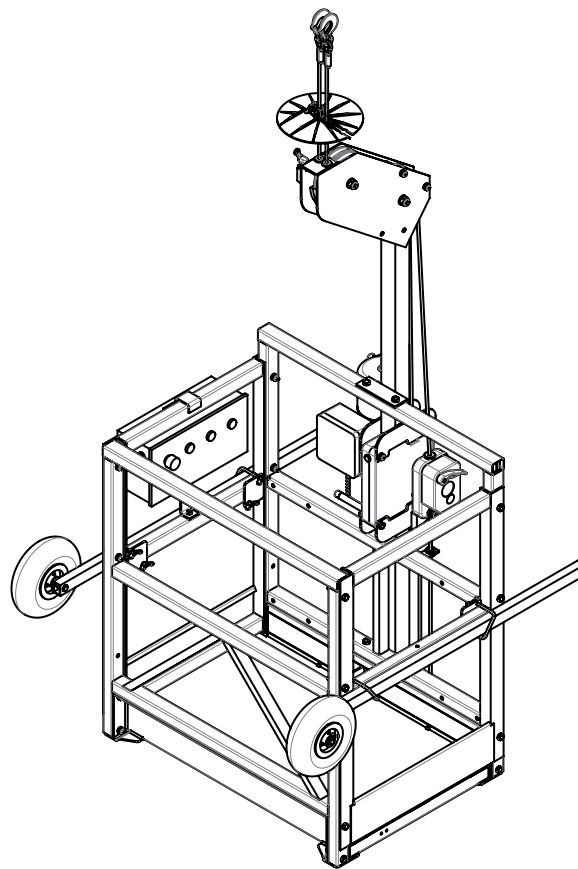


solo 2000

temporary suspended platforms (TSP)

equipped with TIRAK™ motor-driven hoist



original

installation and user manual

Equipment in accordance with
European Union Directives and
manufactured per ISO 9001



MC1672 SOLO-8EN 08/2017

 **Tractel**®

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A. PRIORITY RECOMMENDATIONS

- Temporary suspended platforms (TSP) are work platforms intended for professional use. They must only be entrusted to personnel having the necessary qualification and understanding of the product for set up and use. The operators must be qualified for working at height.
- The equipment must be dismantled and removed from the building once the work for which it has been installed has been completed.
- Two operators are required for safe use of the TSP.
- Only authorised personnel, correctly trained and physically fit, may use the TSP. Unauthorised persons must be prevented from using the equipment.
- Before setting up and using a TSP, make sure you have fully read and understood the information contained in this manual to ensure safe, efficient use of the TSP. Also, before setting the equipment into service, be sure to read the various labels fastened to the equipment.
- This manual must be kept in good condition up to final removal from service of the equipment. This manual must be provided with the equipment to all persons using the TSP.
- If any labels are lost or damaged, the labels must be replaced before setting the equipment into service. Replacement labels and manuals can be supplied on request.
- The employer must apply the safety regulations relative to assembly, use, maintenance and technical inspections of the equipment. The employer must give appropriate instructions to the operators and check their competence.
- A qualified person must check the entire installation on the site before it is set into service.
- Special attention must be given to the TSP suspension. Make sure the suspension rig complies with the applicable standards and recommendations.
- Standard EN 1808 recommends a safety coefficient of 3 for both the anchoring systems and the stability of the temporary suspension beams (example: for an X-500 P hoist, each anchoring point should be able to handle $3 \times 500 \text{ kg} = 1500 \text{ kg}$).
- The structure must be tested when set into service: a coefficient of 1.5 must be applied to the nominal load for the static tests and a coefficient of 1.1 must be applied to the nominal load for the dynamic tests.
- Never use the TSP or an accessory (wire ropes, suspensions, etc.) which is not in good condition. Periodic, regular monitoring of the condition of the equipment by a competent person is an important safety consideration. Maintenance not described in this manual must be entrusted to the manufacturer or to an approved After-Sales Service.
- Never use the equipment for applications other than those described in this manual. The manufacturer cannot guaranty the product for any configurations not described in this manual. For special applications, please consult the manufacturer before proceeding with assembly of the equipment.
- Never use the TSP beyond the operating limits set out in this manual, particularly the rated load indicated on the load plate.
- The safety instructions assume the operators access the platform from the ground.
- Beyond the instructions given in this manual, the manufacturer declines any responsibility for the consequences resulting from disassembly of the hoists or any changes made without the manufacturer's approval, especially where original parts may be replaced by parts from another source.
- The TSP is designed for a service life of 10 years. This service life corresponds to a use in compliance with the instructions given in this manual of 200 hours per year provided the recommended overhauls are carried out. Following this period of 10 years, the owner of the TSP will have to decide to carry out a general inspection of the TSP by the manufacturer to re-evaluate the service life after any restoration work.
- In certain European Union countries, an installation check by a notified body is required before operation on a new site.

IMPORTANT:

If the equipment described in this manual is supplied to an employed person, check that you meet your obligations with respect to national health and safety at work regulations, particularly with regard to checks and tests before use.

B. DESCRIPTION OF EQUIPMENT

B.1. Area of application

The equipment described in this manual is intended for temporary use when conducting inspection and maintenance work on building facades (to lift personnel and work equipment).

Not included in this manual is the following equipment:

- TSPs equipped with manual hoists / winches
- TSPs equipped with hoists with working load limit exceeding 300 kg
- TSPs suspended to 2 suspension points or more (ALTA L/S platforms, ...)
- TSPs with more than one deck
- Suspended platforms designed for permanent installation on buildings
- Access equipment for wells
- Platforms suspended by a crane hook
- Access equipment for use in potentially explosive atmosphere
- TSPs used on non-vertical facades
- TSPs having a non-linear installation configuration, for example, circular platforms

B.2. TSP equipment

The equipment covered by this manual comprises a SOLO work platform equipped with a TIRAK™ X-300 electric hoist, suspended by steel wire ropes to a suspension structure.

The instructions relative to the suspension are covered by a separate manual.

The TSP comprises all of the necessary safety devices to form a temporary suspended access installation covered by a Declaration of Conformity per the Machinery Directive, drawn up by the manufacturer.

B.3. Main components

101	Floor panel
101.1	Front guard-rail
101.2	Rear guard-rail
104	Upper stirrup
104.1	Lower stirrup
105	Lateral guard-rail
106	Façade protection wheel
107	TIRAK™ hoist
108	BLOCSTOP™ BSO fall arrest device
110	Upper limit switch
112	End stop buffer plate
113	Ballast weight for safety wire rope
151	Lifting wire rope
152	Safety wire rope
153	Control box
154	Snap hook

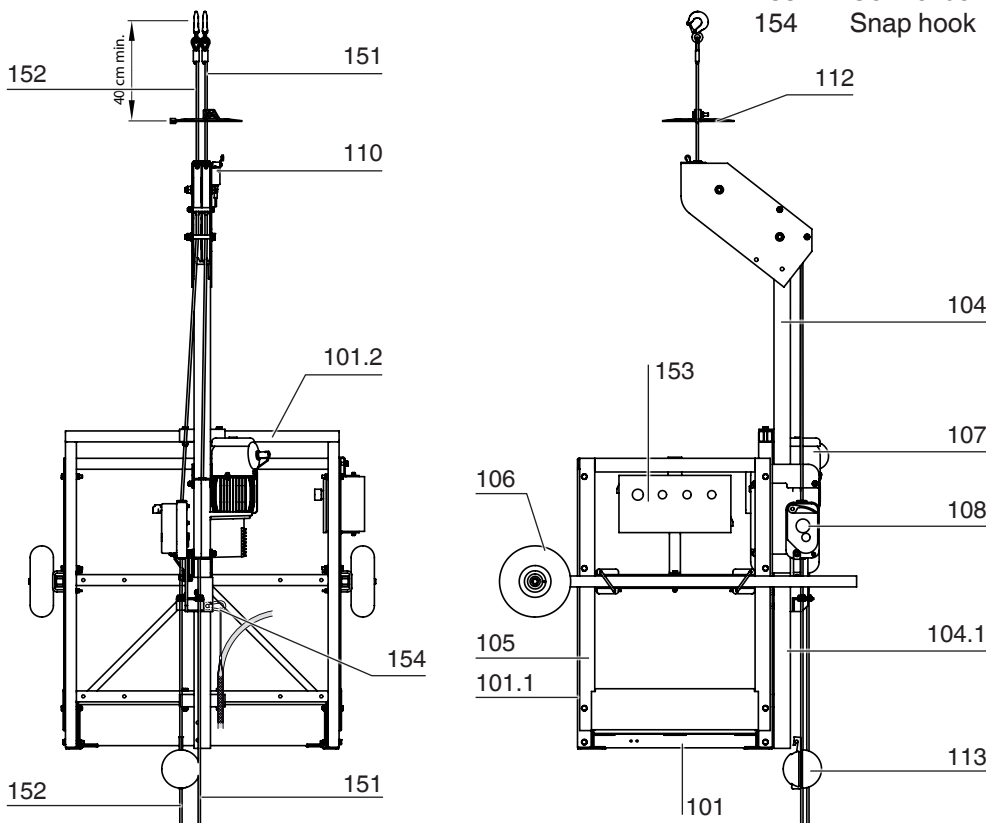


Fig. B.1 - SOLO platform with TIRAK™ hoist

C. INSTALLATION

C.1. Assembly

1. Assemble the front guard-rail (101.1) with a lateral guard-rail (105) using the upper bolt (a) without tightening the screw.
2. Place the two elements on the floor panel (101) and assemble using the lower bolt without over-tightening.
3. Install the rear guard-rail (101.2) using the lower and upper bolts.
4. Close the open side using the remaining lateral guard-rail (105), then tighten all the bolts.
5. Secure the base of the lower stirrup (104.1) to the floor panel (101) and to the rear guard-rail (101.2).
6. Secure the TIRAK™ X-300 (107) on the lower stirrup (104.1) with the motor cover facing upward.
7. Secure the upper stirrup (104) to the TIRAK™ and to the rear guard-rail (101.2) so that the return pulleys are above the platform.
8. Secure the BLOCSTOP™ BSO 500 (108) to the mounting point provided for this purpose on the lower stirrup.
9. Secure and provisionally block the façade protection wheels / support rollers (106/123) using the stirrups and clamps (106a) on the under-rail of the lateral guard-rail (105).
10. Connect the limit switch (110) preassembled in factory to the TIRAK™ hoist.

Nuts and bolts:

- a = M10 x 65
- b = M10 x 70
- M6 = M10 x 75
- d = M10 x 90 / 8.8
with nut M10 DIN 985 and washers Ø 10.5 DIN 125
- e = M12 x 75 / 8.8
with nut M12 DIN 985 and washers Ø 13 DIN 125

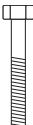
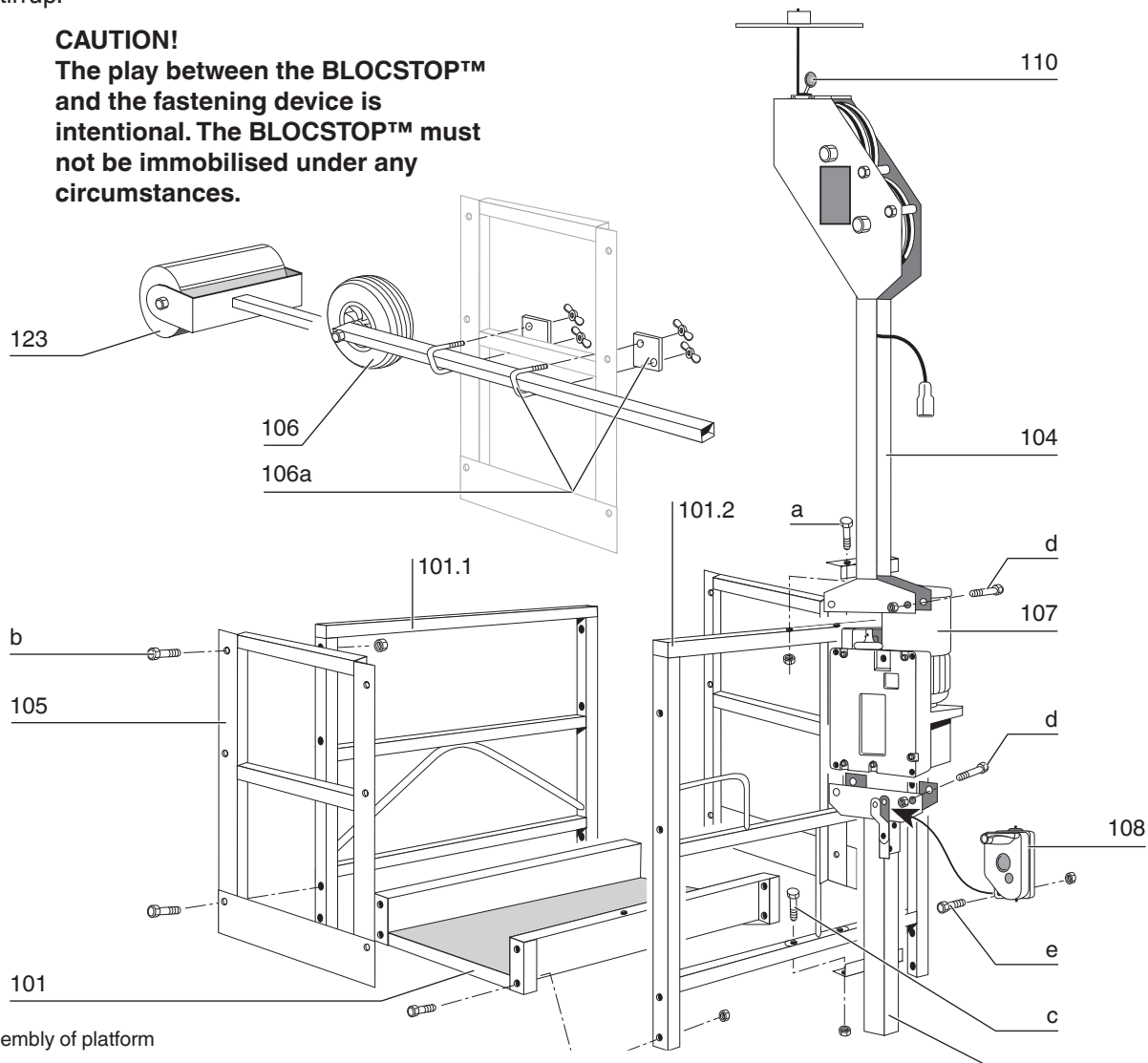



Fig. C.1 - Assembly of platform

C.2. Electrical equipment

C.2.1. Configuration

- Ensure the power supply is compatible with the connection of the control box.
Three power supplies are available in the European Union :
 - three-phase 400V, 50 Hz
 - three-phase 230V, 50 Hz
 - single phase 230V, 50 Hz
- The electrical power supply must be protected upstream by a 30 mA differential (10 A) circuit breaker.
- The power cable between the platform and the ground must be a flexible cable, class 5 minimum, per CEI 228.
- The cross-sections of the wires must be compatible with the power of the hoists and the length of the power cable (see table below).

Minimal cross-sections* of wires for TIRAK hoists™

Cable lengths up to . . meters	20	50	100	200
Three-phase 400 V, 3 conductors + ground	1.5	1.5	1.5	1.5
Three-phase 230 V, 3 conductors + ground	1.5	1.5	1.5	2.5
Single-phase 230 V, 2 conductors + grounds	1.5	2.5	2.5	4
cross-section in mm ² (by conductor) 1 TIRAK™ X-300				

* This concerns cables having a single length with no intermediate connections, fully unwound.

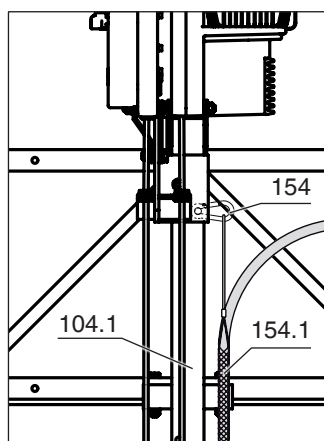


Fig. C.2
Cable-securing sleeve of electrical cable

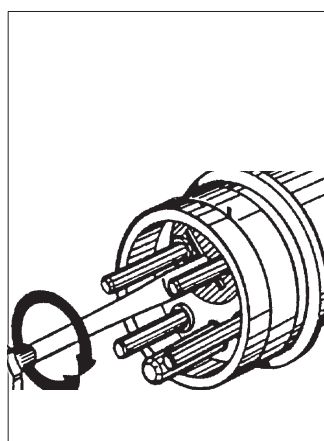


Fig. C.3
Inversion of phases in TIRAK hoist connectors

C.2.2. Installation of electrical equipment

- Connect the power cable to the unit using the CEE connector. The cable-securing sleeve (154.1) prevents any excess traction on the connector. It is secured to the snap hook (154) attached to the lower stirrup (104.1). For heights over 100 m, check permissible load of the cable.
- Check correct operation of the TIRAK hoist and, in particular, that the motor turns in the correct direction. By pressing the «DOWN» button, the wire rope should come out of the hoist through the top. If not, have the installation checked by an electrician. If nothing operates, use a screwdriver to invert two phases in the CEE plug of the hoist (Fig. C.3).
- If an electric power generator is used, it must have a power of at least 4 times the total installed capacity on the platform.

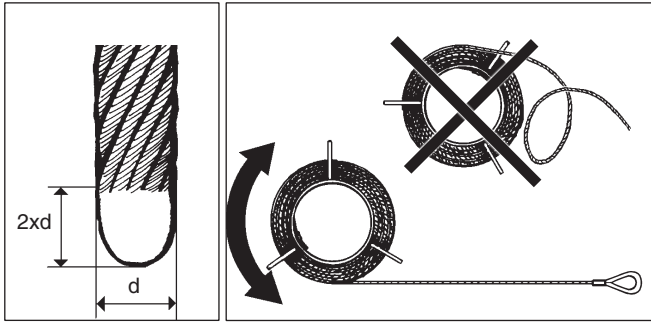


Fig. C.8 - TRACTEL® wire rope tip Fig. C.9 - Unwind the TRACTEL® wire ropes

C.3. Insert the wire ropes



**Risk of injury !
Wear safety gloves !**

Only wire ropes recommended by the manufacturer should be used.



DANGER

Ensure that the wire rope diameter corresponds to the diameter indicated on the nameplate on the TIRAK™ hoist (107), that the length of the wire rope is sufficient and that the wire rope tip is as shown in fig. C.8.

Keep loops from forming when unwinding the wire ropes (Fig. C.9).

Refer to the hoist user manual

Two operators are required to set up the wire ropes: one operator in the platform and one operator on the roof.

Risk of fall !

Operators working at height must wear a safety harness and be secured to a sufficiently strong anchor point.

1. Bring the platform directly into line with the suspensions.

For fastening of the wire ropes to the suspensions, refer to the manual covering the suspensions.

2. Unwind the wire ropes from the ground and hoist them to the roof using a cord.

Never allow the wire ropes to fall from the roof.

3. Fasten the wire ropes to the anchor points.

Two separate anchor points must be used for the lifting wire rope (151) and for the safety wire rope (152).

4. Place an end stop buffer plate (112) on the lifting wire rope (151) at least 40 cm below the suspension (fig. C.10).
5. Run the safety wire rope through the slot provided in the end stop buffer plate (112).

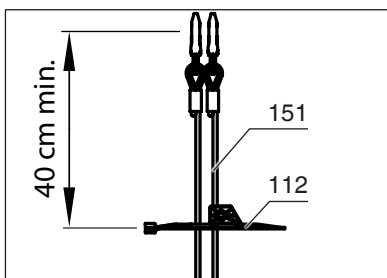


Fig. C.10 – Installation of end stop buffer plate

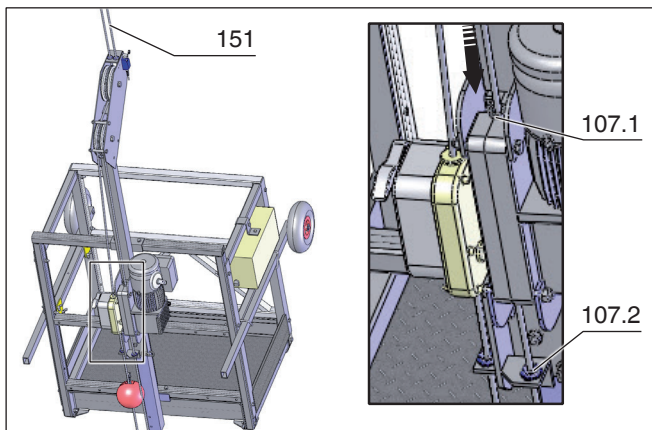
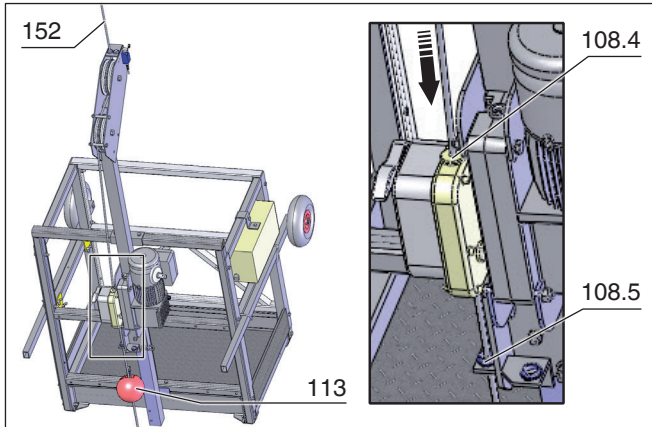


Fig. C.12 – Insertion of wire ropes

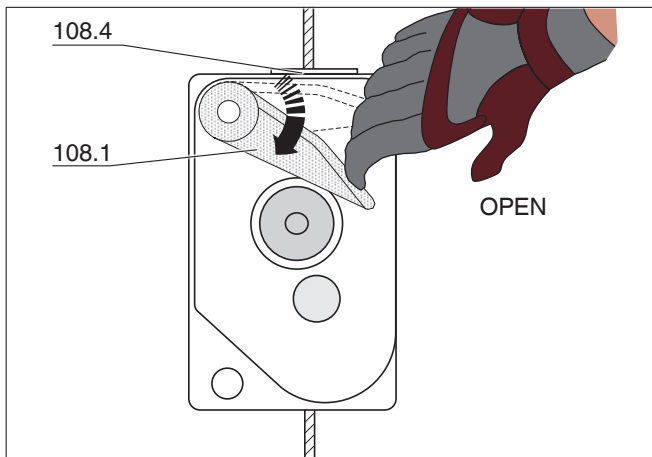


Fig. C.13 – Open the BLOCSTOP™ BSO

When setting up the suspension wire ropes, always observe the following order:

- 1. Safety wire rope (152)**
- 2. Lifting wire rope (151)**

C.3.1. Insert the safety wire rope

1. Run the wire rope over the two return pulleys on the side with the BLOCSTOP™ fall arrest device (108).
2. Return the lever of the BLOCSTOP™ (108.1) to the «OPEN» position.
3. Engage the wire rope by the entry nozzle (108.4) through the BLOCSTOP™ and the guide nozzle (108.5).
4. Lightly tension the wire rope.
5. Fasten the ballast weight (113) at around 20 cm from the ground.
6. Wind the length of unused wire rope on the reel.

C.3.2. Insert the lifting wire rope.

1. Connect the power cable to the nearest connector at the bottom of the building.
2. Before engaging the lifting wire rope (151) in the TIRAK™ (107), check that it is not twisted around the safety wire rope (152).
3. Run the lifting wire rope (151) over the two return pulleys on the side with the TIRAK™ hoist.
4. Insert the wire rope tip by the entry nozzle (107.1) in the hoist until it abuts.
5. Press the «UP» button (43) and continue to push the wire rope by hand until it comes out of the hoist and passes into the guide nozzle (107.2).
6. Lift the platform (button 43) to around 20 cm off the ground.
7. Wind the length of unused wire rope on the reel.

D. SAFETY DEVICES



DANGER

To ensure reliable, safe operation for the personnel, the platform is equipped with the following safety devices:

D.1. Service brake

The TIRAK™ hoist is equipped with a service brake which acts automatically in the event of:

- a) electrical power supply failure
- b) release by operator of «UP» (43) or «DOWN» (44) buttons.

D.2. Emergency stop

In the event of an emergency, the platform up or down movement can be stopped immediately by pressing the red «EMERGENCY STOP» button (42).

Once the cause for using the emergency stop button has been cleared, unlock the button by turning it in the direction of the arrow and pressing either the «UP» (43) or «DOWN» (44) button.

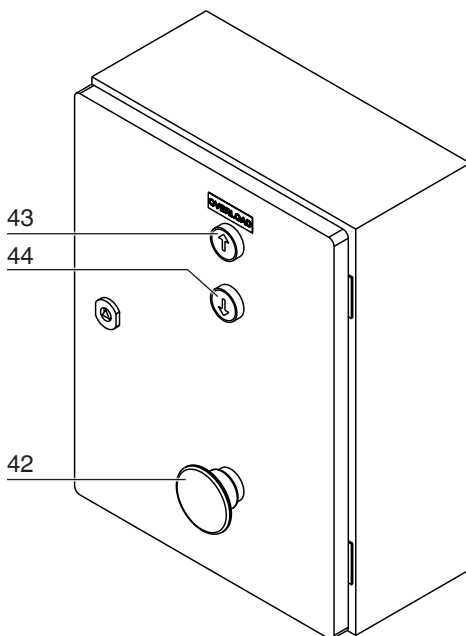


Fig. D.1 - Temporary SOLO control box

D.3. Overload

This built-in safety device is activated when the platform is overloaded or when it snags on a protruding object on the building facade when moving upward.

The overload cuts off the up movement and is indicated by the indicator light (43) in the UP button on the control box.

To continue working, reduce the load in the platform until the indicator light (43) goes off or the platform is cleared from the snag.

The overload limiter setting is “sealed” in factory. Any abnormal appearance of the seal will release the manufacturer of any responsibility in the event of an incident.



DANGER

The operator must check that the load does not exceed the value indicated on the load plate.

D.4. Phase controller

For the three-phase equipment, a device in the control box monitors the direction of the phases. You can invert the phases in the CEE connector by a 180° rotation using a large flat-tip screwdriver.

D.5. Upper limit switch

Up and down movement of the platform is cut off when the limit switch (110) touches the end stop buffer plate (112).

To clear the limit switch, see chapter E.6.

«EMERGENCY DESCENT». Correct operation of the upper limit switch must be checked at least once per day.

D.6. Emergency descent

The TIRAK™ electric hoist is equipped with a manual system which will allow you to bring the platform down in the event of a power failure (see chapter E.6.).

D.7. BLOCSTOP BSO fall arrest device

D.7.1. Operation

The safety wire rope passes through a BLOCSTOP™ BSO fall arrest device (fig. D1.7). The centrifugal weight of the BLOCSTOP™ automatically and continuously controls the transport speed of the safety wire rope through the device. If the speed is too fast, the BLOCSTOP™ stops the descent by gripping on the safety wire rope.

In an emergency case, the BLOCSTOP™ can be triggered by hand by pressing on the EMERGENCY STOP button (108.2) - in particular, in the event of slow *slip-page* of the hoist causing the platform to slope.

D.7.2. Measures to be taken immediately after an incident

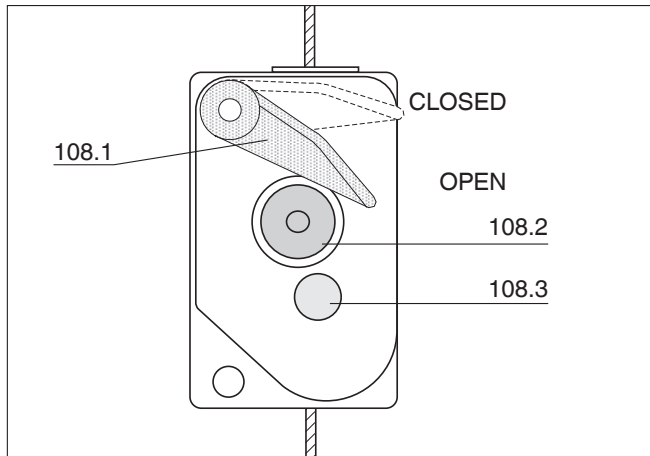


Fig. D.7.1 - BLOCSTOP™ BSO

- 108.1 Lever
- 108.2 EMERGENCY STOP button
- 108.3 Inspection window

The BLOCSTOP™ will engage in the following cases:

- A** Platform lowers with «overspeed»,
- B** Rupture of lifting wire rope or failure of hoist.

In normal operation, the lever (108.1) of the BLOCSTOP™ must be in the «OPEN» position (fig. D1.7).



Risk of injury by great fall due to a safety wire rope which is not tensioned between the suspension and the BLOCSTOP™.
If the BLOCSTOP™ is closed when the platform is moving up, the safety wire rope will not be properly tensioned and the BLOCSTOP™ will become ineffective.

Case B : If the BLOCSTOP™ has engaged subsequent to rupture of the lifting wire rope or failure of the hoist:



Evacuate the operator(s).

Secure the equipment by appropriate means so that the wire rope or hoist can be replaced.

Case A: If you can exclude that the lifting wire rope has not broken or the hoist has not failed:

1. Lift the equipment (43) until you have eliminated the load on the safety wire rope.
2. Return the lever (108.1) to the «OPEN» position (fig. D.7.2).
3. Carefully lower the equipment to the ground while being ready at all times to press the EMERGENCY STOP button (108.2) of the BLOCSTOP™.
4. Before you continue working, check operation of the BLOCSTOP™ as instructed in the following pages.

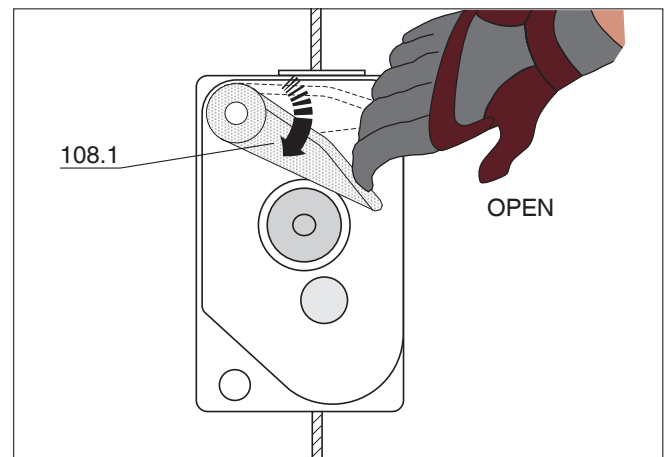


Fig. D.7.2 – Open the BLOCSTOP™ BSO



If the fault persists, call in an After-Sales Service.

DANGER

D.7.3. Functional tests

The equipment is set on the ground (Fig. D.7.3).



Risk of injury!
Wear safety gloves!

1. Press on the EMERGENCY STOP button (108.2). The BLOCSTOP™ should close and the lever (108.1) should jump to the «CLOSED» position.
2. Try to pull the safety wire rope upward.



Risk of fall in the event of malfunction!
If the safety wire rope can be pulled upward:
 - Do not place the equipment in service.
 - Immediately replace the BLOCSTOP™.

DANGER

If the safety wire rope cannot be pulled upward:

1. Return the lever (108.1) to the «OPEN» position.
 2. Pull sharply upwards on the safety wire rope (Fig. D.7.4).
- The BLOCSTOP™ should close and the lever (108.1) should jump to the «CLOSED» position.
3. Return the lever (108.1) to the «OPEN» position.
 4. Repeat steps 2 and 3 three times.

When these tests have been completed successfully, the equipment can be returned to service.

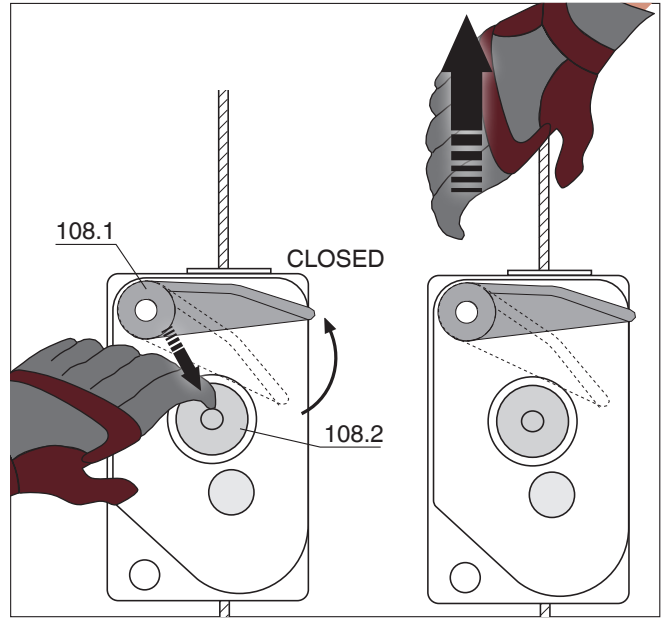


Fig. D.7.3 – Functional test 1

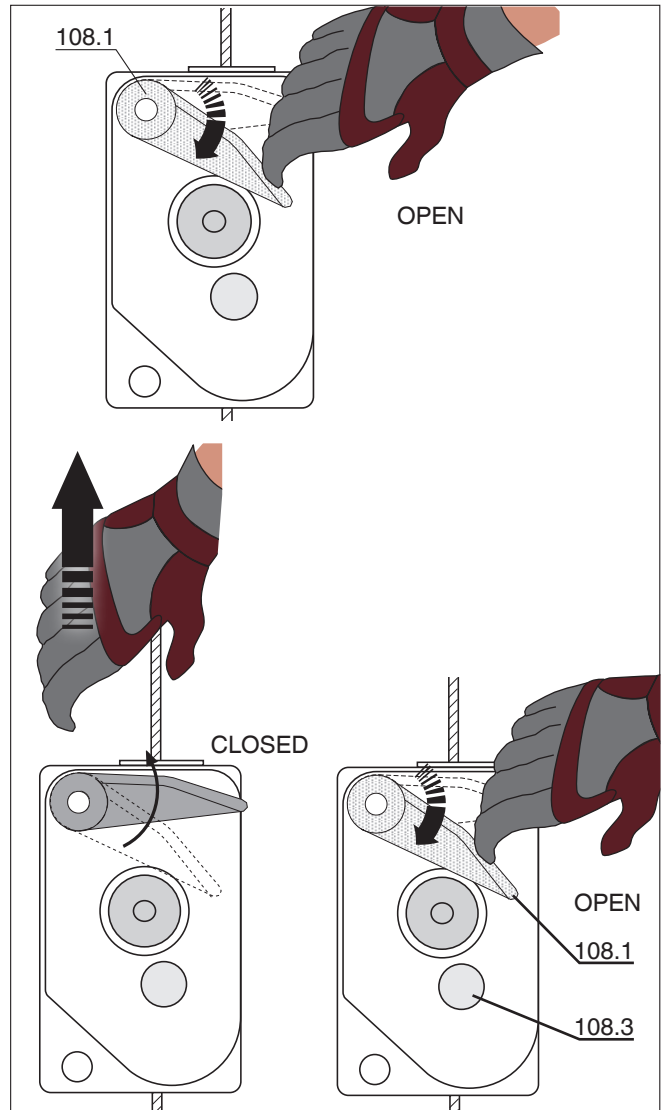


Fig. D.7.4 – Functional test 2



DANGER

Risk of fall in the event of malfunction!

- Do not place the equipment in service.
- Immediately replace the BLOCSTOP™.
- Send in the failed BLOCSTOP™ for overhaul to the manufacturer or to an approved After-Sales Service.

D.7.4. Checks

Before any lifting movement:

- Ensure that the BLOCSTOP™ is securely mounted.
- Ensure that the lever (108.1) is in the «OPEN» position.

During the lifting movements:

- Check at least once through the inspection window (108.3) that the centrifugal weight is rotating.



DANGER

If the centrifugal weight is not rotating, perform a functional test (see above).

Ensure that the safety wire rope is always tensioned between the suspension and the BLOCSTOP™.



DANGER

If the safety wire rope is not tensioned (possible reasons): Ballast weight (113) not in place or BLOCSTOP™ or failed) :
- Stop the movement.

Case 1: the BLOCSTOP™ is open:
Manually push the safety wire rope through the BLOCSTOP™ until it becomes tensioned, without releasing it.

If the ballast weight (113) is not in place, carefully lower the platform, checking that the safety wire rope slides correctly through the BLOCSTOP™.

Fasten the ballast weight (113) to the safety wire rope at around 20 cm from the ground.



DANGER

Case 2: the BLOCSTOP™ is closed:

- Carefully lower the platform until the safety wire rope is nearly tensioned between the suspension and the BLOCSTOP™.
- Open the BLOCSTOP™.

The safety wire rope will automatically tension under the effect of the weight.

Continue the work while observing that the BLOCSTOP™ operates correctly. If the safety wire rope becomes untensioned again above the BLOCSTOP™ during the lifting movements (BLOCSTOP™ in «OPEN» position), immediately stop the work and have the BLOCSTOP™ inspected by an approved After-Sales Service.

E. USING THE PLATFORM

E.1. Special safety instructions



Only wire ropes specified by the TRACTEL® Group should be used. These should be replaced if any of the defects indicated in chapter G. are observed.



Never work with the equipment under strong wind
- greater than 45 km/h - without restraint system
- greater than 60 km/h - with restraint system.

Never work with the equipment under thunder storm conditions.



Use of the platform is prohibited without the safety wire rope(s) and without the fall arrest device(s).



The fall arrest devices are only efficient provided each safety wire rope is properly tensioned between its suspension point and the ballast weight suspended from the safety wire rope.



Never lower the platform by manually opening the brake of the TIRAK hoists if the electrical lowering system operates normally.



Operators must wear a safety helmet as may be required by the worksite conditions.



Risk of injury!
Wear safety gloves!



The dangerous area on the ground should be marked out; this is the area where tools or materials used on the platform could fall. This recommendation is mandatory when the dangerous area may be accessible to the public.



E.2. Preliminary checks

The equipment is intended for use in lighted areas, either naturally or artificially lighted. Where artificial lighting is used, the operator must have sufficient lighting.

When work has been completed, the worksite foreman must return the platform to its “off-duty” position.

Check that the load on the platform does not exceed the rated load (see load plate) and that there is no accumulated snow, ice, or debris, or any excess materials on the platform.

Regularly check correct operation of each hoist, its brake and each fall arrest device as well as limit switches and emergency stop buttons.

Check the safety of each suspension on the roof and ensure that no counterweight has been removed (see suspension user manual).



In particular check that the suspension wire ropes are properly fastened and attached.

Ensure that each end stop buffer plate is properly in place.

Ensure that the ambient temperature is between +55 °C and -10 °C.

Ensure that each stirrup of the equipment is in line with the suspension point.



Ensure that there are no protruding objects on the building facade which could come into collision with the equipment.

E.3. Rated load

Rated load is 120 kg
(= 1 person taken into account for
80 kg + 40 kg material).

E.4. Guiding platform along facade

For platforms working at heights exceeding 40 m, an appropriate guiding system (option) must be used to limit the lateral movements of the platforms which may occur due to wind.

E.5. Electrical controls

The platform up and down movements are controlled from the control box (Fig. E.1). The control buttons are press- and-hold type buttons.



IMPORTANT

If you make an error on a control, wait for the movement to come to a complete stop before making the correction. Avoid controlling the platform by successive pressing actions.

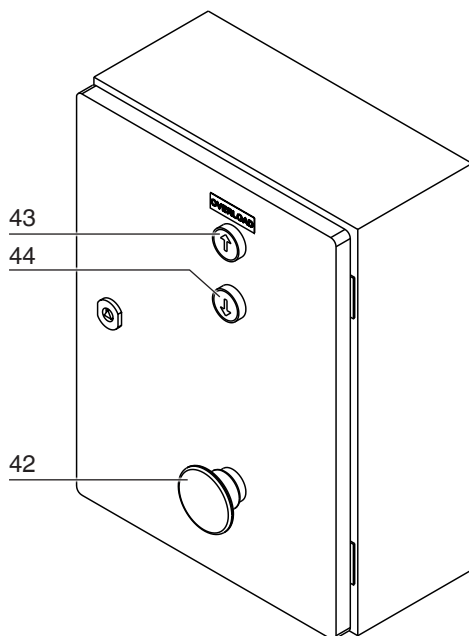


Fig. E.1 - Temporary SOLO control box

- 42 Emergency stop
- 43 Up + overload indicator light.
- 44 Down

E.6. Emergency descent

Use only in the event of a power failure or to release the upper limit switch.

The TIRAK hoist™ is equipped with a manual system which will allow you to lower the platform in the event of a power failure.

- a) Switch off the electrical power supply by disconnecting the connector.
- b) Take out the brake lever (P) housed in the hoist handle and place it, through the slot of the cover, on the brake stirrup (Fig. E.2)



DANGER

Ensure that there are no protruding objects on the building façade which may snag the equipment.

- d) Push the lever upward without forcing to open the service brake. The platform will come down by its own weight and its speed will be limited and controlled automatically by a centrifugal brake.
- e) If the platform does not come down by itself, give it a slight push by turning the handwheel (R) on the motor cover after removing the rubber cap (G).
- f) The platform will stop as soon as you stop acting on the brake lever (P).
- g) Once the platform is on the ground, remove the lever (P) and the handwheel (R) and stow them in their respective housings. Reinstall the rubber cap (G).

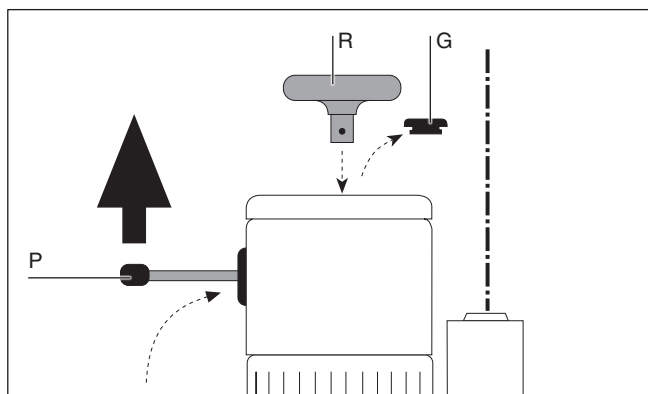


Fig. E.2 - TIRAK™

- G Rubber cap
- P Brake lever
- R Handwheel

E.7. Move platform laterally

1. Stop the platform at around 30 cm off the ground.
2. Remove the ballast weight (113) from the safety wire rope.
3. Give sufficient slack to the safety wire rope.
4. Set the platform on the ground and give sufficient slack to the lifting wire rope.
5. Place the suspension in its new position.
6. Bring the platform directly into line with the suspension.



Do not position the platform using the hoist; this can result in dangerous swinging.

DANGER

7. Tension the lifting wire rope by pressing the «UP» button (43).
8. Lift the platform by around 30 cm off the ground.
9. Tension the safety wire rope by hand and fasten the ballast weight (113) again to the safety wire rope.
10. Wind the length of unused wire rope on the reel.

E.8. Remove the wire ropes

This operation requires two operators, one in the platform and the other on the roof.



The operator working at height must wear a safety harness and be secured to a sufficiently strong anchor point.

DANGER

1. Lower the platform to the ground after removing the ballast weight and give a sufficient amount of slack to the wire ropes.
2. Remove the lifting wire rope from the hoist by pressing the «DOWN» button (44).
3. Slowly remove the safety wire rope (152) from the BLOCSTOP™ (108).
4. On the ground, begin to wind the lifting and safety wire ropes.
5. After having removed the end stop buffer plate (112), the operator on the roof unhooks the suspension wire ropes one after the other and lowers them to the ground using a cord.

Never allow the wire ropes to free-fall to the ground.

F. TROUBLESHOOTING

This chapter contains instructions for the identification and location of faults in view of repairing these on platforms equipped with electric TIRAK™ hoists.

Fault	Cause	Intervention
Hoist does not operate when platform is set into service.	<ul style="list-style-type: none"> No voltage. On three phase system, phases are inverted. 	<ul style="list-style-type: none"> Have presence of voltage checked by an electrician. Invert the phases (see chapter C).
The TIRAK™ motor operates in the up direction, but the wire rope does not engage around the drive pulley.	<ul style="list-style-type: none"> The wire rope end is not rounded off. Wear or failure of traction pulley and clamping system. 	<ul style="list-style-type: none"> Use an appropriate wire rope. Have the hoist overhauled by an approved After-Sales Service.
The TIRAK™ does not operate in the up direction.	Platform is overloaded.	Place the platform on the ground and remove any surplus load.
The TIRAK™ operates in the up direction but the platform does not move up.	<ul style="list-style-type: none"> Voltage drop too high. Rupture of an element in the kinematic chain. 	<ul style="list-style-type: none"> Have presence of voltage or cross-section of conductors checked by an electrician. Have the hoist overhauled by an approved After-Sales Service.
The TIRAK™ operates in the up direction, but with difficulty.	<ul style="list-style-type: none"> Voltage drop too high. Service brake remains closed. The brake is incorrectly adjusted. 	<ul style="list-style-type: none"> Have presence of voltage or cross-section of conductors checked by an electrician. The brake lining is worn; have it replaced. Call in an approved After-Sales Service.
The TIRAK™ operates for a long period of time in the up direction then stops; the motor is hot.	The motor thermal protection has been tripped.	Wait for the motor to cool down and, if possible, partially unload the platform.
The TIRAK™ operates in the down direction but the platform does not come down.	The BLOCSTOP™ ensures its grip on the safety wire rope.	See chapter D.
The TIRAK™ operates normally, then stops.	Failure of electrical power supply.	Have presence of voltage checked by an electrician.
A motor starts slowly.	Single-phase motor: the start-up capacity is faulty or the centrifugal switch is faulty.	Call in an approved After-Sales Service.
Operator receives an electrical discharge when he touches the platform.	Failure of earthing circuit or protection at line head.	Do not use the platform and have the electrical installation checked by an electrician.
<p>BLOCSTOP™ BSA: The BLOCSTOP detection lever cannot be operated manually.</p> <p>BLOCSTOP™ BSO: The lever (9.2) cannot be moved in "OPEN" position manually.</p>	<ul style="list-style-type: none"> Mechanical failure. Wire rope under load. 	<ul style="list-style-type: none"> Replace the BLOCSTOP™. Lift the platform until the safety wire rope is not loaded anymore.
<p>BLOCSTOP™ BSA or BSO: safety wire rope slack between suspension and BLOCSTOP™.</p>	<ul style="list-style-type: none"> No ballast weight (22) attached to cable(s). BLOCSTOP™ faulty. Strongly inclined platform. 	See chapter D.
Platform stops suddenly when moving up.	The platform has encountered an obstacle. The overload safety device has been triggered.	Lower the platform and avoid the obstacle.

G. MAINTENANCE AND INSPECTION

G.1. Yearly check

Except where required by regulations for a shorter inspection period, the hoist and the installation must be checked annually by the manufacturer or by authorized and certified service personnel.

The TIRAK hoists must be checked annually or after every 500 working hours, if the hoist works more than 500 hours per year.

The TIRAK operating hours counters are located in each terminal box of the motors.



A written control certificate is issued for all TIRAK checks (yearly check or exceptional check). The checks are recorded in the logbook provided.

G.2. Regular maintenance

The following simple maintenance operations may be carried out by trained personnel.

G.2.1. Lubrication of wire ropes

The lifting and safety wire ropes must be regularly lubricated using an oiled rag. Use semi-fluid oil SAE 20/30.



Never use oil or grease containing molybdenum disulphide or graphite additives.

G.2.2. Replacing the wire ropes

Only the wire rope recommended by the TRACTEL® Group will ensure safe operation of the hoist.

A TIRAK™ wire rope is defined by:

- its TRACTEL® (S) identification = 1 red strand + TRACTEL® logo on sleeve
- its diameter (see sign plate on the TIRAK™)
- its length
- its terminations:
 - a hook with safety catch and
 - a tip on other hand (fig. G.3)
- its construction.

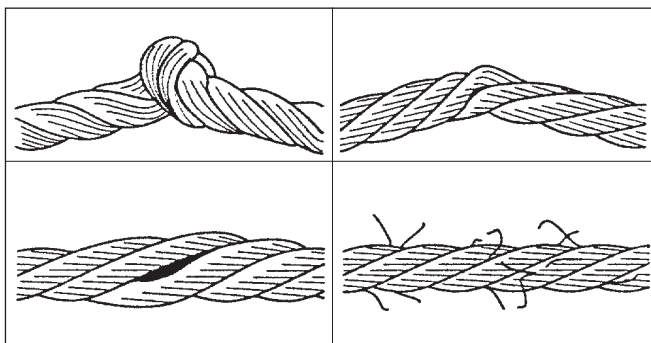


Fig. G.1 - Examples of unusable damaged wire ropes

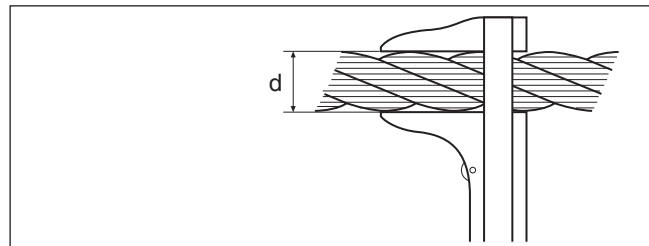
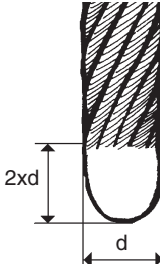


Fig. G.2 - Correct position for measuring wire rope diameter.



Nominal diameter (d) [mm]	Minimum permitted diameter (d_{min}) [mm]
8.3	7.5
9.5	8.5
10.2	9.3

Fig. G.3

The wire ropes should be replaced if any of the defects indicated below are observed (fig. G.1):

- more than 12 wires broken over a length of 24 cm
- damaged or deformed wire rope
- high degree of corrosion
- heat damage
- reduction of diameter of lifting wire rope, minimum value see table above (fig. G.3).

Measure as indicated in fig. G.2.

G.2.3. Checks on BLOCSTOP™ fall arrest device

Regularly check correct operation of the fall arrest device (see chapter D.).



If the BLOCSTOP™ does not operate correctly, it should be replaced immediately and sent in for overhaul to the manufacturer or to an approved After-Sales Service.

G.2.4. TIRAK™ hoists



For inspection and overhaul of TIRAK™ hoists refer to the TIRAK™ assembly instructions.

G.3. Checks when changing worksite

When changing sites, the suspension rigs and platforms must undergo thorough re-commissioning and performance tests.

Static test coefficient: 1.50 (x nominal rated load in platform).

Dynamic test coefficient: 1.10 (x nominal rated load in platform).

The manufacturer must be contacted before these tests are carried out.

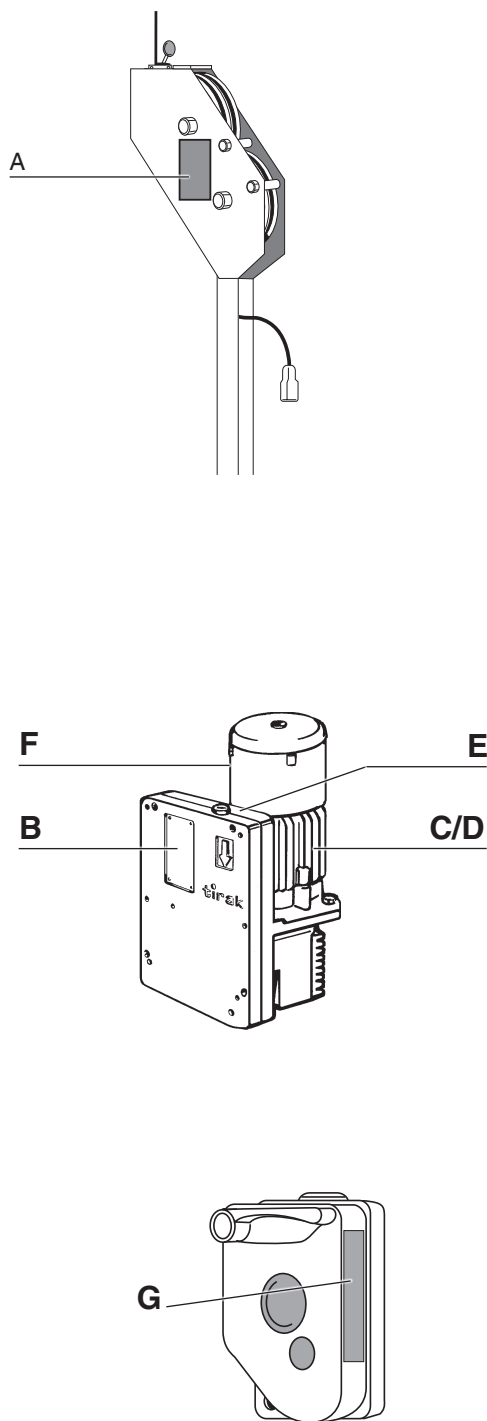


Fig. H.1 – Location of labels and nameplates

H. SPARE PARTS

H.1. Platform

Indicate the type of platform, the code number and the designation of the part.

H.2. TIRAK™ hoist

H.2.1. Wire rope drive mechanism

In addition to the code number and part designation, please indicate the

- hoist model
- serial number
- wire rope diameter

H.2.2. Motor and brake

In addition to the code number and the part designation, please indicate the

- type of motor
- type and voltage of coil

H.3. Electrical control

Indicate the electrical diagram number. The diagram is located in the control box.

H.4. BLOCSTOP™ fall-arrest devices

In addition to the code number and the part designation, please indicate the

- type of BLOCSTOP™
- serial number
- wire rope diameter

H.5. Equipment markings

Check that the labels, markings and load plates are present on the equipment (Fig. H.1):

- A) Nameplate with load table
- B) TIRAK™ nameplate
- C) Motor nameplate
- D) Brake nameplate
- E) «wire rope Ø» sticker
- F) «emergency lowering» sticker
- G) BLOCSTOP™ nameplate

H.6. List of spare parts

For other spare parts, refer to the spare parts list (MC1707 / S-702).

APPENDIX - "CE" DECLARATION OF CONFORMITY

"CE" Declaration of Conformity

according to annex II. 1. A of the European Machinery Directive 2006/42/EC
Temporary suspended platform "TSP"

Model "SOLO 2000"

(no serial number)

The manufacturer: Tractel Secalt S.A. (a TRACTEL® Group company)
3, rue du Fort Dumoulin
P.O. box 1113, L-1011 Luxembourg
Tel. (352) 43 42 42-1 * Fax (352) 43 42 42-200

declares that the machine is in accordance with the model having received the CE type approval No. 0062/5310/760/12/2009/0029, confirming the conformity to the "machinery directive" (No. 2006/42/EC) delivered by the notified body:

BUREAU VERITAS, 32/34 rue Rennequin, F-75850 PARIS CEDEX 17, France (No. 0062)

The machine also complies with the other following directives:

- directive on electromagnetic compatibility N° 2004/108/EC
- directive on low voltage N° 2006/95/EC

with the following harmonized standards:

- EN ISO 12100-1-1/A1-2-2/A1, EN ISO 13850, EN 60204-1-1/A1, EN 1808+A1

and with the other standards, recommendations and following specifications:

- DIN 15020

NOTE: The suspension points are not scope of delivery

Responsible for the documentation: Jörg Thierer; see company address above.

Authorised signature:

Name: Jörg THIERER
Function: General Manager
Place and date of signature: Luxembourg, 01/02/2013
Signature:

