persoonlijke beschermingsuitrustingen tegen hoogtevallen is verplicht</p> <p>• Voordat u de werf instapt, is het verplicht een set te dragen tegen vallen op werflocaties. In geval van een val moet u bescherming dragen tegen vallen. • Het dragen van persoonlijke beschermingsuitrusting van de werf is niet van toepassing op de werflocatie. • Het dragen van persoonlijke beschermingsuitrusting tegen hoogtevallen moet conform de Europese norm EN 353 zijn.</p> <p>• Controleer bij elk gebruik van de werflocatie of u de werflocatie hebt gebruikt met de juiste set van persoonlijke beschermingsuitrusting.</p>	<p>Utilización obligatoria del equipo de protección individual anticaidas</p> <p>• Antes de comenzar, es obligatorio usar los dispositivos del material de utilización autorizada con el arnés y conformidad a este procedimiento. • En caso de caída o de defecto aparente, presentarse al responsable del sitio para hacer verificación conjunta de la instalación. • El equipo de protección individual anticaidas debe ser conforme a la norma europea EN 353. • Controlar cada utilización de la instalación si el usuario aparenta, en caso de anomalía, estar incorrectamente instalado el equipo e informar al responsable.</p>	<p>Utilizzo obbligatorio del dispositivo di protezione individuale anticaduta</p> <p>• Prima di iniziare, occorre assolutamente leggere attentamente il manuale di istruzioni. • Il sito ed almeno apparentemente allo stesso tempo, indossare il dispositivo di protezione individuale anticaduta per fare verificare la forza dell'installazione. • Il dispositivo di protezione individuale anticaduta utilizzato con i corredi di vita deve essere conforme alla normativa europea EN 353. • Ogni utilizzo obbligatorio del materiale deve essere autorizzato, nel caso di anomalie, al responsabile immediatamente. • Informare il responsabile del dispositivo ed informare il responsabile.</p>	
<p>h: </p>		<p>b: stopcable™</p>	
<p>Datum van controle Fecha de control Data di controllo</p>		<p>Installateur - Instalador - Installatore</p>	
<p>Datum van ontvngt Fecha de recepción Data di ricezione</p> <p>Vaňvoegje Altreve Trattante d'arta</p>		<p>m: 108 - 7x19 G 08 - 6x19</p>	
<p>id: 072272</p>			

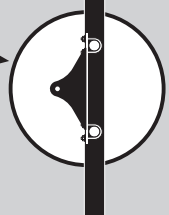
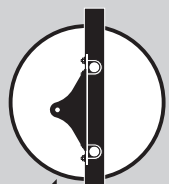
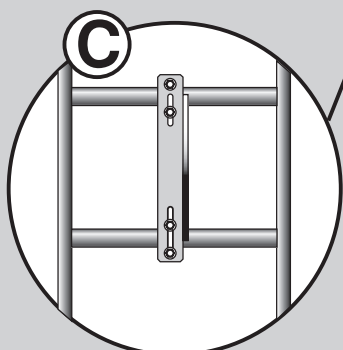
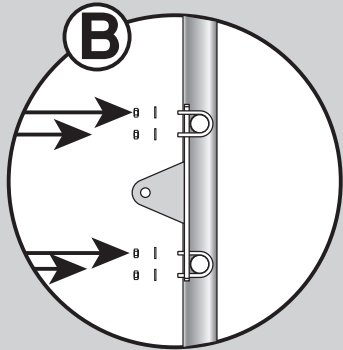
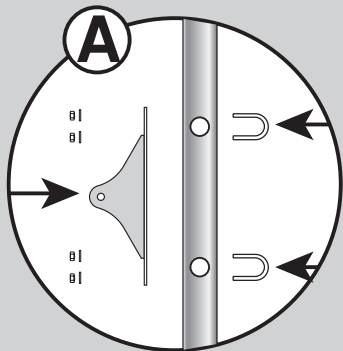
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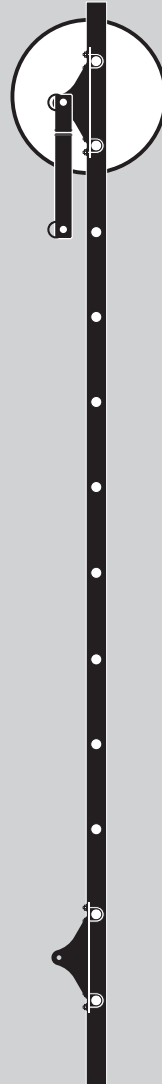
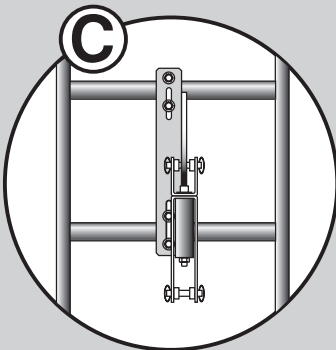
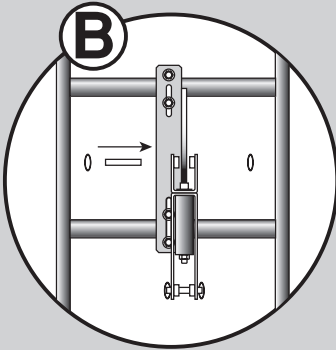
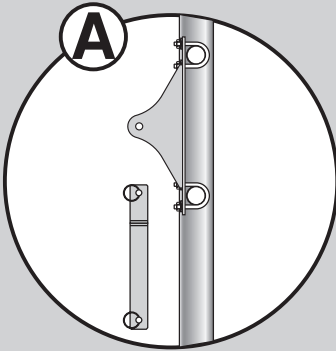
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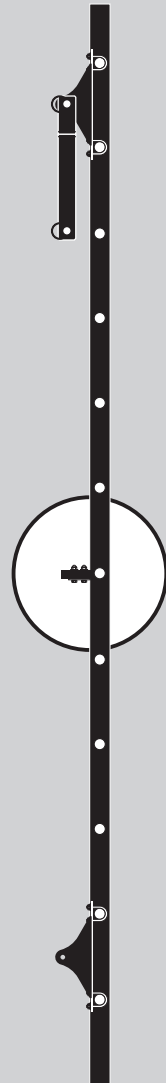
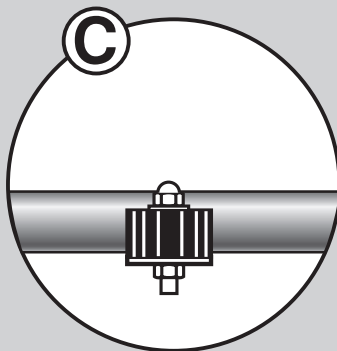
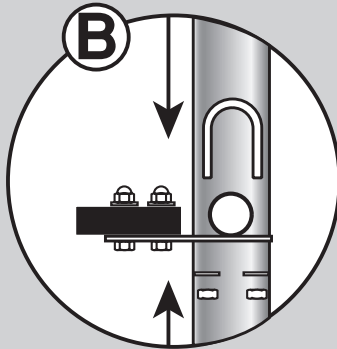
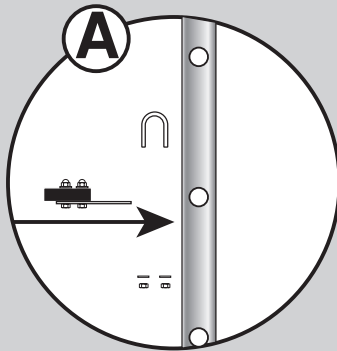
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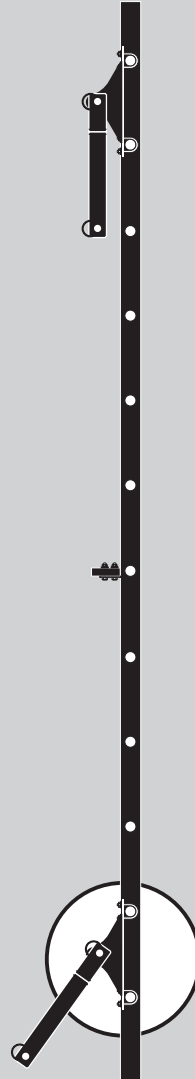
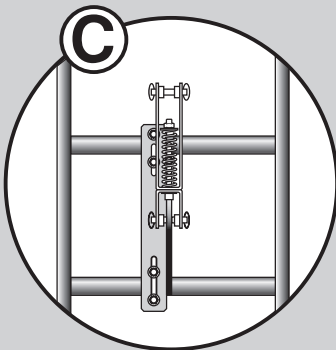
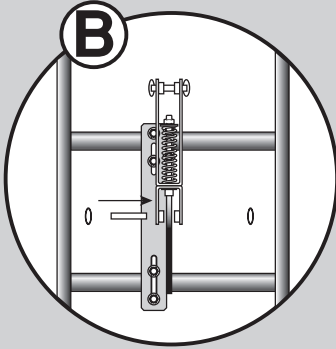
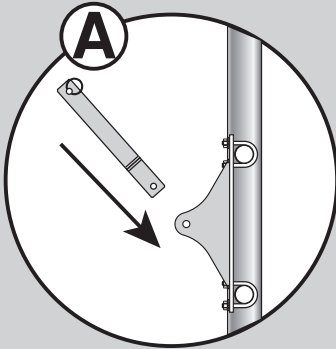
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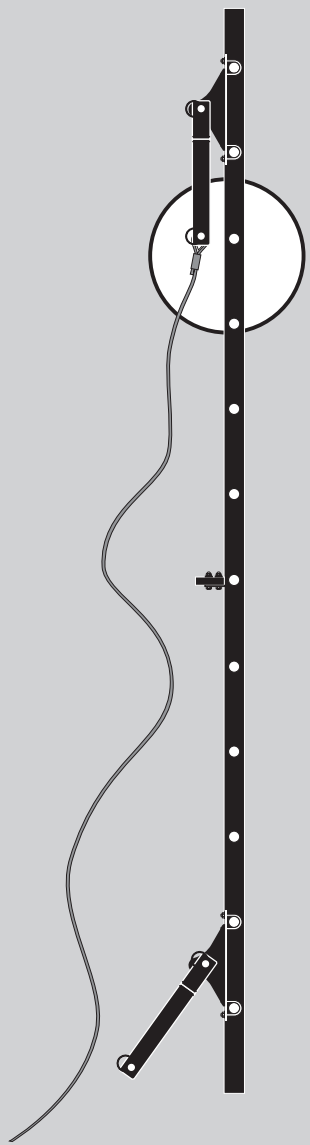
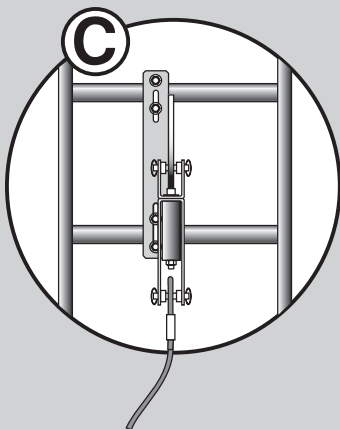
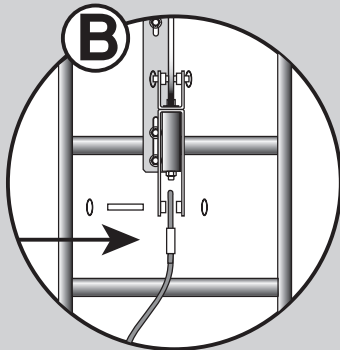
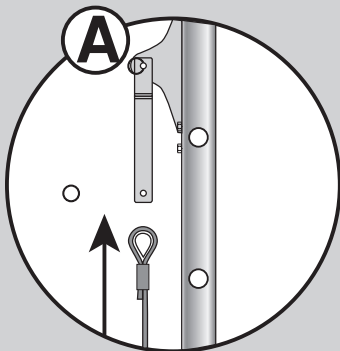
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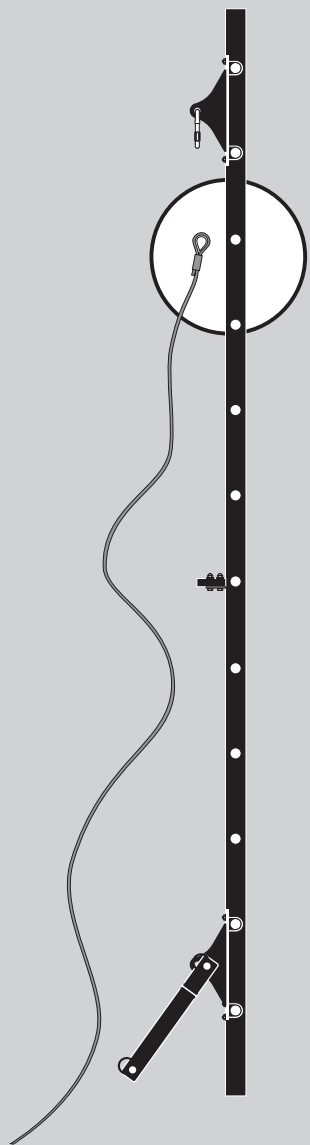
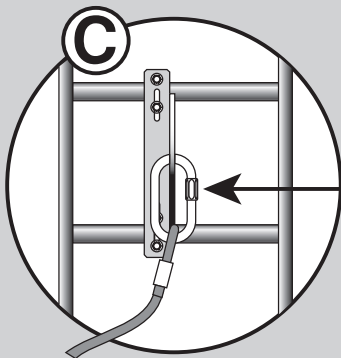
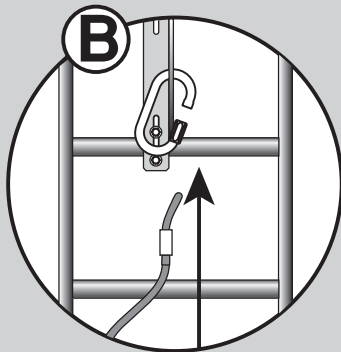
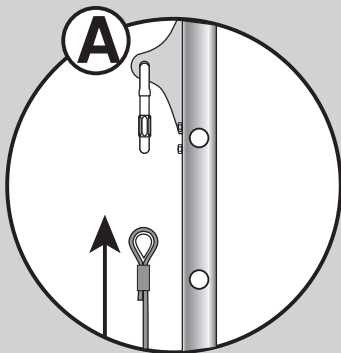
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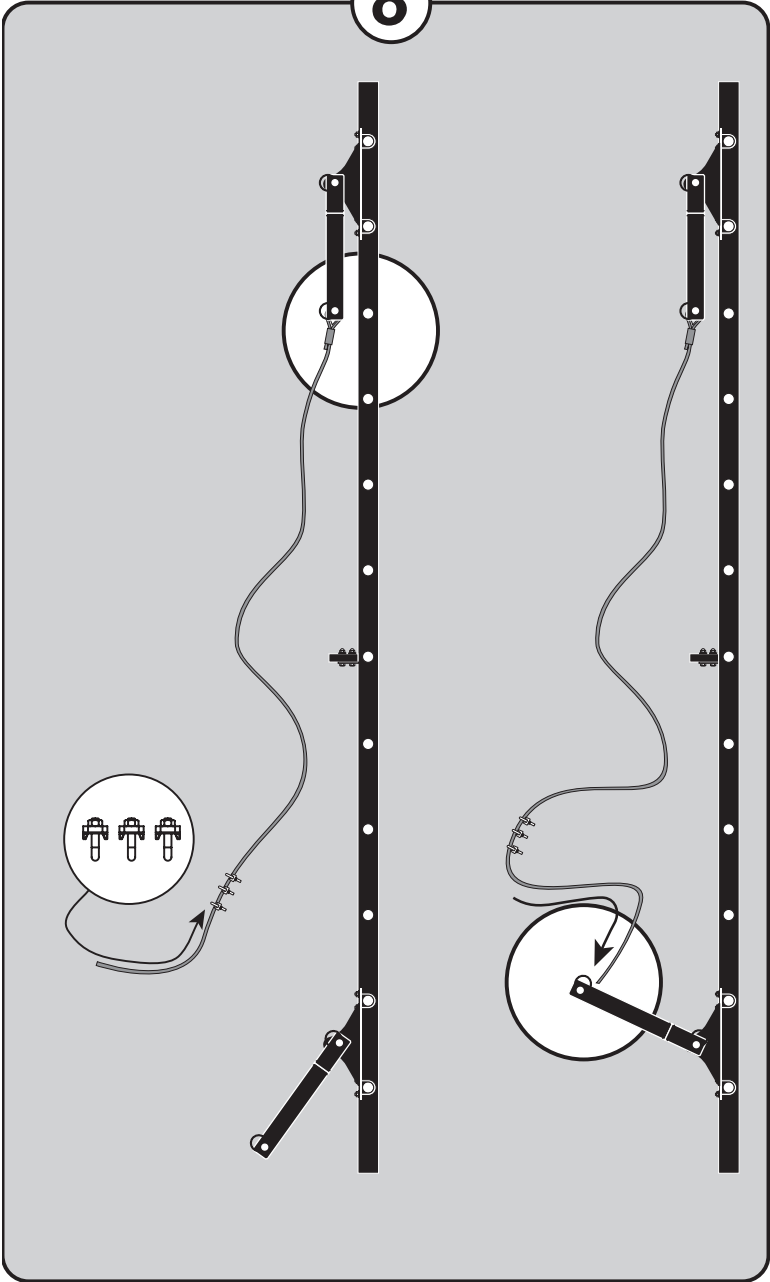
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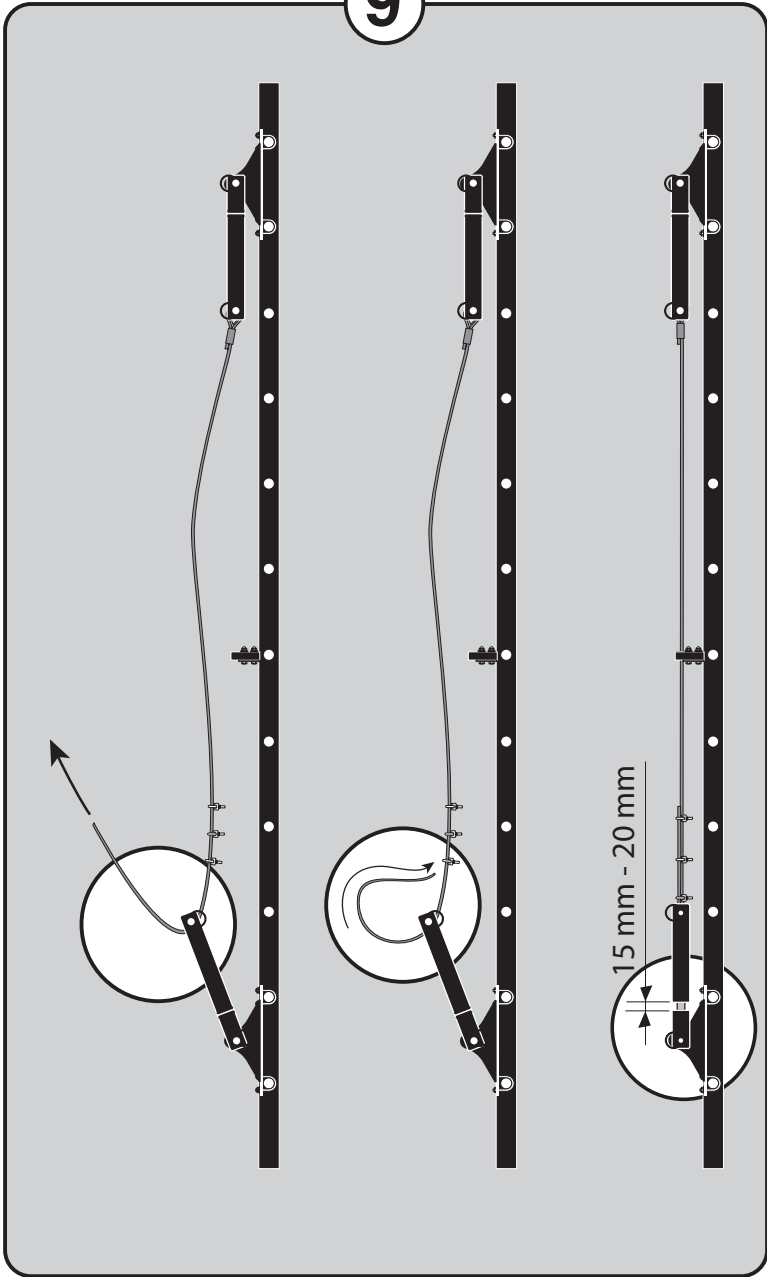
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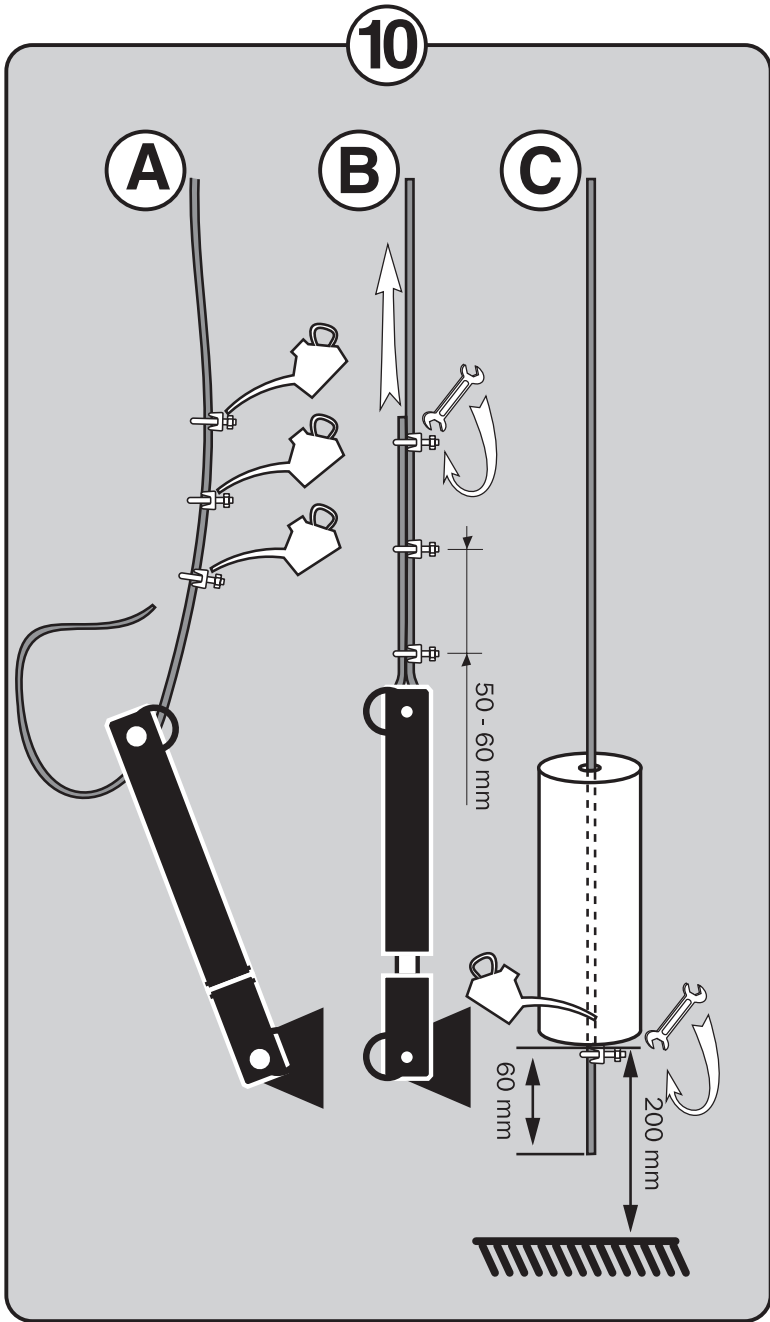


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9





19. Inspection record

DESIGNATION		OK	REV	OK
UPPER AND LOWER ANCHORS	<ul style="list-style-type: none"> • Check that nuts and screws are fully tightened • Check that the component has not been modified • Check for corrosion • Check for deformation 			
CONNECTOR	<ul style="list-style-type: none"> • Check the locking of the clamping ring • Check that the component has not been modified • Check for corrosion • Check for deformation 			
SHOCK ABSORBER FOR FALLS	<ul style="list-style-type: none"> • Check that nuts and screws are fully tightened • Check that the component has not been modified • Check for corrosion • Check for deformation (triggered from a fall) 			
SWAGE FOR STAINLESS STEEL AND GALVANISED CABLE	<ul style="list-style-type: none"> • Check that the sleeving is done properly • Check that the sleeved buckle is properly secured to the anchor point or quick link or to the shock absorber 			
CABLE Ø 8MM	<ul style="list-style-type: none"> • Check that the tensioner system for control of pre-tension is correctly tensionned or check that the counterweights guarantee its function • Check diameter is 8mm • Check that the cable has not been damaged or deformed (pinching of the cable, broken wires, bumps) • Check for corrosion 			
INTERMEDIATE CABLE GUIDE	<ul style="list-style-type: none"> • Check that nuts and screws are fully tightened • Check that the component has not been modified • Check that the component is not broken or damaged • Check for corrosion • Check for deformation 			
TENSIONER FOR CONTROL OF PRE-TENSION	<ul style="list-style-type: none"> • Check that nuts and screws are fully tightened • Check that the component has not been modified • Check for corrosion • Check the tension of the cable (trigger resulting from pre-tension) 			
LOWER ANCHOR	<ul style="list-style-type: none"> • Check that nuts and screws are fully tightened • Check that the component has not been modified • Check for corrosion • Check for deformation 			
INFORMATION PANEL	<ul style="list-style-type: none"> • Check there is an information panel • Check date of inspection 			

Lined writing area with 20 horizontal lines.

Lined writing area with 20 horizontal lines.

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