

Manual winch

MANISTOR[®] 100 and 200

Instruction manual _____

UK



CE

173-192.10-3

PRODUCT DEVELOPED AND MANUFACTURED ACCORDING TO NF EN 13157 STANDARD

REGISTERED DESIGN

To ensure the constant improvement of its products, HUCHEZ reserves the right to change the equipment as described below and, in this case, to supply products which differ from the illustrations in this instruction manual.

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1 - General warning

This machine is governed by European regulations and, more specifically, machinery directive 2006/42/EC and the NF EN 13157 standard.

- Before using this winch, the user must read this instruction manual and comply with all the instructions in order to ensure the safe and efficient use of the equipment.
- This instruction manual must be available to all operators. The manufacturer will provide additional copies on request.
- MANISTOR® winches are used for **lifting** operations.
Please ensure that the operator has read this manual and is qualified to operate the machine in the conditions provided for in this manual. This will ensure the safety of both people and the environment.
- Never use this winch with a load which exceeds the maximum load indicated (see p. 4 § 2.4).
- This machine is used to lift loads. Under no circumstances should it be used to hold a load with the rope taut, in particular if the load is likely to increase as this could cause the rope or winch to break (barges, circus tents, etc.).
- This machine may not, under any circumstances, be used to lift people.
- This machine may not, under any circumstances, be used above people unless the load is secured by some other means.
- Before use, the operator must always check that the machine, rope, hook, markings and fastenings are in good working order.
- The manufacturer shall not accept any liability for consequences resulting from the use or installation of equipment not provided for in the present instructions; or for the consequences of removal, modification or replacement of original parts or components with parts or components from other sources without the written agreement of HUCHEZ.
- It is strictly forbidden to motorise these machines.

2 – Presentation of the machines

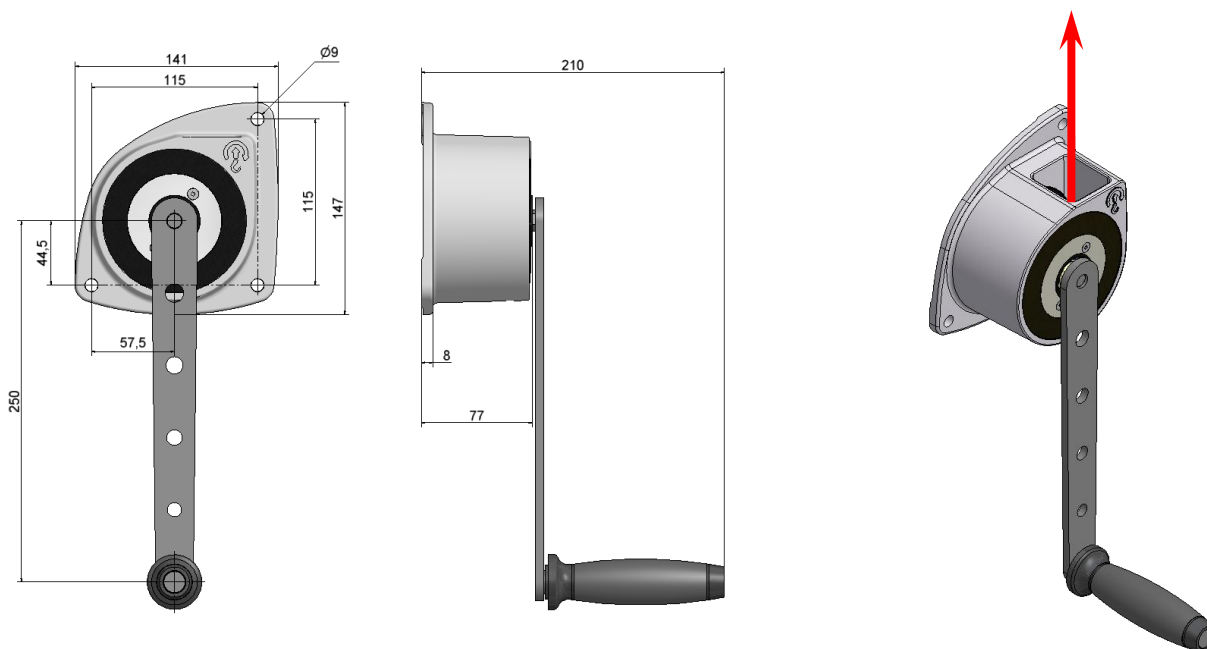
MANISTOR® winches are manual lifting machines manufactured according to the standards and regulations in force.

2.1. Construction

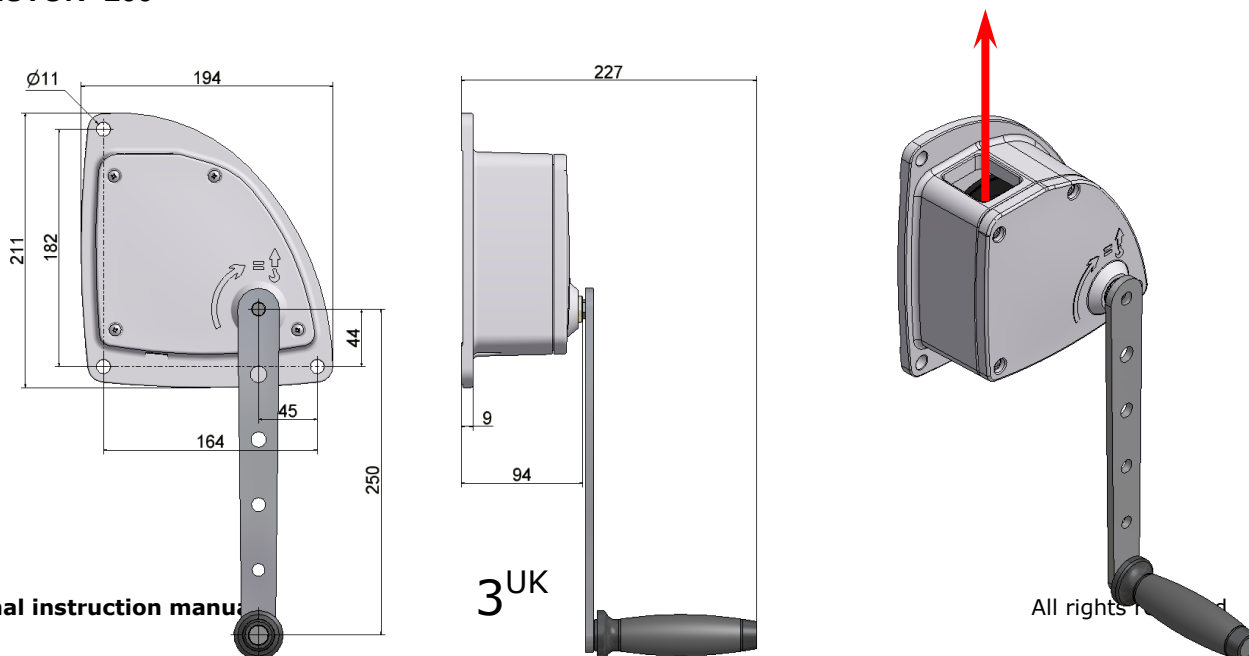
- Aluminium chassis
- Polymer composite drum
- Double rope fastener
- Automatic brake
- Ergonomic handle unit with rotating handle. This handle is assembled and disassembled via a clipping system
- Steel parts protected with anti-corrosive treatments

2.2. Dimensions:

MANISTOR® 100



MANISTOR® 200



2.3. Technical features of the different models

Model	Capacity kg	Number of layers	Rope		Handle load kg	Minimum lift per turn of the handle mm	Weight (bare winch, without rope) kg
			Ø mm	Max. capacity (m)			
Manistor® 100	100	5	3	10	18	153	1.9
Manistor® 200	200	4	4	6.5	12	50	3.0

The rope diameter indicated above corresponds to the load on the last layer.

Important: it is obligatory to check that the rope resistance coefficient complies with the lifted load (coefficient 5).

2.4. Maximum loads depending on the layer of rope used

Since the rope winding layers are not visible to the user, it is forbidden to lift a load greater than the nominal load indicated on the manufacturer's label, regardless of the cutting stroke.

However, these winches can be supplied with a different nominal load for more specific applications. In this case, the installer must ensure that the rope length (and above all the number of useful layers for the winch) complies with the following conditions:

Manistor 100:

Number of layers	1	2	3	4	5
Load (kg)	150	135	120	110	100
Rope length (m)	1.3	3	5.5	8	10.5

Manistor 200:

Number of layers	1	2	3	4
Load (kg)	300	250	220	200
Rope length (m)	0.9	2.5	4.5	6.5

2.5. Accessories

MANISTOR® winches can be delivered with ropes and accessories. The pulleys and pulley blocks used with these winches must comply with standard EN 13157.

2.6. Operation:

Fitting the handle: push the handle in until the clips lock.

Turn the handle one way or another depending on the operation to be performed:

- Lifting a load: turn to the right
- Lowering a load: turn to the left

After use, it is not obligatory to remove the handle; however this is highly recommended if the winch is in a public place or a public path.

Automatic brake activation

A load of at least 10 kg is required for the brake to activate automatically.

3 – Handling – Storage

Manistor winches do not require handling equipment (less than 5 kg with the rope). It is advisable to store the equipment in weatherproof conditions.

4 – Use, assembly and set up

The following precautions should be respected.

4.1. Fastenings

The person responsible for the installation must ensure that the structure holding the winch is strong enough to withstand the stress. The material used for the structure must be able to withstand the maximum pulling and shearing forces in the screws (see table below). The winch must be positioned on a flat surface.

Fastening screws:

Model	Number and screw \emptyset	Maximum pulling and shearing forces on the screws (daN)
Manistor® 100	Three M8 screws	1000/600
Manistor® 200	Three M10 screws	2100/1200

All these screws must have a minimum class of 6.8 to guarantee a high enough safety factor (> 4).

4.2. Rope

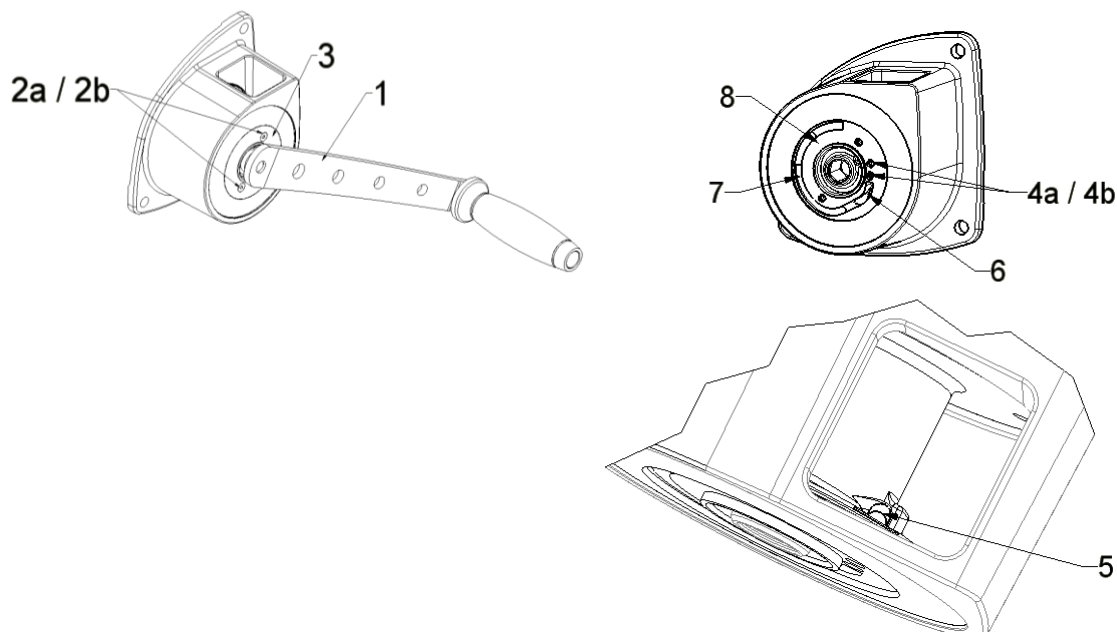
Model	Rope \emptyset (mm)	Max. capacity (m)	Number of layers
Manistor® 100	3	10.5	5
Manistor® 200	4	6.5	4

Check that the quality and breaking load of the rope used are compatible with its use.

4.3 Installing the rope

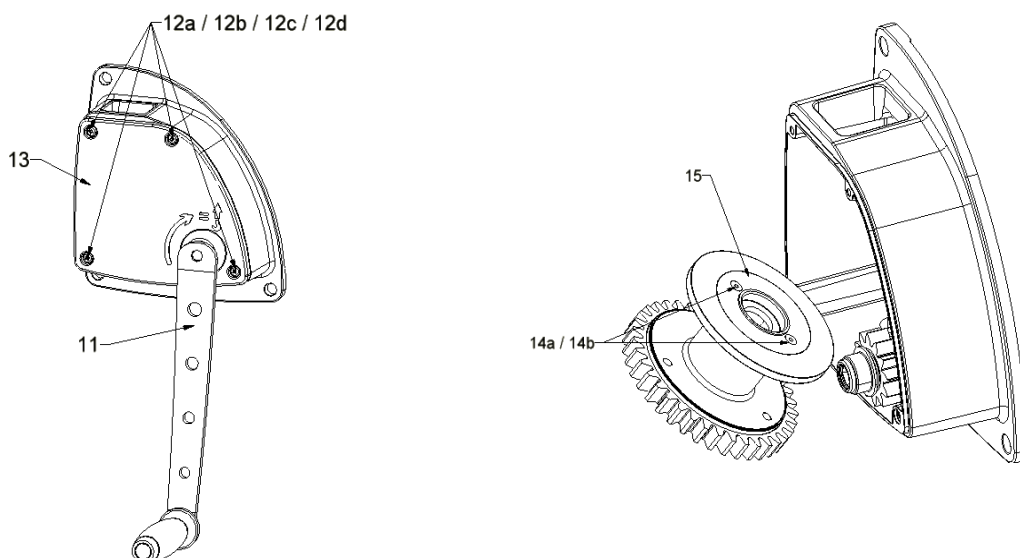
On the Manistor® 100:

Remove the handle 1, remove the screws 2a and 2b, as well as the protection washer 3. Release the screws 4a and 4b. Pass the rope through the drum via the opening 5, the rope will come out through the opening 6. Place the rope in the groove 7 ensuring that it does not go beyond the surface 8. Tighten the rope by tightening the screws 4a and 4b (**do not use a screw gun**). Put the washer 3, the screws 2a and 2b and the handle back on.



On the Manistor® 200:

Remove the handle 11, remove the screws 12a, 12b, 12c and 12d as well as the cover 13. Remove the drum from the winch. Remove the screws 14a and 14b, as well as the protection washer 15.



Release the screws 16a and 16b.

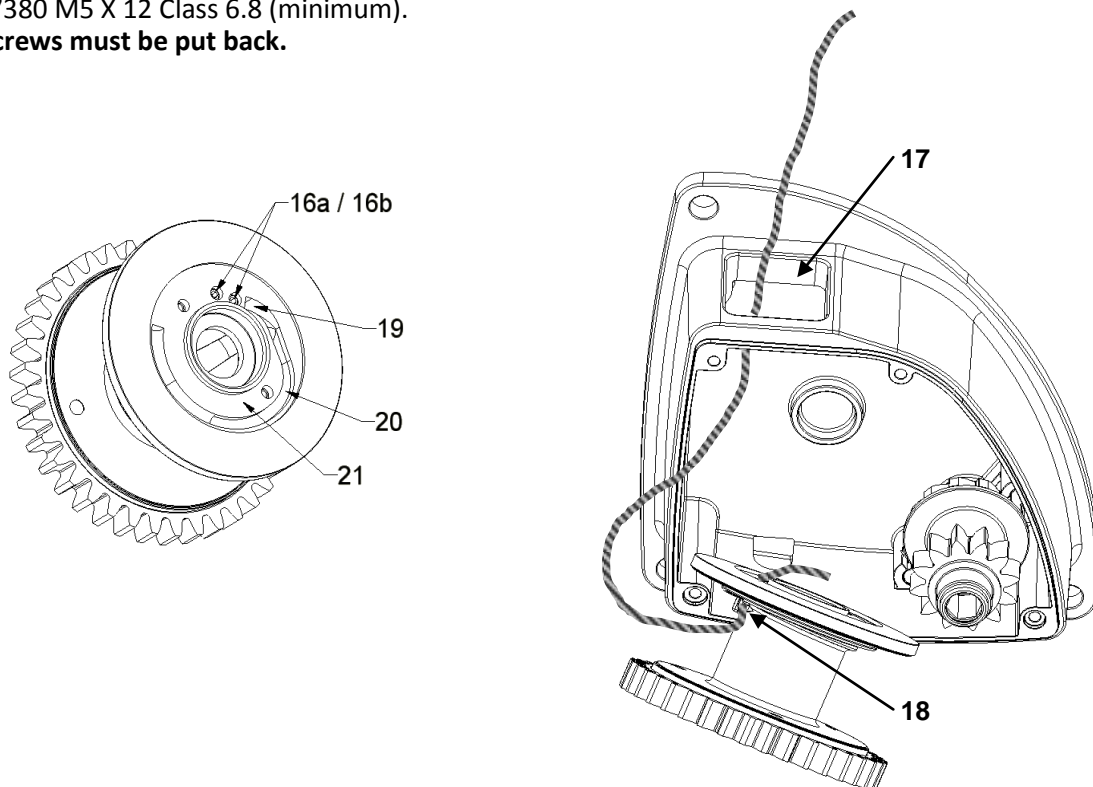
Pass the rope through the opening 17 of the housing. Pass the rope through the drum via the opening 18, the rope will come out through the opening 19. Place the rope in the groove 20 ensuring that it does not go beyond the surface 21. Tighten the rope by tightening the screws 16a and 16b (**do not use a screw gun**). Put the washer 15 and the screws 14a and 14b back on.

Put the drum back in the winch and replace the cover 13. Tighten the screws 12a, 12b, 12c and 12d. Put the handle 11 back on.

The rope has been installed.

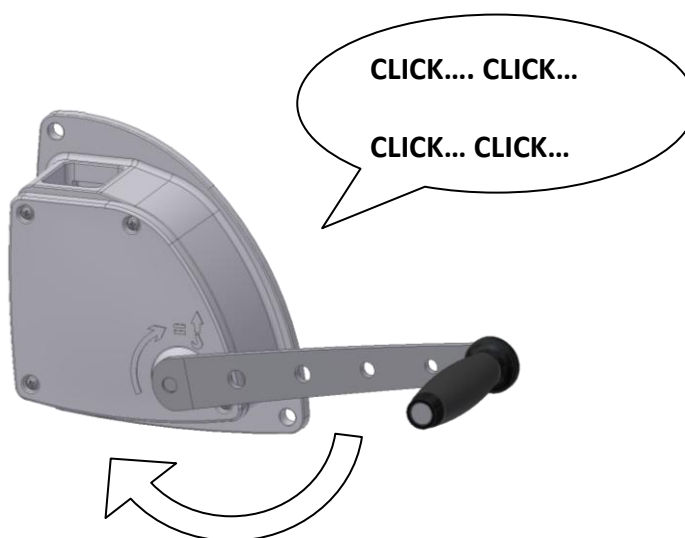
If the screws 12 a/b/c/d are lost, they can be replaced with screws according to NF EN ISO 4762 or NF EN ISO 7380 M5 X 12 Class 6.8 (minimum).

All screws must be put back.



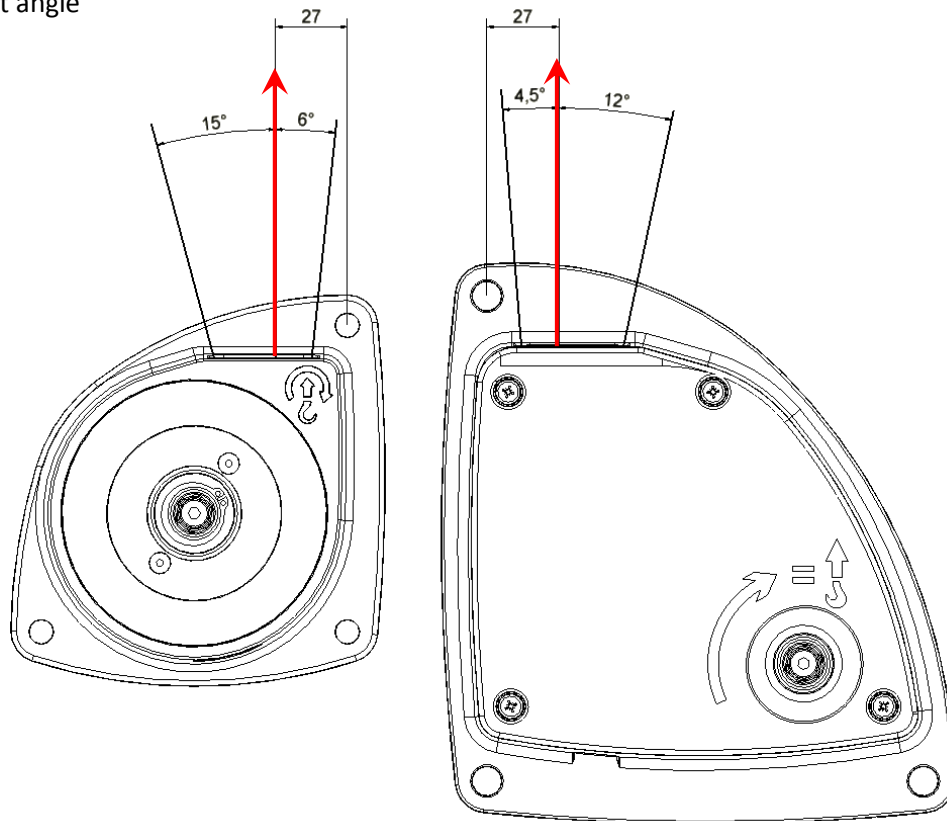
The winding direction of the rope must be strictly observed. To lift the load, turn the handle clockwise: a clicking sound is heard.

To lower the load, turn the handle anti-clockwise.



DANGER! If rope is wound in the wrong direction, the brake will not work.

Rope output angle



4.4 In the event of a system blockage

If the winch blocks as a result of misuse and all lifting and lowering operations are impossible, it is important not to force the machine. This could cause damage and even cause the load to fall. Secure the load by some other means (hoist, forklift) and contact a lifting professional.

4.5 Reduced or zero view of the load

Whenever the user cannot see the load well enough to perfectly control its movements, they should ensure that the load is not in an area in which there may be people or objects (risk of accident or damage to the equipment). It is advisable to secure the area to avoid the passing of people. If the user is unable to see the load, they should ask someone else to supervise the movements of the load. This person should remain at a safe distance and have an unobstructed exit in the event of a problem.

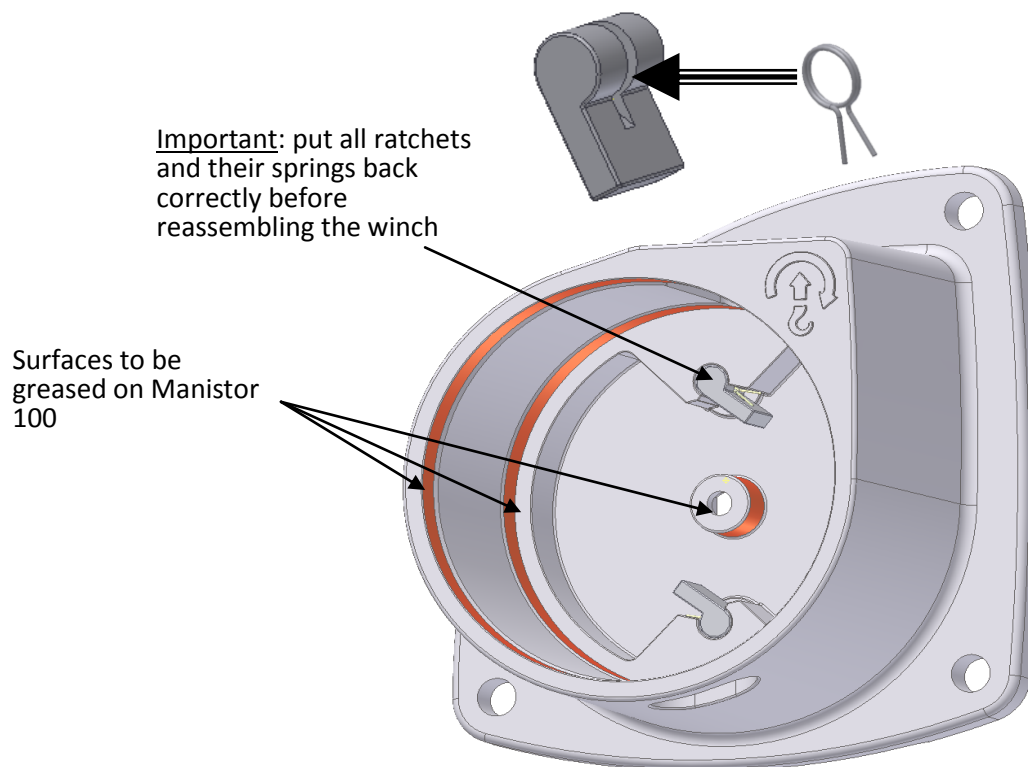
5 – Servicing and maintenance

The delivered winches are ready to be used (after installing the rope if not supplied by the manufacturer).

A maintenance check is required at least once a year:

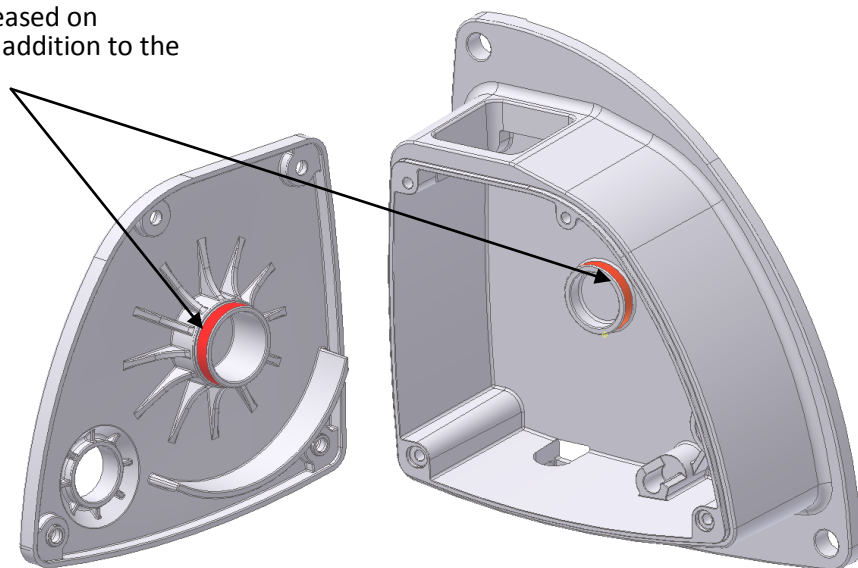
The following require regular greasing:

- on Manistor® 100: surfaces rubbing against the drum (see diagram below) with a grade EP.2 grease for open gears



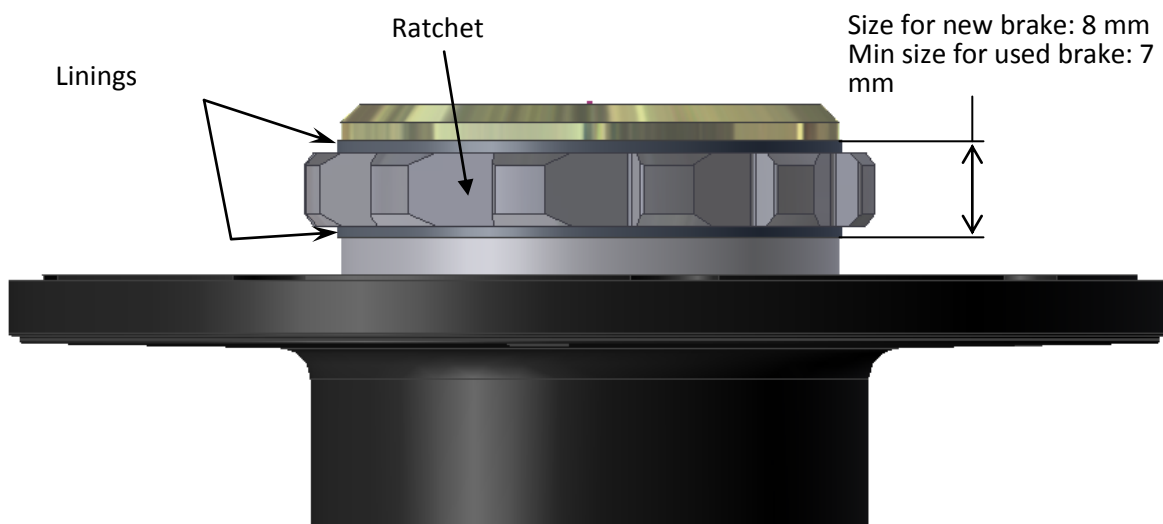
- on Manistor® 200: gears with an EP.2 grade grease for open gears

Surfaces to be greased on Manistor 200. (In addition to the gears).



Regularly and before every use: check the condition of the rope, hook and safety latch. If the rope and hook are not supplied by the manufacturer along with the machine, check that the rope and hook used guarantee a level of safety according to breaking factor 5 (Machinery directive 2006/42/EC).

Regularly monitor the wear of brake linings. When the requirements below are no longer met, the linings must be replaced:



6 – Contraindications for use

Before using the equipment, check for potential causes of overloading such as: adhesion to the ground, suction, jamming, etc. All forbidden and incorrect uses or operations are presented below:

It is forbidden to:

- Lift loads in excess of the nominal load indicated on the machine plate;
- Unwind the drum completely (keep two or three residual winds);
- Pull at an angle;
- Pull on a fixed point;
- Swing the load;
- Use the winch to lift staff;
- Use the winch for random applications (in which the load is likely to change according to natural phenomena such as wind, rain, etc.);
- Walk under a load;
- Use ropes with a different diameter and texture from the specifications in this instruction manual (breaking factor 5);
- Use damaged ropes or spliced ropes;
- Use hooks without a latch, which do not correspond to the loads indicated on the machine or which are in poor condition;
- Insert objects into moving parts;
- Perform operations on a machine while it is loaded;
- Release the drum while loaded;
- Let the load free fall;
- Motorise the machines;
- Use the machine rope as a chain;
- Use handles other than the original ones;
- Use the machine for operations other than those for which it is intended;
- Use the winch as an anti-fall device, regardless of the height of the drop and the load applied;
- Use parts or components other than the original ones provided by the manufacturer;
- Tow by positioning a fixed point on the winch.

7 – Precautions for use

- The operating temperature should be between -10°C and $+50^{\circ}\text{C}$.
- These winches are manufactured for use in a normal environment. If they are used in an aggressive environment (saline, chemical atmosphere, etc.), special care should be taken or advice should be sought from the manufacturer.
- The winches should be used on a regular basis, even with no load, in particular when used in a harsh environment. Prolonged inactivity entails the risk of damaging the brake system (brake sticking).
- It is highly recommended not to handle the rope unless protected by gloves.

8 – Compulsory regulatory checks

This equipment has been designed to be tested:

- In a dynamic situation, with coefficient 1.1
- In a static situation, with coefficient 1.5

A periodic maintenance check is required at least once a year:

In accordance with regulations, the user must keep an inspection booklet recording all the inspections and operations carried out on the machine (Rule FEM 9755).

In France, since 1 April 2005, the owner of a lifting machine must:

1. **Pursuant to the provisions of the order of 2 March 2004**, keep a maintenance log in which the following must be recorded:

- Maintenance operations performed in accordance with the recommendations of the manufacturer
- All other operations (inspection, maintenance, repairs, replacement or changes to the machine)

The following must be recorded for each of these operations: the date of the work, the names of the people and, where appropriate, the companies which carried out the work, the nature of the operation and, if it is a regular operation, the periodicity. If the operations involve the replacement of certain machine components, the references of these components must be indicated.

2. **By virtue of the order of 1 March 2004, article R 232.12 of the Labour Code:**

Checks during set-up (section 3 of the order - articles 12 to 17):

- Suitability test (article 5-1): suitable equipment and compliant installation. Must be provided, in writing, by the user (article 3d).
- Assembly and installation test (article 5-11): equipment installed according to the instruction manual.
- Operating test (article 6c or 14-II): loaded with safety tests.
- Static test (art. 10)
- Dynamic test (art. 11)

Regular general checks (section 5 of the order - articles 22 to 24):

- Inspection of the state of preservation (art. 9): equipment kept in good condition, with nothing missing or added, compliant.
- Operating test (art. 6b and c): loaded with safety tests.
- Checks when resuming service (section 4 of the order - articles 18 to 21):
- Suitability test (art. 5-I): suitable equipment and compliant installation. Must be provided, in writing, by the user (art. 3d).
- Assembly and installation test (art. 5-II): equipment installed according to the instruction manual.
- Inspection of the state of preservation (art. 9): equipment kept in good condition, with nothing missing or added, compliant.
- Operating test (art. 19-II): loaded with safety tests.
- Static test (art. 10)
- Dynamic test (art. 11)

9 – Taking out of use

If the equipment is in a state of disrepair likely to give rise to risks, the user is obliged to ensure that this equipment is eliminated, i.e.: that it is taken out of service, and possibly: disassembled.

10 – Example of the Declaration of Conformity



DECLARATION OF CONFORMITY

F03.30.1 - UK Treuil manuel
MANIBOX – MANISTOR - TIREX

We hereby declare that the design and manufacture of the machinery referred to below comply with the relevant requirements of Directive 2006/42/CE on Machinery.

The machinery's technical file has been put together by the signatory of this declaration.

This declaration shall become null and void in the event it is changed or if any item is added without our prior consent.

Moreover, this declaration shall become null and void if the machinery is not used in accordance with its instructions for use and if it is not inspected regularly.

Type of device: hand winch

Model:

Force:

Serial n°:

Function: Hoisting equipment

Harmonised standard(s) used, notably: EN 13157

Quality assurance: ISO 9001 (certificate registration n°: FQA 9911492)

Equipment delivered: with cable with hook

without cable without hook

Important: these items must comply strictly with the specifications indicated on the manufacturer's plate affixed to the winch and the instructions for use, and they must be supplied by professionals specialised in their use.

and with instructions for use.

Issued in Ferrières on:

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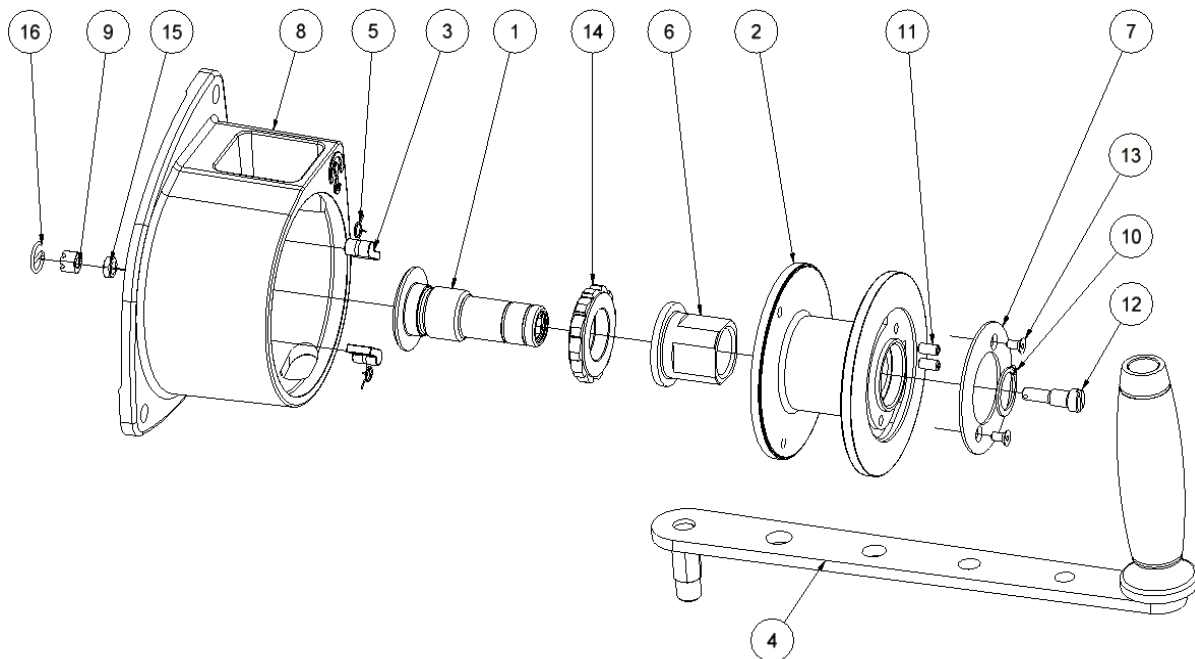
S.A.S. with a capital of €500,000
RC: Beauvais 528 029 492
APE 2822 Z
VAT FR 60 528 029 492



11 – Spare parts

MANISTOR® 100

Key	No.	Description
1	21889	Brake screw
2	21890	Drum
3	21894	Ratchet
4	21895	Handle
5	21901	Ratchet spring
6	21905	Brake nut
7	21907	Stainless-steel washer
8	21908	Housing
9	13698	Nut M6
10	13045	External retaining ring $\varnothing 20 \times 1.2$
11	13421	ST M5x10 Allen screw
12	22445	Screw M6
13	13677	M4x8 countersunk Allen screw
14	21900	Ratchet wheel
15	22446	Spacer washer
16	22447	Pin spring



MANISTOR® 200

Key	No.	Description
1	21889	Brake screw
2	21890	Drum
3	21891	Bearing
4	21892	12-tooth sprocket wheel
5	21893	37-tooth wheel
6	21894	Ratchet
7	21895	Handle
8	21901	Ratchet spring
9	21903	Self-lubricating ring 20x26x16
10	21907	Stainless-steel washer
11	21909	Housing
12	21910	Cover
13	2748	GFM 1416-12 bearing ring
14	2749	GFM-2023-11 bearing ring
15	13698	Nut M6
16	13045	External retaining ring 20x1.2
17	13351	Nylstop HU M5 nut
18	13421	ST M5 x 10 Allen screw
19	13677	M4x8 countersunk Allen screw
20	13678	KFH M5x12 stud
21	13679	M5x12 cross-recessed flat head thread-forming screw
22	22448	Screw M6
23	21900	Ratchet wheel
24	22446	Spacer washer
25	22447	Pin spring

