

# CAYMAN 88 - TIGRES - FALKON

INSTRUCTION MANUAL

MANUALE DI ISTRUZIONI

MANUEL D'INSTRUCTION

ANWEISUNG HANDBUCH

MANUAL DE INSTRUCCIÓN



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## IMPORTANT SAFETY INFORMATION CONCERNING YOUR ANCHOR WINDLASS

This product is not designed as a strong point to fasten your anchor rode. Fast the anchor rode to a strong point such as mooring cleat or similar.  
 The vessel's engine be running and used to assist the anchor recovery.  
 Install always the properly rated circuit breaker to protect the electric plant and the motor from overheating and damages.  
 Always when the product is not in use turn off the main switch to prevent accidental engagement of the product.  
 Always keep hands and feet clear of an operating windlass. If a jam occurs turn the windlass off at the main switch before clearing the anchor rode.  
 Do not use the windlass for different purposes it was designed for.

## WINDLASS ELECTRIC PLANT MINIMUM REQUIREMENTS

The table below suggests the requirements for all the components of the windlass electric plant depending from the motor nominal power .

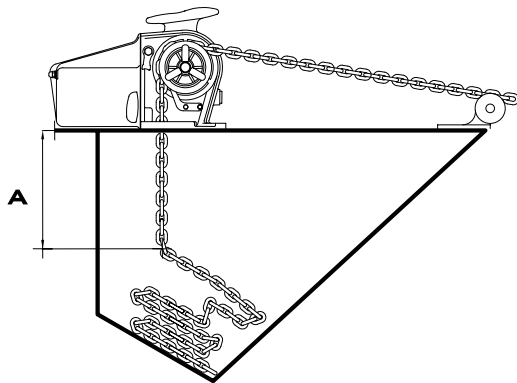
|                                      | 700 W 12V   | 700 W 24 V          | 1000 W 12V          | 1000 W 24V          | 1200 W 12V          | 1200 W 24V          | 1500 W 12V          | 1500 W 24V          |
|--------------------------------------|---|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 1-Minimum battery capacity           | 100 Ah  | 70 Ah               | 150 Ah              | 90 Ah               | 180 Ah              | 100 Ah              | 250 Ah              | 150 Ah              |
| 2-Control Box terminals              | 3   | 3                   | 3                   | 3                   | 3                   | 3                   | 3                   | 3                   |
| 3-Power line cables size             | 25 mm <sup>2</sup>  | 16 mm <sup>2</sup>  | 35 mm <sup>2</sup>  | 25 mm <sup>2</sup>  | 50 mm <sup>2</sup>  | 35 mm <sup>2</sup>  | 50 mm <sup>2</sup>  | 35 mm <sup>2</sup>  |
| 4-Lofrans power line circuit breaker | 70 A  | 35 A                | 100 A               | 70 A                | 100 A               | 70 A                | 125 A               | 70 A                |
| 5-Control line wires size            | 1,5 mm <sup>2</sup>   | 1,5 mm <sup>2</sup> | 1,5 mm <sup>2</sup> | 1,5 mm <sup>2</sup> | 1,5 mm <sup>2</sup> | 1,5 mm <sup>2</sup> | 1,5 mm <sup>2</sup> | 1,5 mm <sup>2</sup> |
| 6-Control line fuse                  | 5 A   | 5 A                 | 5 A                 | 5 A                 | 5 A                 | 5 A                 | 5 A                 | 5 A                 |
| 7-Remote controls types              | Rocker switch C – Hand held remote control Vega – Footswitches – Radio Control Mizar – Orion Line Chaincounters |                     |                     |                     |                     |                     |                     |                     |

Notes /Remarks /Suggestion:

1. Battery of lower capacity decrease the windlass performances and are rapidly subjected to wear and tear.
2. The Control Box is the solenoids box. Please read carefully the Control Box instructions.
3. This size must be increased of 30% when the length of the positive plus the negative cables are more than 10 mts.
4. This Lofrans circuit breaker protects the power line from short circuit and the windlass motor in case of overheating. It must be installed in accessible place to be promptly reactivated when it trips. It can be also used to isolate the windlass from the remote controls as we strongly suggest to avoid accidental engagement.
5. Use 6 mm faston to connect these wires to the terminals of the Control Box.
6. Install this fuse in a place where it is easy to replace.
7. All these controls can be connected in parallel. We strongly recommend to have on board a minimum of two remote controls to operate the windlass in case one of them gets damaged.

All Lofrans equipment are CE approved.

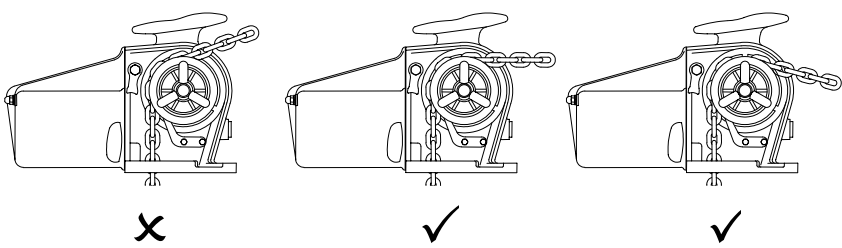
## INSTALLATION GENERAL REQUIREMENTS



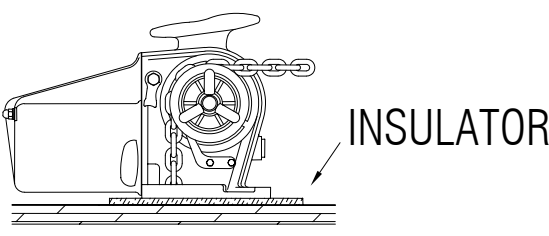
The windlass to work properly must be placed where these four essential conditions are fully satisfied :

1. The gipsy of the windlass must be in line with the bow roller.
2. The deck must be flat. The structure of the boat must be adequate to the load that the windlass is able to pull. If necessary reinforce the deck with a backing pad to spread the stress.
3. The chain fall into the chain locker must be maximized as when the chain is stored completely, it tends to make a shape as a pyramid and reduce the chain fall. To prevent jams you must have a minimum of 300 mm (A) between the underside of the deck and the top of the heaped chain.
4. The chain locker shape is really important to limit the pyramid problem. The drawing beside gives an idea about an ideal configuration.

## INSTALLATION TIPS



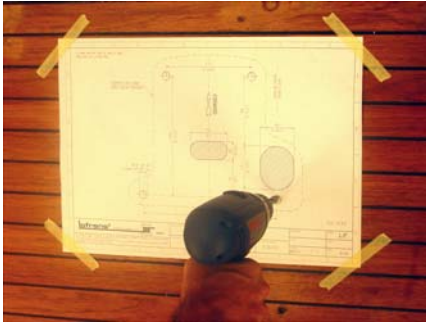
Always the angle where the chain turns around the gipsy must be 90° minimum. See beside. In case this angle is less than 90° put a roller between the gipsy and the bow roller to keep the chain down and get the right angle.



Corrosion problems could depend from the contact between different metals. Where the boat is made in metal, place an insulator between the windlass and the deck.

## INSTALLATION PROCEDURE

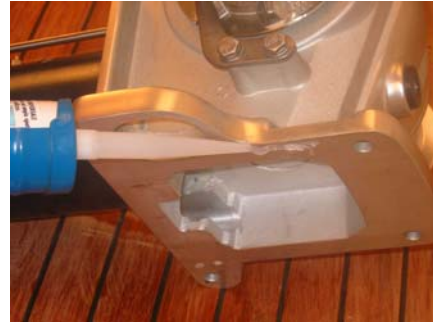
1. Place deck template in the chosen location and drill the holes. Remove the motor cover unscrewing the cap nuts with a 13 mm spanner



3. For Falkon model only place the chain pipe (item 469). The stripper (item 467) must be placed into the middle of the gipsy without touch it. Check that all work properly with a free rotation of the gipsy.



2. Seal the windlass base with high quality silicone sealant and fit the windlass on the deck using stainless steel M10 or equivalent bolts and nuts (Except Cayman 88 model which has the gasket and the mounting studs incorporated)



4. Connect the power line cables from the Control Box unit to the electric motor through the holes placed into the body as shown below.



## TEST PROCEDURE

1. Introduce the chain into the gipsy . Please take care to keep hands and feet away of the incoming chain.
2. Operate the UP switch. The chain will be recovered. Release the UP switch.
3. Operate the DOWN switch. The chain will be released.
4. If the windlass runs in wrong direction change over the M1 and M2 cables at the Control Box.
5. After using the windlass , we strongly recommend that the nuts are checked again to ensure they are well tightened.

## OPERATION

### GIPSY CLUTCH OPERATION

To engage the clutch insert the handle supplied into the wingnut (item 317 for Tigres & Cayman 88 , item 435 for Falkon) and tighten it until you cannot move the handle any more. To disengage the clutch loose the wingnut.

### BAND BRAKE OPERATION – FALKON MODEL ONLY

To engage the band brake turn clockwise the handle (item 440). Turn the handle counterclockwise to disengage the brake.

|  | CHAIN STOPPER | GIPSY CLUTCH | BAND BRAKE | CIRCUIT BREAKER |
|--|---------------|--------------|------------|-----------------|
| <b>DURING THE NAVIGATION</b><br>Windlass must not be used as sole means securing anchor in bow fitting. Anchors should be independently secured to prevent accidental release.   | Engaged       | Engaged      | Engaged    | OFF             |
| <b>LOWERING THE ANCHOR BY THE GIPSY CLUTCH</b><br>Disengage the clutch. The chain fall can be controlled by tightening the wingnut with the handle . At the end of the operation engage the clutch.  | Disengaged    | Disengaged   | Disengaged | OFF             |
| <b>LOWERING THE ANCHOR BY ELECTRIC MOTOR</b><br>Push the button DOWN. You will have always a perfect control of the operation , which can be interrupted any moment by releasing the button DOWN .   | Disengaged    | Engaged      | Disengaged | ON              |
| <b>ONCE ANCHORED</b><br>Reduce the windlass load by the chain stopper or fix the chain with a rope to a strong point as a cleat.   | Engaged       | Engaged      | Engaged    | OFF             |
| <b>RAISING THE ANCHOR</b><br>Start the engine of the boat. Push the button UP while with the boat at minimum speed go towards the anchoring point. <b>Do not use the windlass to pull the boat to the anchor.</b> Release the button UP to stop the operation. Pay attention to the speed of the anchor , which may damage the bow of your boat. In case the anchor be stranded and the Lofrans circuit breaker gets released , wait some minutes before put it back into service and try once more. Should the circuit breaker stop again , we suggest to fix the chain to a cleats and then use the boat engine to break the anchor loose. | Disengaged    | Engaged      | Disengaged | ON              |
| <b>DRUM OPERATION</b><br>Turn clockwise around the drum with two laps of rope. Keep the end of rope. Push the button UP , recovering the rope at the same time.  | Engaged       | Disengaged   | Engaged    | ON              |
| <b>RAISING THE ANCHOR IN CASE OF EMERGENCY</b><br>Insert the handle into the emergency wheel (item 340 for Tigres & Cayman 88, item 457 for Falkon). Draw it forward and backwards alternatively. The stress will be hard in case of deep anchoring.   | Disengaged    | Engaged      | Disengaged | OFF             |

## MAINTENANCE PROGRAM

Below are indicated the operations and the period we consider essential to get the best efficiency and performance of your anchor windlass.

1. Clean all the outer surfaces and the hidden points with fresh water and remove the salt layer.
2. Grease the outer rotation parts . Particularly the main shaft thread and the clutch cones. Check for evidences of corrosion and stress.
3. Check the terminals of the electric motor and the Control Box. Test the drop of tension at the terminals.
4. Check the rotation and the speed of the electric motor. If it runs slowly check the electric motor brushes and clean with abrasive paper. Replace when necessary.
5. Replace of the all outer seals. The gearbox is proper filled with SAE 90 long life oil.
6. Remove the windlass from the deck to clean the salt under the basement.

Yearly frequency of use of the boat

| Maintenance Period | Less than 2 months | From 2 up to 6 months | Over 6 months | Charter |
|--------------------|--------------------|-----------------------|---------------|---------|
| Every 3 months     |                    |                       | 1,2           | 1,2     |
| Every 6 months     |                    | 1,2                   | 3,4           |         |
| Every 12 months    | 1,2,3,4            | 3,4                   |               | 3,4,5   |
| After 24 months    |                    | 5                     | 5             | 6       |
| After 36 months    | 5,6                | 6                     | 6             |         |

## LOFRANS LIMITED INTERNATIONAL WARRANTY

Lofrans warrants this product for a period of 2 years subjected to the conditions listed below :

1. The product must be registered. The registration must be done within 30 days from the date of purchase by one of these options : online going to the web site [www.lofrans.it](http://www.lofrans.it) under the page "Product Registration" and following the instructions or by faxing to +039 2004299 the completed registration card attached to the instruction manual.
2. This warranty starts from the date of purchase of the product from the original purchaser. If the product is first equipment of a new boat the warranty starts from the date of purchase of the boat.
3. This warranty covers original defects in material and workmanship.
4. This warranty is limited to the repairment and/or the replacement of the original defective part.
5. The claim of warranty must be promptly notified in writing and sent by fax or e-mail to Lofrans or Lofrans authorised distributor providing the serial number of the product and the registration warranty number. Lofrans reserves the right to require the proof of purchase of the product to accept the claim of warranty.
6. The defective part/product must be returned to Lofrans or Lofrans authorized distributor. List of authorised distributors is available on the web site [www.lofrans.it](http://www.lofrans.it) .
7. This warranty does not cover failures due to : use of the product in applications for which they are not intended , corrosion , normal wear and tear , discoloration , unauthorised alteration of the product , improper installation , incorrect use or maintenance of the product , conditions that exceed the product's performance specifications
8. This warranty does not cover any loss or damages to the original purchaser due to a proven non conformity of the product with the exception of the cases ruled by the italian law.
9. Lofrans reserves the right to disclaim the warranty in case the product be controlled by improper electric devices and/or in case of non installation of a proper circuit breaker on the electric power line.

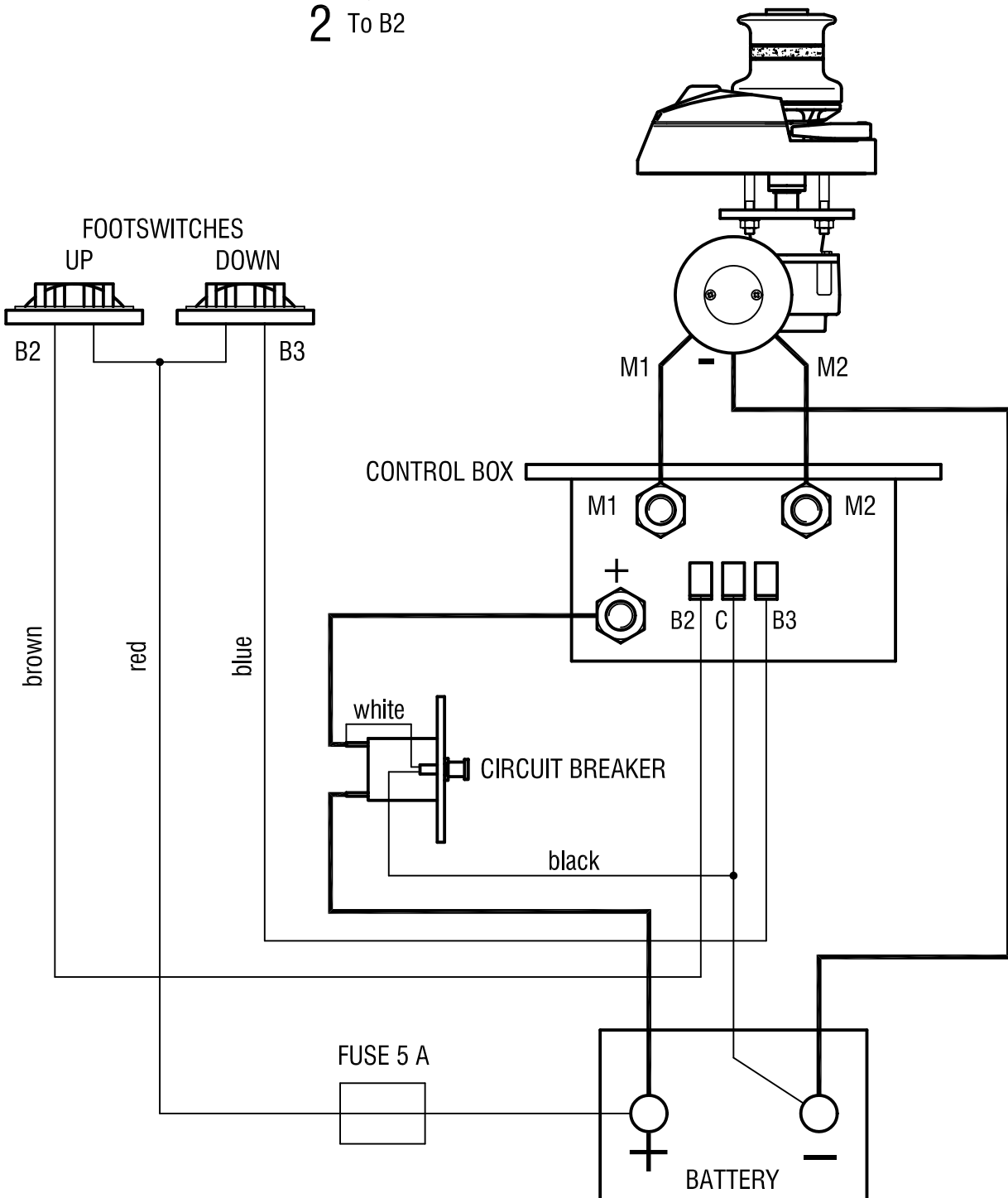
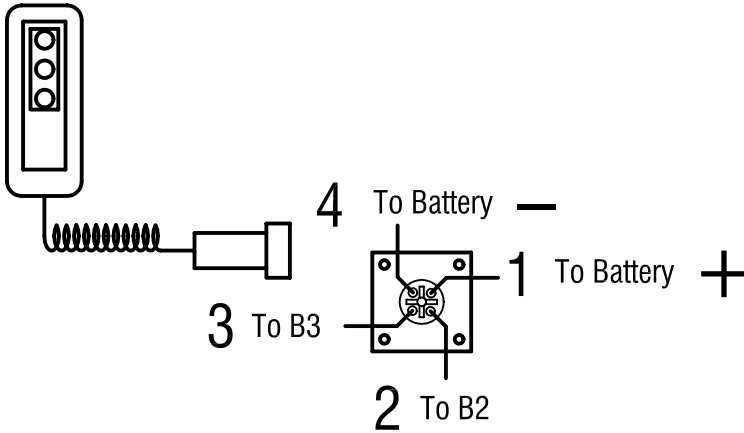
The consumer statutory rights are not affected by this warranty according to the national legislation, disciplining the sale of goods.

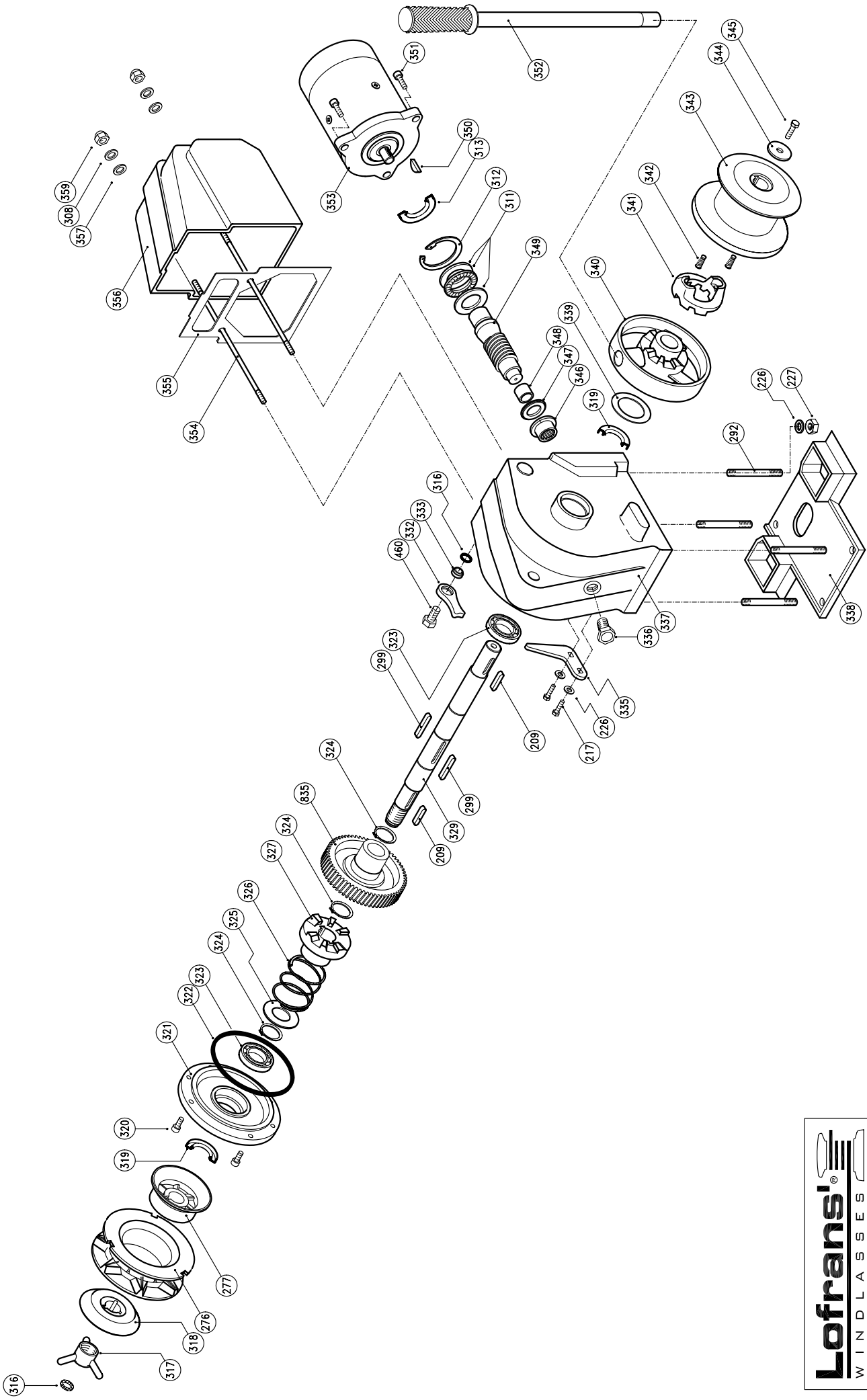
This warranty is ruled by the italian law

For every controversy the Court of Milan is competent exclusively.

### REMOTE CONTROL VEGA

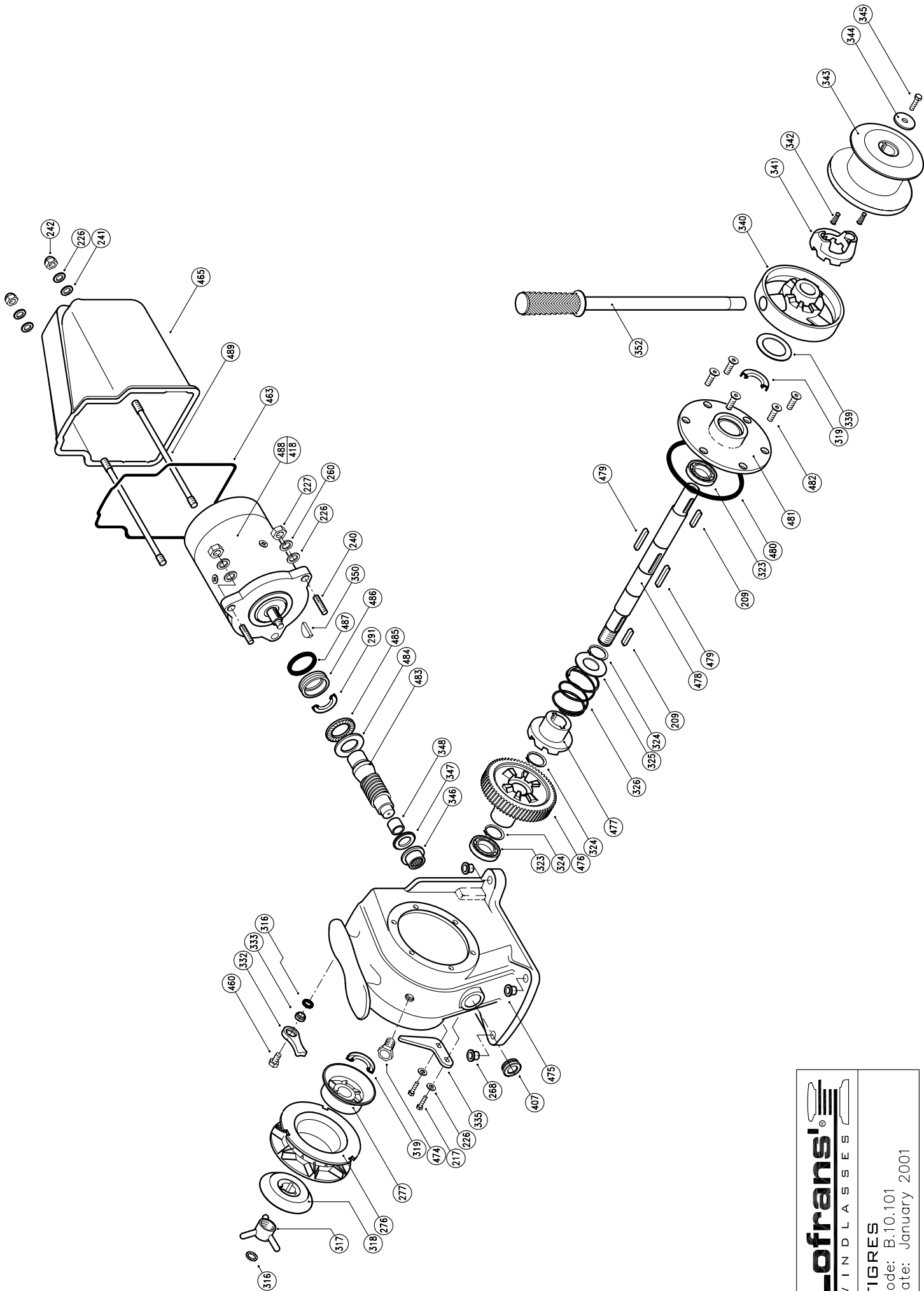
### ROCKER SWITCH TYPE C





|   |                    |
|---|--------------------|
|  <p><b>Lofrans!</b><br/>WINDLASSES</p> | <b>CAYMAN 88</b>   |
|   | code: B.09.101     |
|   | date: January 2001 |
|   |                    |













## LOFRANS' SALES ORGANIZATION

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