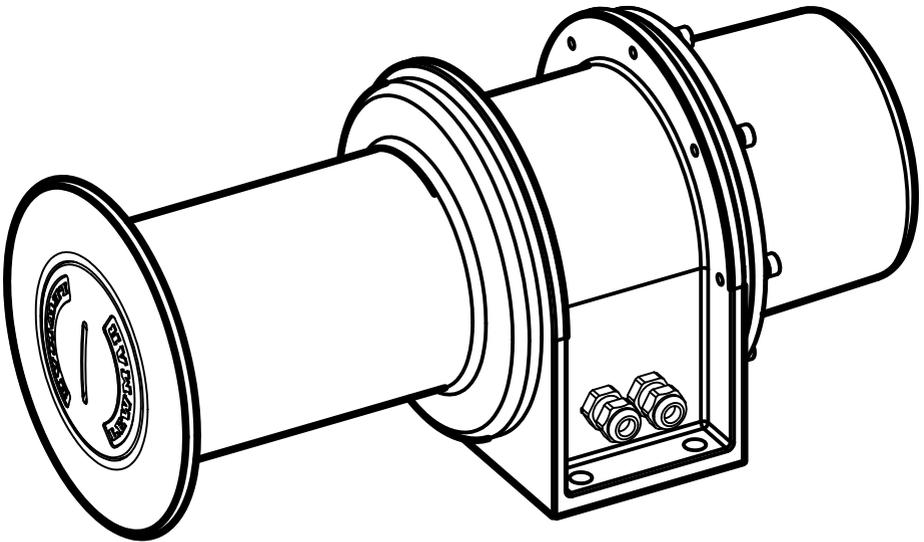


LEWMAR®

Tender Garage Winch Product manual- B10501



1- Introduction

Dear Customer,

Thank you for choosing Lewmar. Lewmar products are world renowned for their quality, technical innovation and proven performance. With a Lewmar product you will be provided with many years of outstanding service.

Product support

Lewmar products are supported by a worldwide network of distributors and Authorised Service Representatives. If you encounter any difficulties with this product, please contact your national distributor, or your local Lewmar dealer. Details are available at: www.lewmar.com

CE Approvals

For CE approval certificates contact Lewmar.

Important information about this manual

Throughout this manual, you will see safety and product damage warnings. You must follow these warnings carefully to avoid possible injury or damage.

2- Safety Notice

 WARNING!

IMPORTANT: Read these notes before continuing.

2.1 Capstan general

- ▶ Winch used incorrectly could cause harm to equipment or crew.
- ▶ Winches are powerful equipment and as such should be used with care and treated with respect.
- ▶ Boating, like many other activities can be hazardous. Even the correct selection, maintenance and use of proper equipment cannot eliminate the potential for danger, serious injury or death.
- ▶ Keep limbs, fingers, clothing and hair clear of capstan.
- ▶ Do not use winch for ANY purpose other than the control of stowing lines
- ▶ A circuit breaker/isolator should always be used with this capstan to protect the motor and cable from overheating and damage.
- ▶ Electric motors become hot during (and for sometime after) use.
 - DO NOT TOUCH THE MOTOR GEARBOX!
- ▶ Always switch off this winch at the circuit breaker/isolator when not in use.
- ▶ It is the unavoidable responsibility of the owner or master or other responsible party to assess the risk of any operation on the vessel.

2.2 Fitting

- ▶ This equipment must be installed and operated in accordance with the instructions contained in this manual. Failure to do so could result in poor product performance, personal injury and/or damage to your boat.
- ▶ Consult the boat manufacturer if you have any doubt about the strength or suitability of the mounting location.

2.3 Electrical

- ▶ Make sure you have switched off the power before you start installing this product.
- ▶ This product requires installation by a suitably qualified electrical engineer.

3- Installation

Lewmar recommends winches are specified and installed by competent marine engineers.

Plan location carefully:

- ▶ Ensure the rope feed correctly.

1. Drill 4 off holes to the size detailed on the template. With a sandwich construction, it is important to seal the exposed surfaces.
2. Ensure motor cables are secured clear of rotating drum and line
3. Fix securely using M8 bolts (4 off)

4- Electrical wiring

Caution

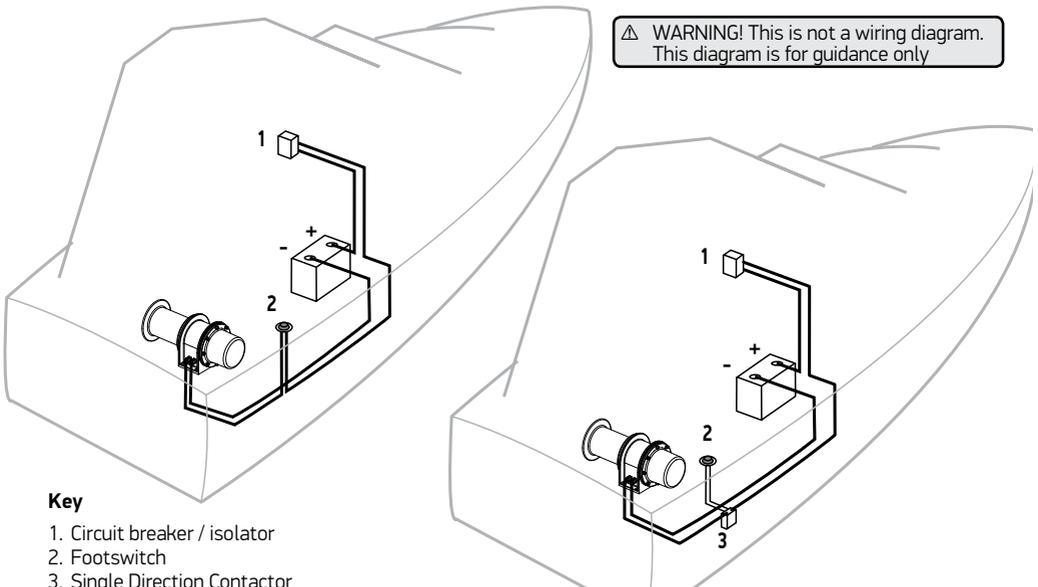
- ▶ Plan wiring installation to suit controls and to give operator full view of the tender garage door.
- ▶ Use marine grade copper wire
- ▶ Fit copper crimp terminals to wire ends
- ▶ Keep winch wiring separate from other wiring separate from other wiring and connect to starter battery where possible.
- ▶ The circuit breaker must be kept dry.
- ▶ All switches must be wired in parallel.

Warning

- ▶ If you are not sure you understand these guidelines, seek professional help.
- ▶ Ensure that the installation complies with USCG, ABYC, NMMA or other local regulations.
- ▶ If necessary add a grounding strap between the mounting studs and an earthing point.

Check

- ▶ The winch operates in the correct direction from all switches
- ▶ The winch does not cause harmful electro-magnetic interference to other equipment.



4.1 Wiring

Plan the position of the contactor (if used) near the winch in a dry environment.

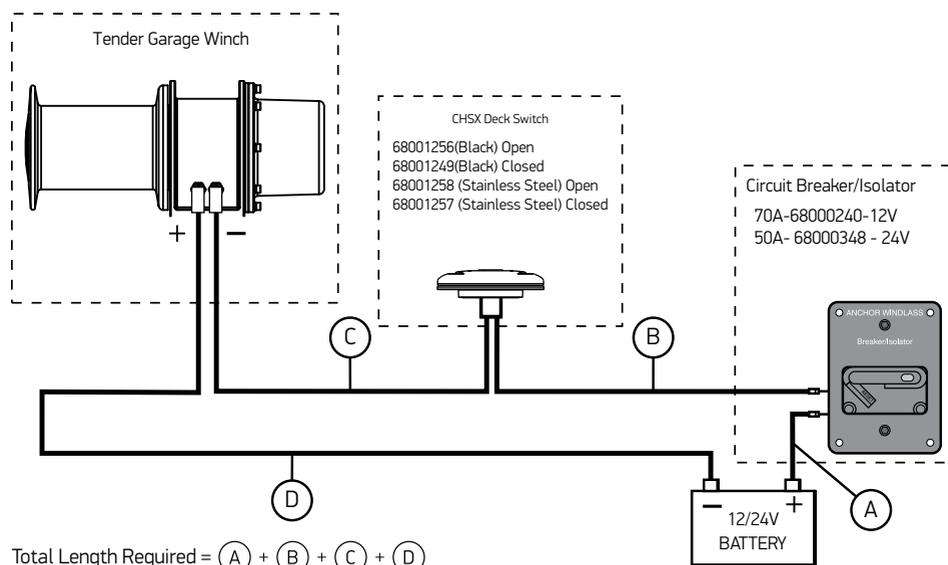
The wiring system should be of the fully insulated type, which avoids possible electrolytic corrosion problems. We recommend the use of type III stranded, tinned copper wire with copper crimp terminals. Most modern installations are negative return (negative ground) but polarity should be checked.

Overload protection, in the form of the circuit breaker must be built into the wiring circuit.

NOTE:

- ▶ The circuit breaker should be positioned close to the battery in a dry, readily accessible place.
- ▶ The circuit breaker must be manually reset should an overload occur that causes it to trip to the off position.

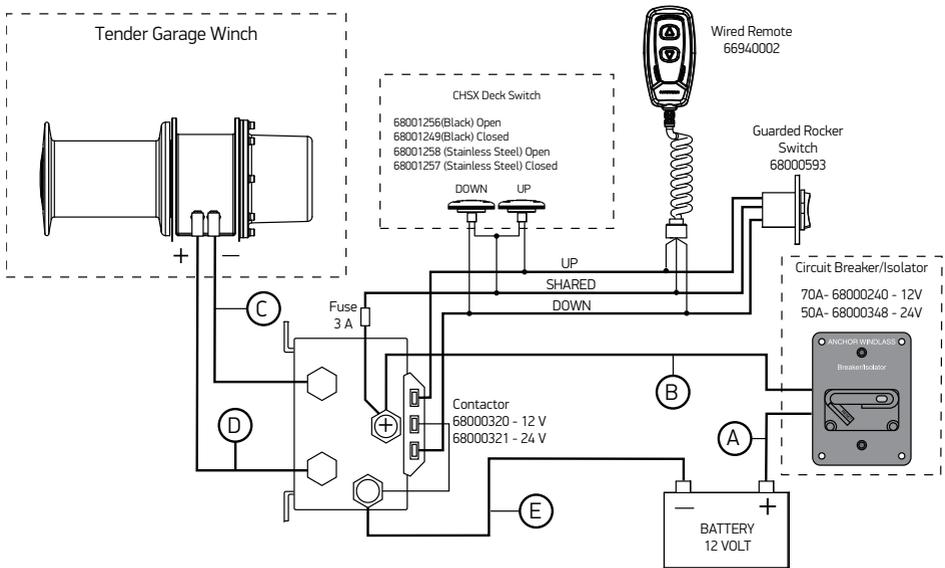
4.2 - Single switch installation - No contactor



Choice of cable thickness depends on total cable length as per the following table:

MODEL	A + B + C + D =					
	up to 18 m	up to 60 ft	18 - 27 m	60 - 90 ft	27 - 37 m	90 - 120 ft
TGW 12V	6 mm ²	8 AWG	10 mm ²	8 AWG	16 mm ²	6 AWG
TGW 24V	6 mm ²	8 AWG	10 mm ²	8 AWG	16 mm ²	6 AWG

4.3 - Dual switch installation with contactor



Total Length Required = (A) + (B) + (C) + (D) + (E)

Only one type of switch is required, though more than one may be fitted.

Choice of cable thickness depends on total cable length as per the following table:

MODEL	A + B + C + D =					
	up to 18 m	up to 60 ft	18 - 27 m	60 - 90 ft	27 - 37 m	90 - 120 ft
TGW 12V	6 mm ²	8 AWG	10 mm ²	8 AWG	16 mm ²	6 AWG
TGW 24V	6 mm ²	8 AWG	10 mm ²	8 AWG	16 mm ²	6 AWG

Switch wire thickness: 1.5 mm² (14 AWG)

4.4 Control Switch Installation

Find a suitable position for the electric safety deck switch(es) in view of the winch.

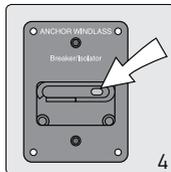
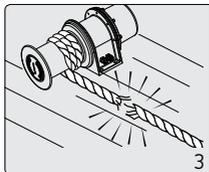
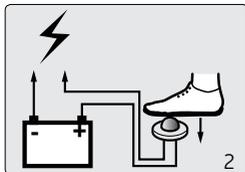
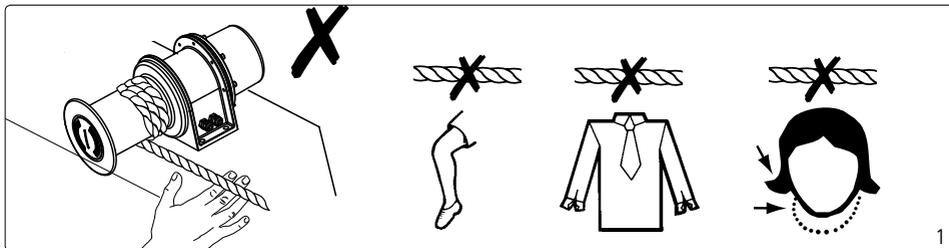
Connect up the switch wiring (Follow the mounting instructions supplied with the switch).

NOTE: In a multi station installation all switches must be wired in a parallel circuit.

Check

The winch operates in the correct direction from all switches.

5- Operation



1. Keep limbs, fingers, clothing and hair clear of winch
2. Use footswitch to operate the winch
3. Do not overload and avoid stalling the winch
4. When not in use, you must isolate the capstan electrically at the circuit breaker/isolator.

When operating, ensure that the line stows evenly on drum

Should the winch stall, switch off and wait a few seconds before trying again. If the recommended breaker/ isolator has tripped, it will require to be manually reset before the winch can operate again. It is important to the future good performance of the motor that the winch is not allowed to stall for more than a few seconds and therefore avoid stalling the winch whenever possible.

Power off

Turn the power isolator OFF after use.



6- Servicing

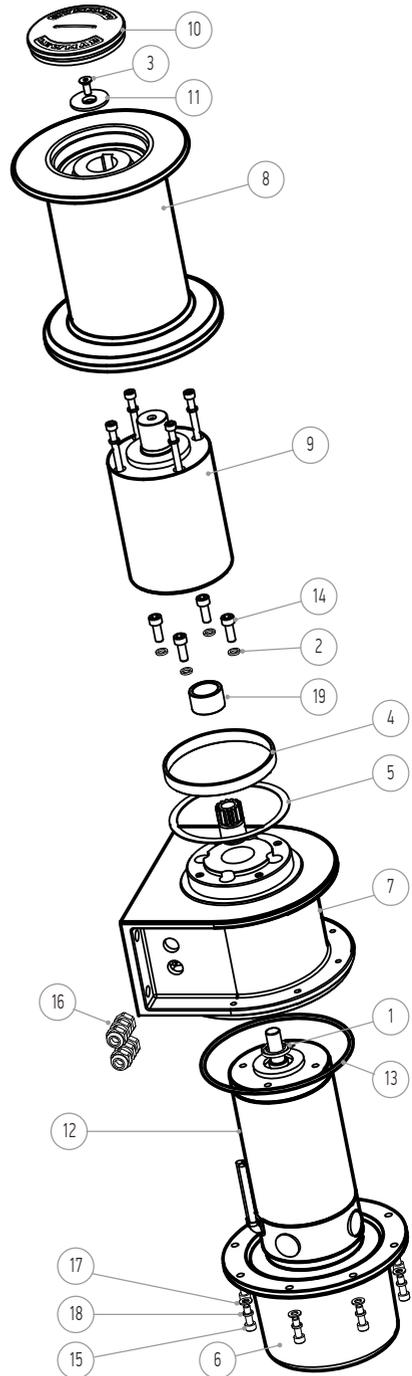
Regularly

- ▶ Wash down the winch using fresh water.
- ▶ Examine all electrical connections for corrosion, clean and lightly grease.
- ▶ Check mounting bolts and nuts for tightness and condition.

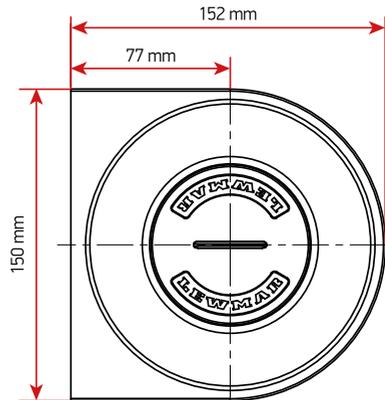
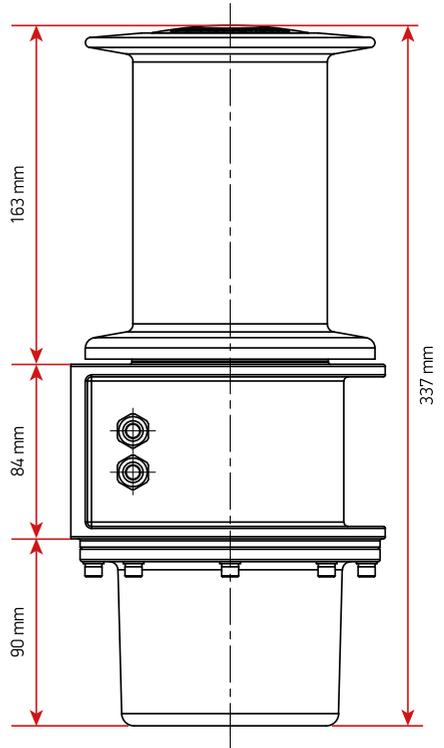
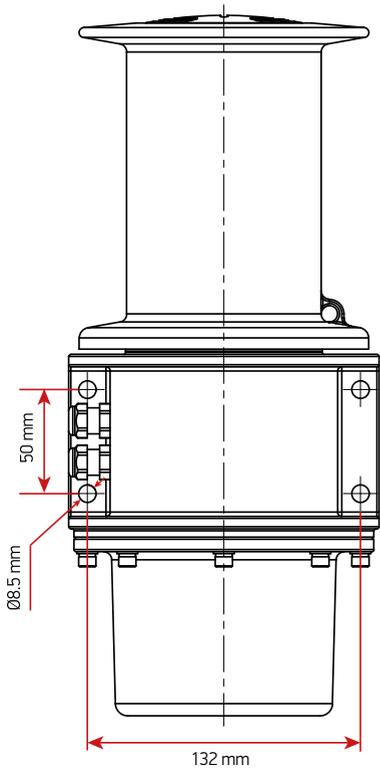
Annually

- ▶ Check electric cables for damage. Repair/renew as required.
- ▶ Strip the winch components, clean and lightly grease.

ITEM	PART NO	DESCRIPTION	QTY
1	310-003	Rotary seal	1
2	526-063	M6 spring washer	4
3	529-020	M5x12 CSK SDC screw	1
4	65002516	Bearing	1
5	65002517	Washer	1
6	65002518	IP Cover	1
7	65002519	Mounting frame M/C	1
8	65002520	Drum, M/C	1
9	66200088	Planetary gearbox	1
10	66200090	Drum Cap	1
11	66200166	Retaining washer	1
12	66200228	MOTOR PM 24V/1000W IP65	1
	66200227	MOTOR PM 12V/1000W IP65	1
13	82001227	D-ring 114,5 I/D x 3mm Dia	1
14	B0679	M6x16 SKT HD cap screw A2	4
15	B0774	Socket HD cap screw	8
16	B11906	Cable gland + Locknut	2
17	B1210-A4	M5 A4 Washer Form A	8
18	B1233_A4	M5 Spring Washer	8
19	B12334	Roller Bearing HK2016	1



7- Specification



8- Warranty

Limited Warranty and Key Terms of Supply by Lewmar

Lewmar warrants that in normal private pleasure boat usage and with proper maintenance its products will conform with their specification for a period of three years from the date of purchase by the end user, subject to the conditions, limitations and exceptions listed below. Any product, which proves to be defective in normal usage during that three-year period, will be repaired or, at Lewmar's option, replaced by Lewmar.

A CONDITIONS AND LIMITATIONS

- i Lewmar's liability shall be limited to the repair or replacement of any parts of the product which are defective in materials or workmanship.
- ii Responsibility for the selection of products appropriate for the use intended by the Buyer shall rest solely with the Buyer and Lewmar accepts no responsibility for any such selection.
- iii Lewmar shall not be liable in any way for Product failure, or any resulting loss or damage that arises from:
 - a. use of a product in an application for which it was not designed or intended;
 - b. corrosion, ultra violet degradation or wear and tear;
 - c. a failure to service or maintain the product in accordance with Lewmar's recommendations;
 - d. faulty or deficient installation of the product (unless conducted by Lewmar);
 - e. any modification or alteration of the product;
 - f. conditions that exceed the product's performance specifications or safe working loads.
- g. Abuse
- iv Product subject to a warranty claim must be returned to the Lewmar outlet that supplied the product for examination unless otherwise approved by Lewmar in writing.
- v This warranty does not cover any incidental costs incurred for the investigation, removal, carriage, transport or installation of product.
- vi Service by anyone other than authorized Lewmar representatives shall void this warranty unless it accords with Lewmar guidelines and standards of workmanship.
- vii Lewmar's products are intended for use only in the marine environment. Buyers intending to use them for any other purpose should seek independent professional advice as to their suitability. Lewmar accepts no liability arising from such other use.

B EXCEPTIONS

Cover under this Warranty is limited to a period of one year from the date of purchase by the end user in the case of any of the following products or parts of products:

- Electric motors and associated electrical equipment
- Electronic controls
- Hydraulic pumps, valves and actuators
- Hatch & Portlight weather seals
- Products used in "Grand Prix" racing applications
- Products used in commercial or charter applications
- Anchor rodes

C LIABILITY

- i Lewmar's liability under this warranty shall be to the exclusion of all other warranties or liabilities (to the extent permitted by law). In particular (but without limitation):
 - a. Lewmar shall not be liable for:
 - Any loss of anticipated turnover or profit or indirect, consequential or economic loss;
 - Damages, costs or expenses payable to any third party;
 - Any damage to yachts or equipment;
 - Death or personal injury (unless caused by Lewmar's negligence).Some states and countries do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you
- b. Lewmar grants no other warranties regarding the fitness for purpose, use, nature or satisfactory quality of the products.
- ii Where applicable law does not permit a statutory or implied warranty to be excluded, then such warranty, if permitted by that state or country's law, shall be limited to a period of one year from the date of purchase by the end user. Some states and countries do not allow limitations on how long an implied warranty lasts, so this limitation may not apply to you.

D PROCEDURE

Notice of a claim for service under this warranty shall be made promptly and in writing by the end user to the Lewmar outlet that supplied the product or to Lewmar Limited at Southmoor Lane, Havant, Hampshire PO9 1JJ, England.

E SEVERANCE CLAUSE

If any clause of this warranty is held by any court or other competent authority to be invalid or unenforceable in whole or in part, the validity of the remaining clauses of this warranty and the remainder of the clause in question shall not be affected.

F OTHER RIGHTS

This warranty gives you specific legal rights, and you may also have other legal rights, which vary from state to state and country to country.

In the case of European States a Consumer customer (as defined nationally) has legal rights under the applicable national law governing the sale of Consumer Goods; this Warranty does not affect those rights.

G LAW

This warranty shall be governed by and read in accordance with the laws of England or the state or country in which the first end user is domiciled at the time of purchase of the product.

H DISPUTES

Any dispute arising under this warranty may, at the option of the end-user, be referred to alternative dispute resolution under the rules of the British Marine Federation or to the Courts of the State whose law shall govern the warranty or to the Courts of England and Wales.

The British Marine Federation may be contacted at Marine House, Thorpe Lea Road, Egham, England, TW20 8BF

NOTES:

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