# NER Nero guard swimming pool cover instruction manual

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### 1 Introduction

### 1.1 About this instruction manual

This instruction manual contains information on the assembly, use and maintenance of the NEROS wimming pool cover.

All users of the NEROS wimming pool cover are required to read and assimilate the information contained in this document.

### 1.1.1 Pictograms



### Warning

Indicates a potentially dangerous situation that could cause serious or even fatal injuries and/or damage to the equipment if the instruction is not followed.



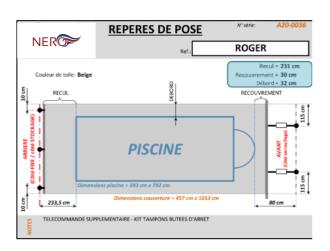
### Information

Useful information or recommendation.

### 1.1.2 Accompanying documents

This instruction manual is accompanied by the following documents:

- 1 installation reference sheet
- 1 installation acceptance report (to be returned to PBK-ENCO)







Installation acceptance report



### 1.2 Intended use

The NEROS wimming pool cover is an automated cover in reinforced PVC fabric with following functions:

- Ensure safety around the pool.
- Protect the pool from external pollution in season and during winter (wintering).
- Preserve the temperature and limit the evaporation of pool water.

### Warning



The Oré swimming pool cover does not replace individual liability. Nor is it intended to replace the vigilance of parents and/or responsible adults, which remains the essential factor for the protection of young children.

### 1.3 Regulations and standards

The design of the NEROS wimming pool cover complies with the following regulations and standards:

- NFP90-308: Swimming pool covers



### 2 Receipt, unloading and opening of packages

### 2.1.1 Receipt

The risk associated with the delivery shall be borne by the Customer. PBK-ENCO cannot be held responsible for damage caused during the transport of packages.

### Warning



- The control of the delivery is carried out in the presence of the driver.
- Immediately issue a reservation to the driver and note on the transport slip a description of the damage or the missing parts.
- Verbal reporting is not enough.

### 2.1.2 Parcel details

The delivery consists of 4 main parcels:

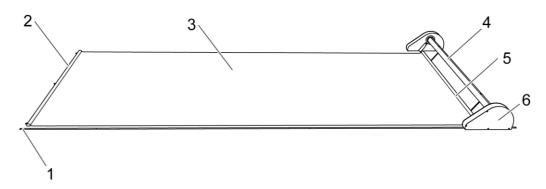
Parcel 1	PVC canvas cover Guide rail	
Parcel 2	Reel shaft	
Parcel 3	Reel block (engine)	
Parcel 4	Reel block (opposite to the engine side)	
	<ul> <li>1 wired charger (length: 10 m)</li> <li>1 accessory bag: <ul> <li>Accompanying documents</li> <li>2 retaining straps and their fixing elements</li> <li>2 wintering straps and their fixing elements</li> <li>Fixing elements to secure the cover to the ground</li> <li>Fixing elements of the guide rail</li> <li>2 remote controls</li> <li>2 stops and their fixing elements</li> </ul> </li> </ul>	

NOTE: Depending on the carrier performing the service, parcels 1 and 2 can be grouped together in the same load and parcels 3 and 4 grouped together on a pallet.



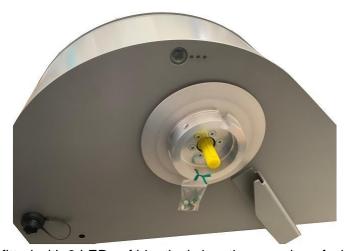
### 3 Description

### 3.1 Overview



- 1. Guide rail \*
- 3. Cover fabric
- 5. Front crosspiece of the cover
- \* The guide rail can be installed on either side of the pool.
- 2. Rear crosspiece of the cover
- 4. Reel shaft
- 6. Reel block (x2)

### 3.2 Description of the reel LEDs



The engine block is fitted with 3 LEDs of identical size, the meaning of which is as follows:

Colour of the LED	Description
Red	The cover will stop working. Recharge quickly.
O Yellow	Batteries need to be charged.
Green	The batteries are charged.

(The big - bigger lens corresponds to the infrared reception area see Section 7 - Use)

### Information



- The LEDs only light up when using the remote control.
- The lighting may briefly switch between colours while the cover is being opened or closed. Ignore this status switch.



### 3.3 Specifications

### 3.3.1 Technical specifications

Specifications	Description	
Dimensions of the canvas	Tailored	
Maximum pool dimensions	5 x 12 m (inner dimensions)	
Mean weight (canvas + reel shaft) *	110 kg	
Weight of the reel blocks	2 × 40 kg	

<sup>\*</sup> For a coverage of 4 x 8 m.

### 3.3.2 Environment

Specifications	Description	
Operating temperature	> 5 °C	

### 3.3.3 Electrical specifications

Specifications	Description	
Reel battery voltage	24 V (2 x 12 V in series)	
Charger voltage	230 V	
Charger cord length	Electrical plug cord: 2 m male plug cord: 10 m	
Batteries for the remote control	1 button cell CR2032	

### 3.3.4 Water treatment features

Specifications	Description	
рН	Between 7.2 and 7.4	
Chlorine content	Between 1 and 1.5ppm	

### 3.3.5 Performance

Specifications	Description	
Charging time (full cycle)	Between 6 and 8 hours	
Manoeuvring time (opening or closing) *	About 1 minute	

<sup>\*</sup> For a cover of 9 m long.



### 4 Security

### Warning



- The swimming pool can pose a serious danger to your children. A drowning happens very quickly. Children near a swimming pool require your constant vigilance and active supervision, even if they know how to swim.
- It is the responsibility of the user to follow the safety instructions set out in this section.





# **LOCKED COVER**

# **SECURITY**

### 4.1 General safety tips

- Systematically actively monitor children near a swimming pool, including children who can swim.
- Entrust the supervision to a designated adult and not to any person present in the environment (to prevent everyone from thinking that it is another person who is responsible for supervision).
- Equip young children with buoys and armbands adapted to their size.
- Develop life-saving skills.
- Teach your children to swim from an early age.
- Never run beside a swimming pool.
- Memorise and display the first aid numbers near the swimming pool:
  - 15 = SAMU
  - 18 = Fire brigade
  - 112 = European emergency number
  - Poison Control Centre of your geographic area
- Keep a mobile phone handy on which the emergency numbers (listed above) are stored near the swimming pool.
- Keep equipment that serve to help a person in difficulty easily accessible near the swimming pool (pole, buoy, etc.).



### 4.2 Safety advice specific to the NEROS wimming pool cover

- Systematically close the NEROS wimming pool cover in the event of absence, even temporary, from home, see Section 7.3 Close the NEROS wimming pool cover.
- The physical presence of a responsible adult is essential when the pool is open.
- The Oré cover should only be opened or closed by responsible adults.
- Never step or jump on the NERO ool cover.
- In the event of a breakdown or malfunction of the NEROSWimming pool cover, take all necessary measures to prevent children from accessing the pool.

### Warning

The swimming pool is no longer secure when:

- The water drainage holes located in the centre of the cover are blocked.
- Rainwater does not drain naturally and puddles are present on the cover.
- The cover is not correctly and completely closed and locked with the straps.
- The cover is damaged (tear, etc.).
- The mechanism has not reached the end of its travel and the straps cannot be put on.





### 5 Assembly

### 5.1 Necessary tools

- 1 decametre
- 1 perforator (drill: ø5x160minimum, ø10 x160minimum)
- 1 external hex key 5 mm
- 1 standard key 13 mm
- 1 mallet
- 1 Phillips screwdriver
- 1 carpenter's pencil
- 1 cord

#### 5.2 Checks before installation

The Oré swimming pool cover is made to measure according to the measurement sheet sent to PBK-ENCO when ordering.

Refer to the measurement sheet and the installation reference sheet to check that the dimensions of the equipment received comply with the dimensions indicated in the documents.

Check that the following information is consistent between all the documents:

- Pool width and length
- Recoil and recovery
- Colour of the canvas

See Section 1.1.2 Accompanying documents.

### 5.3 Preparation of the installation site

### 5.3.1 Anchoring

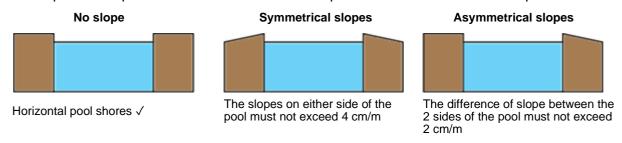
### Warning



- To ensure effective retaining of the cover, the fixing points must be anchored in a sufficiently strong support, such as a concrete slab with a density of 350 kg/m³.
- In case of insufficient paving, it is imperative to build concrete pads of minimum 30 x 30 x 30 cm

### 5.3.2 Pool shore slope

The slopes of the pool shores on each side of the pool must be as horizontal as possible.





### 5.4 Installation

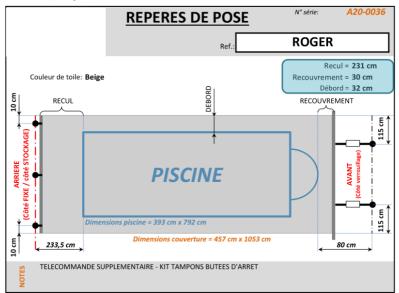
### Warning



- The installation of the NERGEOVER requires 2 operators (average installation time = 2 hours).
- It is mandatory to carry out the installation operations in the order set out in this section.

### 5.4.1 Positioning the cover

- 1. On the "Installation marks" document, identify the following elements:
  - Location of the storage side of the cover.
  - Value of the setback dimension (storage side).
  - Overflow value (length sides of the pool).





### Information

The minimum setback value is 30 cm (or 90 cm if you want to clear access to the skimmer).

- 2. At the edge of the pool, on the storage side, draw a line on the ground at the value of the setback dimension indicated on the sheet.
- 3. Position the cover in its packaging at the end of the pool on the storage side.



### Information

The arrow drawn on the packaging must point towards the pool.



4. Carefully unpack the packaging, keeping the cover rolled up.



### Warning

Be careful not to damage the cover when unpacking.



5. Align the rear crosspiece of the cover with the marking made on the ground.



- 6. On each length side of the pool, draw a line on the ground at the value of the overflow dimension.
- 7. If necessary, realign the cover on the width of the pool to align it with the markings on the ground.
- 8. Unroll the cover over the entire pool.





### Information

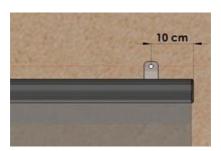
Be sure to keep the cover (2) in position at all times. Use your lower limbs (foot or knee) to exert pressure on the cover during unrolling.

- 9. Check that the cover is in position and that it completely covers the pool.
- 10. On both sides of the length, remove the polyethylene wrap (1), taking care not to move the cover.



### 5.4.2 Fixing the cover to the ground

- 1. Extend a decametre along the entire length of the crosspiece behind the cover on the storage side.
- 2. Position the 3 sliding fixing brackets of the rear crosspiece as follows:
  - 1 central fixing bracket at mid-length of the cover's rear crosspiece.
  - 2 lateral fixing brackets at 10 cm each from the end of the cover's rear crosspiece.



3. Make a mark on the ground in the neutral part of the oblong hole of the central fixing bracket.





### Warning

Only drill the central fixing hole. The 2 side fixing holes will be drilled at the end of the installation.

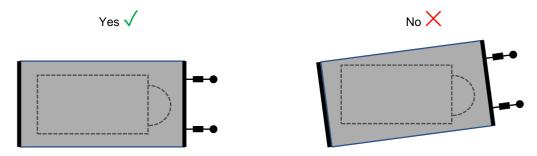


- 5. Refit the central fixing lug above the central fixing hole.
- 6. Install a dowel in the central mounting hole.
- 7. Fix the central fixing lug to the central fixing hole with the screws provided (hexagon head screw + washer).

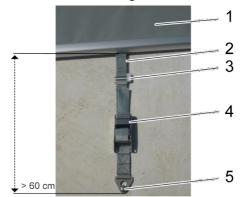


### 5.4.3 Installation of the 2 retaining straps

- 1. Pull the cover (1) as tight as possible by manually pulling it towards the locking side (opposite the storage side).
- 2. Check the alignment of the cover in relation to the pool.



3. On the pool locking side, draw a line on the ground at a minimum distance of 60 cm.

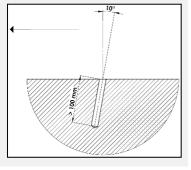


- 4. With a measuring tape, check that the position of the fixing elements (2) of the retaining straps on the front crosspiece of the cover corresponds to the dimension indicated on the document "Fitting marks". If necessary, adjust.
- 5. On the line on the ground, drill 1 hole in front of each strap (drill Ø10).



#### Information

For better efficiency, it is recommended to drill with an angle of 5 to 10° in the opposite direction to the traction of the cover.



6. Install the retaining strap in its tensioner (4), see Section 7.6 Pass a strap through its tensioner.



#### Information

Scan this QR code to access a video tutorial that illustrates the installation of the straps.



7. Fasten the quick release buckle (3) of the strap in the fastening of the front crosspiece of the cover.

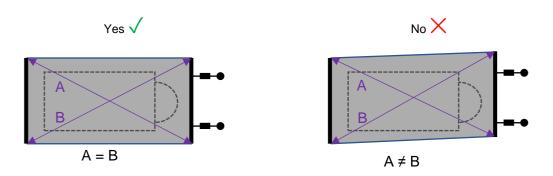


- 8. Lock the strap to the ground with an anchor nail (5).
- 9. Close the strap.
- 10. Operate the strap lever to tension the cover.
- 11. On each side of the length of the pool, measure the overhang distance between the end of the cover and the edge of the pool.
- 12. If necessary, realign the cover on the width of the pool to align it with the markings on the ground.
- 13. With a measuring tape, measure the diagonals of the cover.



### Warning

The diagonals must have the same length.



14. If necessary, adjust the position of the cover until the diagonals have the same length.

### 5.4.4 Finalisation of fixing the cover to the ground

- 1. On the storage side, slide the lateral fixing brackets of the rear crosspiece at a distance of 10 cm from the ends.
- 2. Mark on the ground and drill in the same way as the central hole, see Section 5.4.2 Fixing the cover to the ground.

### 5.4.5 Assembly of the reel

1. Position the shaft of the reel at the end of the pool (locking side).





### Information



The axis of the reel consists of 2 axes positioned one inside the other:

- The winding tube (exterior).
- The transmission shaft (interior).
- 2. Position the 2 reel blocks on each side of the pool as in the previous photo:
  - Cover side aluminium flange
  - Tapered part of the reel directed towards the cover.

#### Information



- Leave the 2 blocks on their cardboard wedges during the installation operations.
- is recognisable by the presence of charge indicator LEDs.
- Align the engine block with the front crosspiece of the cover.
- Leave the other block about 1 m set back so as not to interfere with the installation operations of the shaft on the engine block.

The engine block contains the engine and the batteries. The engine block

3. Partially disengage (approximately 40 cm, engine block side) the transmission shaft (2) from the winding tube (1).



4. Detach the bag of screws of the aluminium flange (6) from the engine block.



### Information

The screws will be used to attach the shaft to the engine block.

5. Fit the transmission shaft on the engine block, taking care to align the key groove (3) of the transmission shaft with the key (4) of the shaft (5) of the engine block.





For better visibility of the pin, manually operate the drive wheel of the block until the pin is positioned upwards.





6. Fit the winding tube (outer tube) on the aluminium flange of the engine block, taking care to align the groove (male) of the tube with the groove (female) of the aluminium flange of the engine block.



- 7. Position and tighten the 3 BHC M8×20 stainless steel screws a few turns to secure the reel shaft to the engine block.
- 8. Position the opposite block in front of the axis
- 9. If necessary, manually operate the drive wheel (rear wheel) of the engine block to rotate the shaft of the reel until the key groove is aligned with the key of the opposite block.
- 10. Repeat steps 5 to 7 for the opposite block.
- 11. Tighten the 3 screws of each block.



### 5.4.6 Connecting the cover to the reel



### Information

The connection is made using straps present on the roller tube and on the front crosspiece of the cover. The positioning of the straps is preset at the factory.



- 1. Align the assembled reel on the cover.
- 2. On each side, position and centre the foot of the block's ramp on the roller of the front crosspiece of the cover.





### Information

Give light calf taps on the blocks to adjust the centring of the ramp feet on the rollers of the front crosspiece of the cover.

3. On both sides, connect the strap on the reel tube with the strap on the front crosspiece of the cover.





### 5.4.7 Installation of the guide rail



### Warning

The installation of the guide rail is done when the cover is closed.

### Information



- The function of the guide rail is to maintain the trajectory of the reel during the opening/closing cycles of the cover.
- The guide rail is installed along the length of the pool on the side of the block on which the white-grooved wheel is installed.
- If it is necessary to install the guide rail on the other side of the pool, it is necessary to dismantle and invert the wheels of the blocks, see Section 9.2.5 Interchange a standard front wheel and a grooved wheel (guide rail)
- 1. Identify the side of the pool on which to mount the guide rail.
- 2. Position the guide rail along the pool.
- 3. Assemble the guide rail profiles together using the joints.



### Information



- Start with the longest tube and end with the shortest tube. The longest tube must be positioned on the locking side.
- The guide rail is cut to the following length: canvas length + 50 cm.

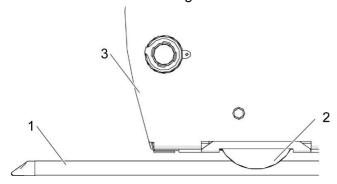


### Information

Tip: surround the junctions with Scotch tape to prevent them from slipping during assembly with the guide profiles.



4. Lift the reel block (3) and pass the rail (1) under the guide wheel (2) so that the guide rail protrudes a few centimetres on the locking side.



5. Measure 13 cm between the rail and the edge of the canvas (flat canvas).



- 6. If necessary (for example, to make it easier to drill the holes compared to the paving joints), adjust the position of the rail by moving it from the back to the front (latitude =  $\pm$  10 cm).
- 7. Drill the holes for the guide rail (drill Ø5).



### Information

It is recommended to make a round trip along the length of the rail by drilling every other hole on the way out, and the remaining holes on the way back.



### Warning

- 1 operator must permanently hold the rail in position while the other operator drills the holes.
- Do not forget to drill the holes under the reel block.
- 8. Install the knock-in anchors in the holes using a Phillips screwdriver and a mallet to secure the rail to the floor.



- 9. At the ends of the rail, fit the end caps.
- 10. Mark and drill the holes for the end caps.
- 11. Install the drive dowels in the holes of the end caps.



### 5.4.8 Battery connection



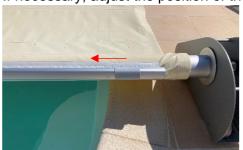
### Warning

The battery of the NERCOVER is delivered unplugged in order to limit its self-discharge. It is necessary to connect the battery in order to use the cover.

Refer to the procedure for removing the batteries, see Section 9.2.2 Remove the batteries.

### 5.4.9 Alignment and finalisation of the installation

- 1. Release the 2 retaining straps.
- 2. Take the remote control and carry out a complete opening manoeuvre, see Section 7.1 Use of the remote control.
- 3. Check that the reel completes its run straight. If necessary, adjust the alignment of the cover.
- 4. Carry out a complete closing manoeuvre (see Section 7.3 Close the Oré swimming pool cover, making sure when passing each bar that the ledge protective pads are correctly positioned in relation to the point of contact with the ledge. If necessary, adjust the position of the pad by tapping on its side with a mallet:





At the end of the closing manoeuvre, adjust the alignment of the cover if necessary.

5. Carry out a new complete opening/closing cycle.

### 5.4.10 Installation of the rubber stops

- 1. Open the cover, see Section 7.1 Use of the remote control.
- 2. Draw a line parallel to the rear crosspiece of the cover (distance: max. 27 cm).





- 3. Drill a hole (drill Ø10) on this line and in the axis of each of the reel blocks.
- 4. Install a dowel in each of the holes.
- 5. Assemble the stops (rubber buffer + spacer + screw + washer).
- 6. Fix the stops to the floor.





### Warning

Do not forget to install a spacer between the rubber buffer and the floor.

### 5.4.11 Installation of the 2 wintering straps

- 1. Close the cover, see Section 7.3 Close the NEROSWIMMING pool cover.
- 2. Mark the position of the tensioners on the front crosspiece of the cover.
- 3. On the line drawn on the ground when installing the retaining straps, mark the intersection of the tensioners, see Section 5.4.3 Installation of the 2 retaining straps.
- 4. On the line on the ground, drill 1 hole in front of each strap (drill Ø10).



### Information

It is recommended to drill with an angle of 5 to 10° in the opposite direction to the traction of the cover.

5. Install the 2 wintering straps in the same way as the 2 retaining straps.



### 5.4.12 Installation of a solar panel (optional)

The solar panel is a back-up charging option that compensates for the self-discharge of the batteries. The solar panel is integrated into the upper casing of the engine block of the reel.

A solar panel allows to recharge the equivalent of 1 to 2 opening/closing cycles per day in the summer season.

### Warning

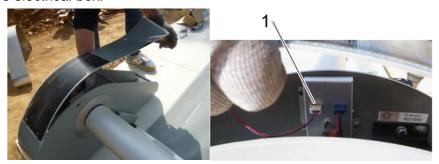


- The use of a solar panel does not replace the regular recharging of the batteries. (Carry out a charge before putting into wintering, another charge at the end of wintering, then if necessary, during the season according to the indication of the battery charge indicator LEDs)
- The efficiency of the solar panel is directly related to the sunshine.



To replace a standard casing with a solar panel casing, proceed as follows:

- 1. Remove the upper casing from the engine block, see Section 9.2.1 Remove the upper casing from a block.
- 2. Install the front part of the solar panel casing, then connect the solar panel terminal to the block's electrical box.



- 3. Clip the rear part of the solar panel onto the block.
- 4. Use an Allen key to tighten the 5 fastening screws on the outer side of the engine block.



### 6 Commissioning

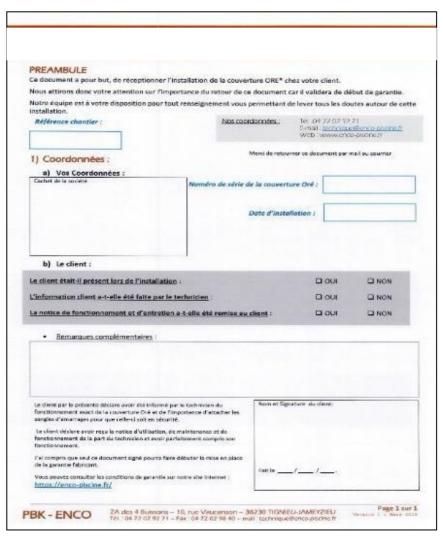
Once the NEROS wimming pool cover has been installed, the installer must:

- communicate this instruction manual to the end users of the product.
- have the end users sign the cover receipt report.



### Information

The acceptance report of the NEROS wimming pool cover validates the beginning of the warranty according to the conditions specified in this instruction manual.



Each a swimming pool cover has a serial number which must be entered on the acceptance report.

The serial number is indicated in the following places:

- On the installation reference sheet.
- On the accessory bag.
- On a label stuck inside the block on the engine side.



### 7 Use

### 7.1 Use of the remote control

Our remote control is a technology dedicated to the Oré cover and can only work with it. No other remote control can replace ours.

It works in infrared (like your TV) and not through radio waves.

The transmitter is located at the end of the rounded part of the remote control. Hold the remote control in the same direction as the photo opposite.

You must point it towards the big lens of the engine block to ensure that it works a at a distance of less than 6m from the receiver.



### 7.2 Open the Oré pool cover

The opening of the cover consists in automatically winding the canvas around the reel. Proceed as follows:

- 1. Detach the cover's locking straps.
- 2. Check that there are no objects in the reel movement area or on the cover.
- 3. Grasp the remote control and aim at the receiver lens.
- 4. Press the button (open padlock) on the remote control.

### Warning



- It is necessary to keep the opening button pressed.
- during the whole
- Always keep a view of the pool during opening or closing operations.
- 5. Before the reel comes into contact with the rubber stops fixed to the floor, release the button (padlock open) on the remote control.





#### Information

- The stops are designed to prevent damage to the cover if opened beyond the maximum limit.



- The stops are not designed to stop the reel running at full speed repeatedly.
- When closing the cover, release the button on the remote control when the back of the reel reaches the level of the front crosspiece (on the ground) of the cover. Pulse the button again until the rear of the roller reaches the stop.
- 6. Store the remote control out of sight and reach of children.

### 7.3 Close the swimming pool cover

Closing the cover consists of automatically unrolling the fabric above the pool. Proceed as follows:

1. Remove all objects from the pool (toys, buoys, inflatable mattresses, etc.).



### Warning

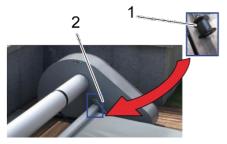
Check that there are no swimmers or foreign bodies before and during the cover closing procedure.

- 2. Grasp the remote control and aim at the receiver lens.
- 3. Press the button (closed padlock) on the remote control.

### Warning



- It is necessary to keep the close button for pressed during the whole cycle of closure.
- Always keep a view of the pool during opening or closing operations.
- 4. Before completely unrolling the canvas, check that the rollers (1) of the front crosspiece of the cover descend into the rails (2) of the reel blocks in order to be able to flatten the cover on the ground.





- 5. If necessary, reopen the cover a few centimetres and then close again until the rollers descend correctly into the rails.
- 6. When the tarpaulin is taut and the reel is blocked by the rollers, release the button (padlock closed).



### Information

There is no limit; once the cover is taut, the reel is blocked by the rollers and the wheels turn empty.



7. Lock the 2 retaining straps.



#### Information

Scan this QR code to access a video tutorial that illustrates the installation of the straps.



8. Store the remote control out of sight and reach of children.

### 7.4 Secure the swimming pool cover



### Warning

The Neroswimming pool cover is only secure when the 2 retaining straps are locked.

- 1. Close the cover, see Section 7.3 Close the NEROSWIMMING pool cover.
- 2. Relock the 2 retaining straps to the ground with their anchor nail.
- 3. Install the retaining straps, see Section 5.4.3 Installation of the 2 retaining straps.



#### Information

The 2 wintering straps can be used to optimise the tightness of the cover during wintering.

### 7.5 Charge the reel batteries

### Warning



- The batteries are recharged by connecting the charger to the mains.
  The connection to the mains must be located at a distance greater
- than 2 m from the pool in an area protected from humidity.

   It is recommended to regularly monitor the condition of the batteries. S
- It is recommended to regularly monitor the condition of the batteries. See Section 9.1 Preventive maintenance for battery recharging frequency.



### Information

A system equipped with 2 fully charged batteries has an autonomy of approximately 15 opening/closing cycles for a coverage of approximately 10 m in length.

1. On the reel, unscrew the sealing cap of the electrical socket back on.





2. Connect the charger power cord by aligning the male keying pin on the charger side with the female keying pin on the reel side.



### Warning

Do not force the electrical outlet.

Female polarizer (reel)



Male polarizer (charger)



3. When the plug is in place, tighten the sealing ring to lock the charger plug onto the reel plug.





### Warning

Screw without forcing on the electrical outlet.

4. Connect the charger to the mains. During the charging cycle, the charger's **Red** LED is on.
When the charging cycle is complete, the charger's **Green** LED is on.



#### Information

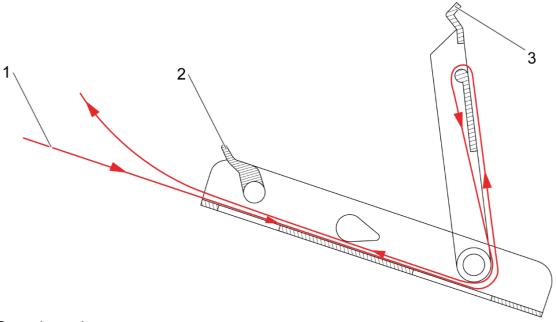
The charging time varies according to the state of discharge of the batteries. A complete charging cycle takes an average of 6 hours.

- 5. Disconnect the charger from the mains.
- 6. Loosen the sealing ring then disconnect the charger from the reel.
- 7. On the reel, screw the sealing cap of the electrical socket back on.
- 8. Store the charger out of sight and reach of children.



### 7.6 Pass a strap through its tensioner

1. Release the rocker (3) from its lock (2).



- 2. Open the rocker.
- 3. Pass the strap (1) through the tensioner following the path shown in the diagram above.
- 4. Tighten the strap on the output side with the desired adjustment.
- 5. Close and lock the rocker



### 8 Maintenance



### Warning

Cover maintenance is the sole responsibility of the user.

#### 8.1 Water treatment



### Warning

The pool water must always (including in the presence of water treatment by salt electrolysis) respect the pH and the chlorine level indicated in Section 3.3.4 Water treatment features.

- In season, it is necessary to open the cover at least once a day in order to prevent the accumulation of chemicals between the water and the cover.
- In order to avoid any overchlorination or impairment of the pH, it is advisable to equip
  the installation with any device allowing the regulation of the supply of water
  treatment products. This instruction is mandatory in the case of an automatic cover
  fitted to an indoor swimming pool. It remains recommended for any type of outdoor
  pool.
- The above instructions also apply to any type of automatic or non-automatic pool water treatment device.

### 8.2 Cleaning

Clean the cover at least twice a year (preferably before and after the swimming season) using a specific cleaning product for PVC fabric.

Routine cleaning is done with a simple jet of water.



### Warning

- Do not use a high-pressure cleaner.
- Avoid aggressive, foaming or solvent products.
- Avoid abrasive sponges.

### 8.3 Annual inspection

Inspect once or twice a year the entire cover and its fastening elements. Additional verification is required in the following cases:

- After someone falls on the cover.
- After an extreme weather event (storm, heavy snowfall, etc.).



#### Warning

It is necessary to replace all worn or damaged elements.



### 8.4 Wintering

The cover is designed to protect your pool during the winter.

#### 8.4.1 Winterization

- 1. Lock the 2 retaining straps to secure the cover, see Section 7.4 Secure the swimming pool cover.
- 2. Lock the 2 wintering straps.
- 3. Fully charge the batteries, see Section 7.5 Charge the reel batteries.
- 4. During wintering, charge at least 1 complete charging cycle per month (except in the case of the presence of a solar panel which compensates for the self-discharge of the batteries during the winter).



#### Information

If you do not need to open the pool during the winter, it is possible to dismantle the batteries in order to store them in a dry place, see Section 9.2.2 Remove the batteries.



### Warning

In the event of snowfall during the winter, it is essential to remove the snow from the cover. An accumulation of snow can cause irreversible damage to the cover.

### 8.4.2 End of winter

- 1. Reinstall the reel batteries (if they have been removed), see Section 9.2.2 Remove the batteries.
- 2. Charge the batteries.



#### Information

It is recommended to charge the batteries the day before recommissioning in order to fully charge the batteries.

- 3. Unlock the 2 wintering straps.
- 4. Open the cover, see Section 7.1 Use of the remote control.



### 9 Maintenance

### 9.1 Preventive maintenance

Operation	Daily	Weekly	Monthly	Annually or biannually
Open/close the cover (in season)	✓			
Recharge the batteries (in season)		✓		
Recharge the batteries (wintering)			<b>√</b>	
Inspect the cover and its fastening elements				✓
Clean the cover with a suitable product				✓

### 9.2 Corrective maintenance

### 9.2.1 Remove the upper casing of a block

1. Remove the protective canvas from the standard casing (if there is no solar panel).



- 2. Loosen the 5 fixing screws on the outer side.
- 3. Unclip the rear of the upper casing.



### Warning

If there is a solar panel, be careful not to tear the connectors.

- 4. If necessary, disconnect the connection lug of the solar panel to the block box.
- 5. Completely remove the upper casing from above.



To refit, proceed in the reverse order.



### 9.2.2 Remove the batteries



### Warning

- Always perform a complete recharge cycle before dismantling the batteries.
- Be sure to unplug and store the charger before removing the batteries.
- 1. Remove the upper casing from the engine block, see Section 9.2.1 Remove the upper casing from a block.
- 2. Disconnect the harness (1) from the board at the battery (2).

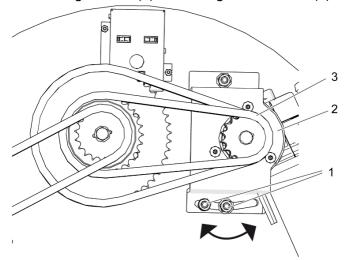


- 3. Remove the fastening screw (4) from the battery clamp (3).
- 4. Remove the battery clamp.
- 5. Remove the battery.
- 6. Store the batteries in a cool, dry place.

To refit, proceed in the reverse order.

### 9.2.3 Adjust engine chain tension

- 1. Remove the upper casing from the engine block, see Section 9.2.1 Remove the upper casing from a block.
- 2. Remove the outer side of the engine block.
- 3. Loosen the 2 lower fastening screws (1) of the engine subframe (2).



- 4. Move the engine cradle slightly backwards to adjust the chain tension (3).
- 5. Tighten the 2 lower fastening screws of the engine subframe.
- 6. Refit the outer side.
- 7. Refit the upper casing.



### 9.2.4 Adjust the chain tension of the drive wheel

- 1. Remove the upper casing from the engine block, see Section 9.2.1 Remove the upper casing from a block.
- 2. Loosen the 4 fastening screws of the drive wheel mounting bracket (at the rear of the engine block).



- 3. Move the mounting bracket slightly to adjust the chain tension.
- 4. Tighten the 4 fastening screws.
- 5. Refit the upper casing.

### 9.2.5 Interchange a standard front wheel and a grooved wheel (guide rail)



### Information

The use of a guide rail requires the presence of a grooved wheel on the engine block. The grooved wheel comes installed to match the side where the guide rail is located. If you need to install the guide rail on the other side of the pool, it is necessary to reverse the wheels.

- 1. Remove the upper block casings, see Section 9.2.1 Remove the upper casing from a block.
- 2. Remove the 2 fastening screws (1) from the support (2) of the standard wheel (3).



- 3. Remove the support.
- 4. Extract the rubber wheel and its axle.



5. On the other block, remove the 2 fixing nuts (4) from the grooved wheel support (5).

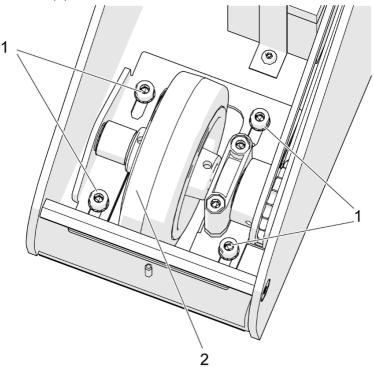


6. Remove the grooved wheel and its support from below the block.

To refit, proceed in the reverse order.

### 9.2.6 Replace a rear wheel

- 1. Remove the upper casing from the engine block, see Section 9.2.1 Remove the upper casing from a block.
- 2. Remove the 4 screws (1) of the rear wheel.



3. Extract the rear wheel subassembly (2).

To refit, proceed in the reverse order taking care to re-tension the chain, see Section 9.2.4 Adjust the chain tension of the drive wheel



### 9.2.7 Check the charging circuit



### Information

- This section is intended for qualified technicians in charge of maintenance.
- A multimeter is required. It must be set to measure a direct voltage of 24 V as well as the polarity of this voltage (positive or negative).

### **Battery voltage check**

- 1. Remove the upper casing from the engine block, see Section 9.2.1 Remove the upper casing from a block.
- 2. On the battery, disconnect the 2 harness lugs from the harness coming from the control board.
- 3. Measure the voltage at the battery terminals by positioning the multimeter probes as follows:
  - • Red lead of the multimeter on the terminal (+ / red) of the battery.
  - Black lead on the other terminal (- / black).



- 4. Interpret the measurement as follows:
  - Displayed voltage greater than 23.5 V
     The battery is working normally (at full charge, the battery voltage is close to 26 V).
  - Displayed voltage lower than 23.5 V
     The battery is discharged; recharge the battery.
     If the voltage is below 18 V, the battery is dead. Check the charging circuit.
  - <u>Displayed voltage negative</u>
     Check that the measurement is carried out respecting the polarity.
     If so, the battery is dead. Check the charging circuit (charger and internal circuit).



### **Charger operation check**

- 1. Connect the charger to the mains (without connecting it to the mechanism). The charger LED should turn solid green. ■
- 2. Measure the voltage across the terminals of the 24 V plug by positioning the multimeter probes as follows:
  - **Red** lead on the (+) terminal of the socket located closest to the polarizer
  - • Black lead on the other terminal (-).



- 3. Interpret the measurement as follows:
  - Displayed voltage approximately 27.1 V Operation is normal.
  - <u>Displayed voltage zero</u>
     One of the wires inside the 24V socket is probably disconnected. Contact PBK-ENCO for troubleshooting procedure.
  - <u>Displayed voltage negative</u>
     Contact PBK-ENCO for troubleshooting procedure.



#### Internal circuit check

- 1. On the board, disconnect the harness connector connecting the battery.
- 2. Connect the charger to the Nergengine block socket.
- 3. Connect the charger to the mains.
- 4. Measure the voltage on the board at the terminals of the connector to which the battery was connected by positioning the multimeter probes as follows:
  - RED lead on the top terminal (+)
  - BLACK lead on the other terminal (-)





### Information

Depending on the production series, the connector can be red, orange or brown.

- 5. Interpret the measurement as follows:
  - Displayed voltage approximately 27.1 V Operation OK
  - Displayed voltage zero

Make sure that one of the wires connecting the charger link socket with the card is not disconnected. Otherwise, contact your dealer.

Displayed voltage negative

Check that the measurement is carried out respecting the polarity. If this is the case, ensure that the wires of the harness connecting the card to the charger link socket are connected as follows:

- Blue wire on the right terminal
- Brown wire on left terminal



### 9.3 After-sales service

After-sales service is provided exclusively by your dealer.



# 10 Troubleshooting

Sign	Cause	Solution	
When opening the cover, a creaking sound of the chain is heard.	The engine chain is not tight enough	Tension the engine chain.	
The cover rolls up askew.	The drive wheel of one of the blocks is worn.	Replace the worn wheel.	
	The cover is misdirected.	Install a guide rail.	
	The pool shore is sunken.		
The batteries discharge quickly.	The batteries are damaged by a charging fault.	Check the charging circuit.	
	The batteries are worn out.	Replace batteries.	
The reel's orange LED is permanently on while the cover is being opened or closed.	The battery is not sufficiently charged.	Perform a full battery charge cycle.	
The reel does not work but I still want to swim.	The reel is faulty.	Manually separate the strap that connects the cover to the shaft of the reel, then open the cover manually.  Contact your dealer to	
	The batteries are discharged	troubleshoot the reel.  Recharge the batteries.	
The remote control does not work.	The battery is exhausted.	Check the correct functioning of the reel with the emergency remote control.  Replace the remote control battery.	
	The remote control is not pointed at the lens of the engine block receiver.	Position yourself on the length of the pool opposite the engine unit and point the remote control towards the receiver lens for the duration of the opening / closing.	



### 11 Warranty

### 11.1 Warranty conditions

### Warning



- The warranty only covers the replacement of parts or assemblies found to be defective, excluding any liability, compensation or transport costs, for any reason whatsoever.
- The warranty is acquired only after full payment of the invoice, and receipt of the installation acceptance report.
- The warranty is granted only in the case of an installation carried out according to the rules of the art in compliance with the standards in force and in accordance with the instruction manual provided by PBK-ENCO

The Oré cover has a 5-year warranty in normal use on the following elements:

- PVC canvas.
- Aluminium profiles,
- Hooks,
- Adjustable mounting brackets,
- Reel,
- Engine,
- Chains & sprockets,
- Straps,
- Tension pawls.

For other so-called wear parts and accessories (remote control, protective pads, end caps), the warranty is 6 months.

### 11.2 Warranty disclaimer

The warranty is excluded in the following cases:

- Cover not installed by a trained professional.
- Improper assembly, non-compliance with the instructions and resulting damage.
- Misuse or abnormal use and resulting damage.
- Normal wear of cover components.
- Wear and damage due to abnormal friction.
- Wear due to abrasion on rough, abrasive or curved supports.
- Excess weight on the cover (snow, pockets of water due to the obstruction of the evacuation holes, object, animal, etc.).
- Strong and very strong winds.
- Damage related to products and water treatment.
- Damage due to transport.
- Cleaning with a product other than that recommended, see Section 8.1 Water traitment.
- Use of spare parts from another origin.



### **Appendix A. Certificate of Compliance**



LABORATOIRE DE TRAPPES 29, avenue Roger Hennequin - 78197 Trappes Cedex Tél: 01 30 69 10 00 - Fax: 01 30 69 12 34

## ATTESTATION DE CONFORMITE

aux exigences de sécurité de la norme NF P 90-308 (déc. 2013)

Eléments de protection pour piscines enterrées non closes privatives à usage individuel ou collectif – Couvertures de sécurité et dispositifs d'accrochage

Certificate of Conformity with the safety requirements of NF P 90-308 (December 2013)

Protective elements for in-ground, barrier-free, private or collective use swimming pools – Safety covers and securing devices

Type de couverture de sécurité

Type of safety cover

Bache automatique

Marque et modèle

**ENCO-PBK Oré** 

wark and moder

ENCO-PBK

Fabricant Manufacturer

10, RUE DE VAUCANSON 38230 TIGNIEU-JAMEYZIEU

FRANCE

Demandeur de l'attestation

Applicant

**ENCO-PBK** 

10, RUE DE VAUCANSON 38230 TIGNIEU-JAMEYZIEU

**FRANCE** 

Au vu du rapport d'examen sur dossier référencé P191072-DEC/1, la couverture essayée est déclarée conforme aux exigences du document de référence.

On the basis of the results contained in the report reference P191072-DEC/1, the safety cover tested is declared in conformity with the requirements of the above referenced document.

Trappes, le 26 juin 2019



Responsable de l'essai Test Officer

Zoulandi

Signature numérique de MADASCHI David Date: 2019.06.26 15:40:44 +02'00'

### David MADASCHI

Cette attestation est délivrée dans les conditions suivantes

- 1. Elle ne s'applique qu'à l'article essayé et pour les essais réalisés ou pour les informations qui sont consignés dans le rapport référencé ci-dessus. "Le LNE décline toute responsabilité en cas de non-conformité d'un des étéments de l'article essayé pour lequel le demandeur a fourni au LNE un certificat ou une garantie de la conformité aux normes en vigueur, le demandeur étant seul responsable de la véracité des documents qu'il produit au LNE."
- 2. Elle n'implique pas qu'une procédure de surveillance ou de contrôle de fabrication ait été mise en place par le LNE.
- La conformité à la norme référencée ci-dessus n'exonère pas de la conformité à la réglementation en vigueur.
- Des copies peuvent être délivrées sur simple demande auprès du demandeur.

This certificate is issued under the following conditions:

- It applies only to the tested item and to the tests or information specified in the report referenced above. The LNE declines any responsibility in the event of non conformity for one of the elements of the article tested for which the applicant provided to the LNE a certificate or a guarantee of the compliance with the standards in force, the applicant being the only person responsible of the veracity of the documents that he produces to the LNE."
- It does not imply that LNE has performed any surveillance or control of its manufacture.
- The conformity to the above referenced standard does not exempt from the conformity to the regulation in force.
- Copies are available upon request by the applicant.

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SECURITY