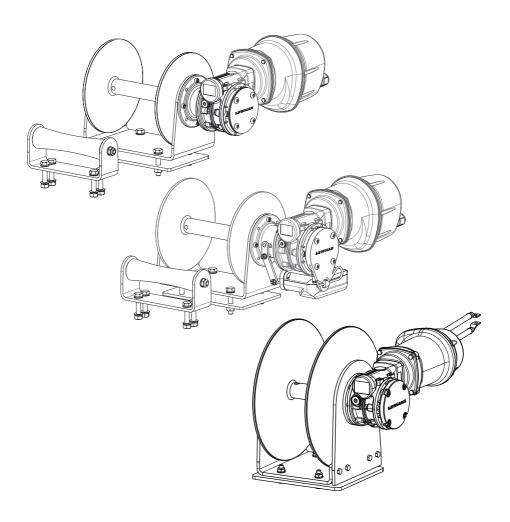
LEWMAR

Drum Windlass - Product Manual Ref B18039 iss.5





1- Introduction

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- Specifications

Mini Drum

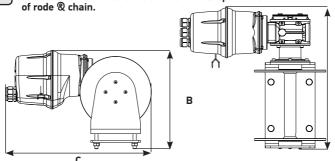
Small Drum

Large Drum

 ⚠ WARNING!

TTTTTTT	} 20 €	
40m (131ft) of 8mm (1/3") rope	10m (32ft) of 6mm (1/4") Chain	
TITITITI	} 	
60m (196ft) of 6mm (1/4") rope	10m (32ft) of 6mm (1/4") Chain	
TITITITI	} 	
75m (246ft) of 8mm (1/3") rope	10m (32ft) of 8mm (1/3") Chain	

Only genuine Lewmar-supplied replacement rope kit should be used. This is critical to the correct function of the unit. Specification above shows combination



MODEL	FREEFALL	MOTOR SUPPLY	MOTOR POWER	MAXIMU SPE	JM LINE EED	NORMAL CURRENT DRAW	WEIG	HT	,	Α	E	3	(
		Voltage	Watt	m/min.	ft/min.	Amp	kg	lb	mm	in	mm	in	mm	in
69001015		12	1000w	41	134	70	22	48	423	16.5	252	9.9	439	17.2
69001017	√	12	1000w	41	134	70	25.5	56	423	16.5	252	9.9	439	17.2
69001016		12	1000w	41	134	70	24	52	483	19	280	11	431	16.9
69001018	√	12	1000w	41	134	70	27.5	60	483	19	280	11	431	16.9
69001078	√	12	1000w	41	134	70	27.8	61.3	483	19	280	11	431	16.9
69001092	√	24	1000w	41	134	70	28.2	62.1	483	19	280	11	431	16.9
69001107		12	800w	40	131	70	18.2	40	291	11.4	290	11.4	424	16.7
69001074		12	800w	40	131	70	19.8	43	291	11.4	290	11.4	424	16.7

3- Safetu Notice

▲ WARNING!

IMPORTANT: Read these notes before continuing.

3.1 Windlass general

At all times it is the responsibility of the boat operator to ensure that the anchor and rode are properly stowed for the prevailing sea conditions. This is particularly important with high-speed powerboats, because an anchor accidentally deploying while under way can cause considerable damage. An anchor windlass is mounted in the most exposed position on a vessel and is thus subject to severe atmospheric attack resulting in a possibility of corrosion in excess of that experienced with most other items of deck equipment. As the windlass may only be used infrequently, the risk of corrosion is further increased. It is essential that the windlass is regularly examined, operated and given any necessary maintenance.

Please ensure that you thoroughly understand the operation and safety requirements of the windlass before commencing the installation. Only persons who are completely familiar with the controls and those who have been fully made aware of the correct use of the windlass should be allowed to use it. If there is any doubt of how to install or operate this unit please seek advice from a suitably qualified engineer.

- Windlasses used incorrectly could cause harm to equipment or crew.
- Windlasses 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.
- Lewmar windlasses are designed and supplied for anchor control in marine applications and are not to be used in conjunction with any other use.
- Keep limbs, fingers, clothing and hair clear of windlass, rode and anchor during operation. Severe bodily harm could result
- Ensure there are no swimmers or divers nearby when dropping anchor.
- Windlasses must not be used as the sole means of securing the anchor to the bow fitting especially under storm conditions. Anchors should be independently secured to prevent accidental release.
- · Classification Societies require that a vessel lying at anchor must have its anchor rope/chain secured to a chain stopper or other suitable independent strong point.
- A windlass should never be used as a mooring bollard, the anchor rode MUST be secured to a mooring cleat, chain stopper or other designated strong point. Using the windlass to secure the rode will damage the windlass.
- Do not use windlass for ANY purpose other than deployment and recovery of anchor.
- The circuit breaker in this product must never be deactivated or otherwise bypassed, it is intended to protect the motor and cables from overheating and damage.
- · Always switch off this windlass at the circuit breaker/isolator when not in use.
- It is the unavoidable responsibility of the owner, master or other responsible party to assess the risk of any operation on the vessel.
- Windlass must not be operated whilst under the influence of alcohol or drugs.

3.2 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.

3.3 Electrical

- Make sure that the boat's battery power supply has been switched off before starting the installation.
- This product requires installation by a suitably qualified electrical engineer.



4- Installation

4.1 Installation Tips

Standard Operation

- Both exposed wires from motor must be connected via joiners/ Solder then heat shrink, to eliminate any corrosion or water entering wires when attaching power cables to attachments
- The drum must be in line and centred to the guide roller or hawse pipe to ensure an even wrap on the drum
- 3. Gearbox to Drum can be rotated to the orientation which is most convenient for your install.
- 4. Ensure the circuit breaker is wired between the Isolator/battery and the switch. and is as close to the battery as possible.
- Regularly check all fittings and winch for any loose parts.

Freefall Operation

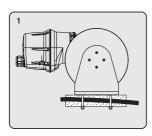
- 1. Must use correct cable size for Freefall No direct connection from motor wires to Freefall.
- Do not cross wires on the battery side, This will cause the Freefall to malfunction and void warranty.
- Freefall must go down fast. If not, swap the motor wires around. Using it the wrong way round will void the warranty.
- 4. Ensure the circuit breaker is wired between the Isolator/battery and the switch. and is as close to the battery as possible.
- 5. Regularly check all fittings and winch for any loose parts

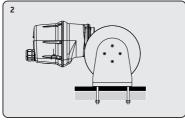
4.2 Accessories

Use only genuine Lewmar parts and accessories to ensure top performance and eliminate the risk of voiding your warranty. For replacement parts, please visit your dealer or www.lewmar.com

4.3 Above deck preparation

IMPORTANT - Plan location carefully and allow for the following:

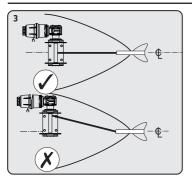


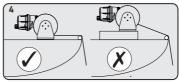


1. If the deck is not flat, a suitable mounting pad may be required to take up camber or sheer.

NOTE: If in doubt about the suitable construction of the pad consult a qualified marine engineer. The deck is an integral component of the windlass it has to secure the windlass and be strong enough to cope with the high torque stresses involved in recovering the anchor. Decks that are thin, or of foam or balsa laminate construction, will require reinforcement in order to spread the loads that will be applied to the deck while the windlass is in use.

LEWMAR





- 2. The windlass should be placed such that the centre-line of the anchor shank or bow-roller is coincidental to the centre-line of the windlass housing.
- 3. Lead from the roller should be fed horizontally back to the windlass unit

4.4 Below deck preparation

IMPORTANT: The positioning of the windlass must be checked prior to cutting for deck/hull and bulkhead clearance for the mounting bolts and wiring (if led below deck).

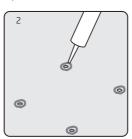
4.5 Above deck fitting

Lay the windlass in place and mark the location of the 4 mounting holes onto the deck.

If you wish to lead the motor wires below deck, mark a further hole in location to suit.

Place the unit to one side and using an 8.5mm (11/32") diameter drill bit, make four holes for the mounting bolts and, if required, use a 12mm $(\frac{1}{2})$ drill bit to make the hole for the power wires (optional).



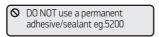


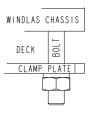
- 1. When all the holes have been made, apply an appropriate marine sealant to the freshly cut hole edges to help avoid water absorption by the deck.
- 2. When you are ready to finally install the windlass, apply sealant around all the deck holes. Position the windlass appropriately.
- 3. Apply some extra sealant into the deck holes and then push four mounting bolts, with washers, through the holes. Likewise, if the power wires are being fed under-deck, push the wires through the hole and seal to avoid water ingress using extra sealant.

NOTE: The unit will fall to one side until fixed down due to motor weight.

4.6 Under deck fastening

- 1. Place clamp plate over bolts to underside of deck.
- 2. With a helper on deck holding the bolt heads static, tighten up the nuts below-deck until tight. Nylock nuts or Loctite is recommended. Use washers.
- NOTE: If using silicone or other rubbery type sealant, it is advisable to allow curing of the sealant before final tightening of the mounting nuts.







5- Electrical wiring



Lewmar recommends that the installation complies with USCG, ABYC, NMMA or other local regulations. If you are not sure you understand these guidelines, seek professional help

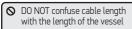
5.1 Power source

The windlass must be connected to a suitable 12V DC supply for unit and free-fall

The power source must be suitably sized for the expected duration of windlass use.

Cable sizes based on typical usage

- · Motor thermal trips must be wired in as specified in the product manual
- · The circuit must be protected by the recommended thermal circuit breaker
- These figures are provided as guidance only, please seek professional assistance where required



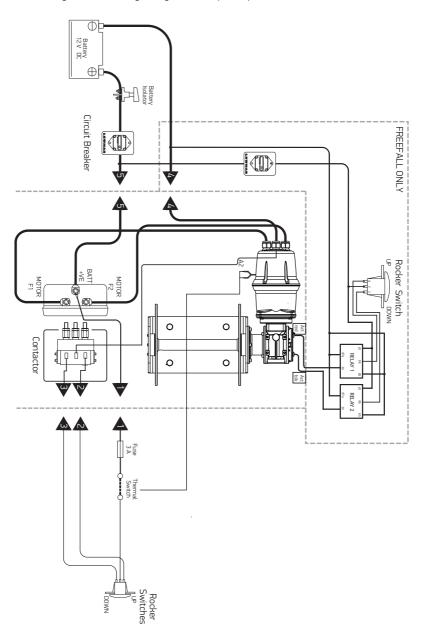
Windlass performance is directly related to cable size and length. Voltage drop over the complete wiring run must not exceed 10%.

17	2V	Max Distance in Meters (+VE \rightarrow product \rightarrow -VE)							
Current (A)	Cable Size	5	10	15	20	25	30	35	40
150	mm²	16	35	50	70	70	95	120	120
150	AWG	4	2	1	2/0	3/0	3/0	4/0	2 x 2/0
175	mm²	16	35	50	70	95	120	120	2 x 70
	AWG	4	2	0 70	2/0	3/0	4/0	2 x 2/0	2 x 2/0
200	mm² AWG	25 4	50 1	2/0	95 3/0	95 4/0	120 2 x 2/0	2 x 70 2 x 3/0	2 x 95 2 x 3/0
	mm ²	25	50	70	95	120	2 x 2/0 2 x 70	2 x 3/0 2 x 95	2 x 95
225	AWG	4	1	2/0	3/0	4/0	2 x 2/0	2 x 3/0	2 x 3/0
	mm²	25	50	70	95	120	2 x 70	2 x 95	2 x 95
250	AWG	2	0	3/0	4/0	2 x 2/0	2 x 3/0	2 x 3/0	2 x 4/0
275	mm²	35	50	95	120	2 x 70	2 x 95	2 x 95	2 x 120
2/5	AWG	2	0	3/0	4/0	2 x 2/0	2 x 3/0	2 x 4/0	2 x 4/0
300	mm²	35	70	95	120	2 x 70	2 x 95	2 x 120	2 x 120
300	AWG	2	2/0	3/0	2 x 2/0	2 x 3/0	2 x 3/0	2 x 4/0	x
325	mm²	35	70	95	2 x 70	2 x 95	2 x 95	2 x 120	×
323	AWG	2	2/0	4/0	2 x 2/0	2 x 3/0	2 x 4/0	2 x 4/0	X
350	mm²	35	70	120	2 x 70	2 x 95	2 x 120	2 x 120	×
	AWG	2	2/0	4/0	2 x 2/0	2 x 3/0	2 x 4/0	x	X
375	mm²	35	70	120	2 x 70	2 x 95	2 x 120	×	x
	AWG mm²	1 50	3/0 95	4/0 120	2 x 3/0	2 x 4/0	2 x 4/0 2 x 120	X	×
400	AWG	1	3/0	2 x 2/0	2 x 95 2 x 3/0	2 x 95 2 x 4/0	2 X 12U X	x x	x x
	mm ²	50	95	120	2 x 3/0 2 x 95	2 x 4/0 2 x 120	2 x 120	X	×
425	AWG	1	3/0	2 x 2/0	2 x 3/0	2 x 4/0	X X	×	×
	mm²	50	95	2 x 70	2 x 95	2 x 120	x	x	×
450	AWG	1	3/0	2 x 2/0	2 x 3/0	2 x 4/0	×	×	×
	mm²	50	95	2 x 70	2 x 95	2 x 120	x	x	x
475	AWG	0	4/0	2 x 2/0	2 x 4/0	х	x	x	×
500	mm²	50	95	2 x 70	2 x 95	2 x 120	x	x	×
500	AWG	0	4/0	2 x 3/0	2 x 4/0	x	x	x	x
525	mm²	50	120	2 x 95	2 x 120	х	х	x	×
323	AWG	0	4/0	2 x 3/0	2 x 4/0	X	х	х	X
550	mm²	70	120	2 x 95	2 x 120	х	x	×	×
	AWG	0	4/0	2 x 3/0	2 x 4/0	х	х	×	×
575	mm²	70	120	2 x 95	2 x 120	х	x	Х	×
	AWG mm²	2/0 70	4/0 120	2 x 3/0 2 x 95	2 x 4/0 2 x 120	X	X	X X	×
600	AWG	2/0	2 x 2/0	2 x 3/0	2 X 12U X	x x	x x	x x	x x
	mm ²	70	120	2 x 3/0 2 x 95	2 x 120	X	X	X	×
625	AWG	2/0	2 x 2/0	2 x 4/0	0	X	×	×	×
	mm²	70	2 x 70	2 x 95	2 x 120	X	x	×	×
650	AWG	2/0	2 x 2/0	2 x 4/0	х	x	x	x	x



5.3 Wiring Drum Windlass

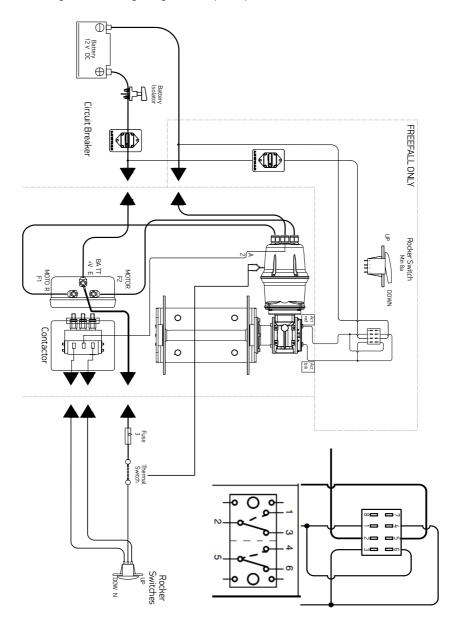
The wiring system should be fully insulated, which avoids possible electrolytic corrosion problems. We recommend the use of type III stranded, tinned copper wire with copper crimp terminals. Most modern installations are negative return (negative ground) but polarity should be checked.





5.4 Wiring Drum Windlass - Alternative with latching Rocker Switch

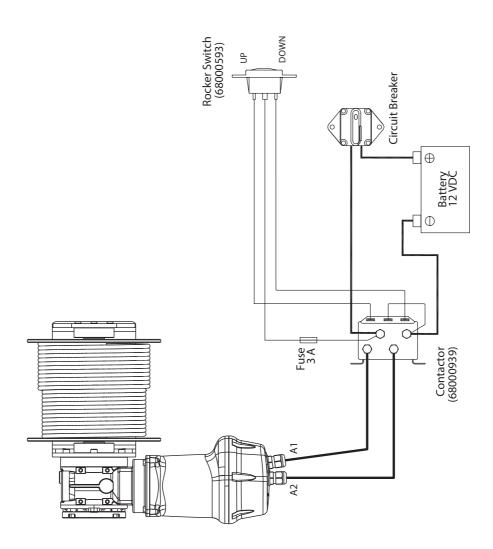
The wiring system should be fully insulated, which avoids possible electrolytic corrosion problems. We recommend the use of type III stranded, tinned copper wire with copper crimp terminals. Most modern installations are negative return (negative ground) but polarity should be checked.





5.5 Wiring Mini-Drum Windlass

The wiring system should be fully insulated, 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.





6- Operation

First check that power is turned on to the windlass and that the circuit breaker is not tripped (push the button in to reset).

Standard Operation

To drop anchor:

- 1. Release any anchor locks
- 2. Hold down on the integrated rocker switch
- 3. Release button when the desired length of rode has been deployed.

Freefall Operation

To drop anchor:

- 1. Release anchor locks
- 2. Hold "Down" on (Freefall) rocker switch for 6 seconds to start freefall and anchor will drop.
- 4. Hold "Up" on the (Freefall) rocker switch for 6 seconds to reenquage drum main drive.

WARNING! Windlass damage if drive engaged while drum is in use!

To raise anchor:

- 1. Hold up on the integrated rocker switch
- Release when the anchor is approaching the bow-roller
- 3. Use the controls carefully until the anchor is home.
- 4. Over drive will damage bow roller or rode

To raise anchor:

- 1. Hold up on the Drum rocker switch
- 2. Release when the anchor is approaching the bow-roller
- 3. Use the controls carefully until the anchor is home.
- 4. As anchor approaches the bow roller, use careful adjustments of controls to avoid damaging vessel. Start and stop the windlass to bring the anchor slowly into the bow roller.
- Pulling the last bit of rode and anchor into the bow roller at full speed can damage the boat, bow roller and windlass

NOTE: Main drive will not drive drum in Freefall mode

6.1 Standard windlass operating procedures

This is an anchor recovery device. DO NOT use the windlass to pull the boat to the anchor as it will damage the mechanism. DO NOT use the windlass to free a fauled anchor, use a secure fixed point on the deck to break the anchor free.

When retrieving anchor do not overload or stall the windlass.

When anchoring, power rode out allowing the vessel to take up stern away, thus preventing the rode tangling with anchor. Use this method also for mooring stern first to a jetty.

To aid recovery, slowly and safely power the vessel at idle speed towards the anchor but not over and beyond, as this can cause damage to topsides.

As anchor approaches the bow roller, use careful adjustments of controls to avoid damaging vessel. Start and stop the windlass to bring the anchor slowly into the bow roller.

Pulling the last bit of rode and anchor into the bow roller at full speed can damage the boat, bow roller and windlass.

LEWMAR

7- Servicina

▲ WARNING! Isolate the windlass using circuit breaker/isolator

▲ WARNING! Ensure rode is adequately. secured to an independent strong point

The service period is determined by the frequency of use. Professional users will need to carry out these operations more often than the weekend user. Before commencing any work on this or any other electrical product, isolate from the power source.

Bedding in period:

When new there are some areas that will need frequent checking. If no movement is found they can be inspected less often.

· Check mounting bolts are tight and tighten if required.

Annually or more often if frequent user:

- Use light machine oil sparingly to lubricate Drum bearings
- · Examine all electrical connections, to make sure they are sound and corrosion hasn't set in. Tighten if necessary and protect if required.
- · Check mounting bolts and tighten if required.
- · Check rode for wear.
- · Check unit for damage / Gearbox oil leak

8- Troubleshooting

- 1. Failure to power anchor down.
- Check that power to the motor is turned on and that the circuit breaker is not tripped
- · Check all wiring connections and that voltage is reaching the motor wires when the down button is pressed. If so, the motor has become defective and must be changed.
- 2. Failure to power anchor up.
- · Check that power to the motor is turned on and that the circuit breaker is not tripped
- Operate the up switch. Check voltage is reaching the motor wires.
- · Check Freefall position
- 3. Rope is not laying properly / becoming tangled
- Rope specification is crucial to the correct functioning of the unit and therefore only the genuine Lewmar CRW rope kit.
- · Check unit angle to bow roller for correct alignment

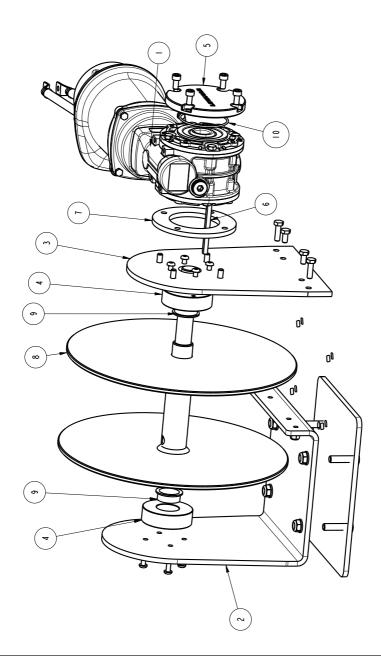


BLANK PAGE

LEWMAR®

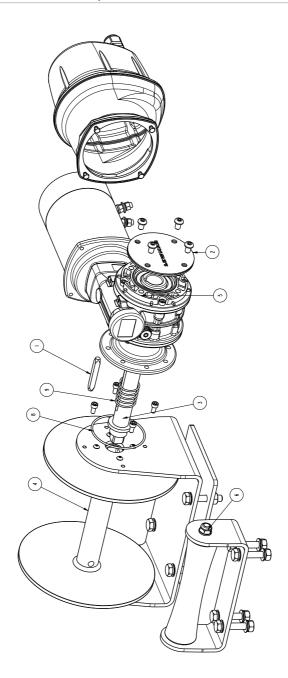
8- Parts / Spares List

8.1 Mini Drum Windlass - 69001074, 69001107



	PART NO.	DESCRIPTION	ITEMS INCLUD- ED QTY)
1	45000352	5 X 28 KEY	1
2	65004327	MDW CHASSIS 1	1
3	65004328	MDW CHASSIS 2	1
4	65004331	MDW BEARING CARRIER	2
5	65004332	MDW MGB COVER	1
6	65004333	MDW KEY	1
7	65004449	MDW GB SPACER	1
8	68001428	MINI DRUM WINDLASS DRUM	1
9	B18144	IGUS BEARING	2
10	B18147	ORING ID 55 X 2 DIA	1

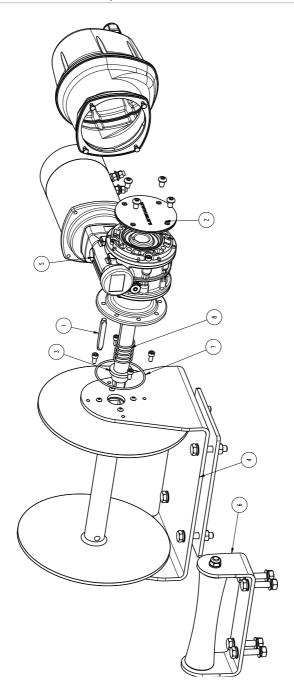
8.2 Small Drum Windlass - 69001015,



	PART NO.	DESCRIPTION	ITEMS INCLUD- ED (QTY)
1	65000177	DRIVE KEY BRASS 8 X 8 X 60	1
2	65004068	MOTOR COVER PLATE + GASKET	1
3	65004069	DRUM WINDLASS DRIVE SHAFT	1
4	68001381	SMALL DRUM ASSEMBLY	1
5	68001383	RMU50 1/70 DRUM WINDLASS MGB	1
6	69001025	DRUM WINDLASS ROLLER GUIDE ASSY	1
8	B17764	ORING	1
9	B17765	SS316 SPRING	1

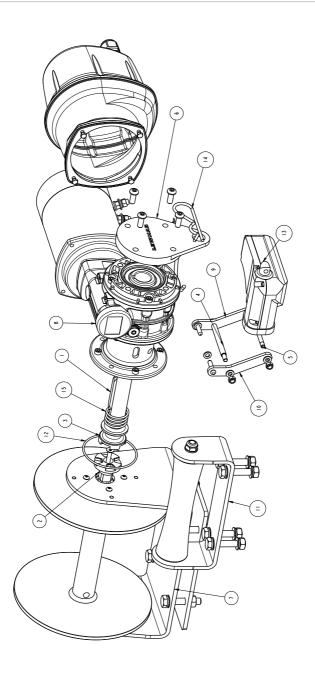
LEWMAR®

8.3 Large Drum Windlass - 69001016,



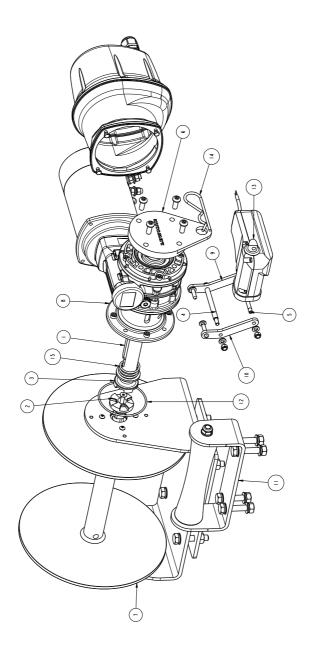
	PART NO.	DESCRIPTION	ITEMS INCLUD- ED (QTY)
1	65000177	DRIVE KEY BRASS 8 X 8 X 60	1
2	65004068	MOTOR COVER PLATE + GASKET	1
3	65004069	DRUM WINDLASS DRIVE SHAFT	1
4	68001382	LARGE DRUM ASSEMBLY	1
5	68001383	RMU50 1/70 DRUM WINDLASS MGB	1
6	69001025	DRUM WINDLASS GUIDE ROLLER ASSY	1
7	B17764	O RING	1
8	B17765	SS316 SPRING	1

8.4 Small Drum Windlass Free Fall - 69001017,



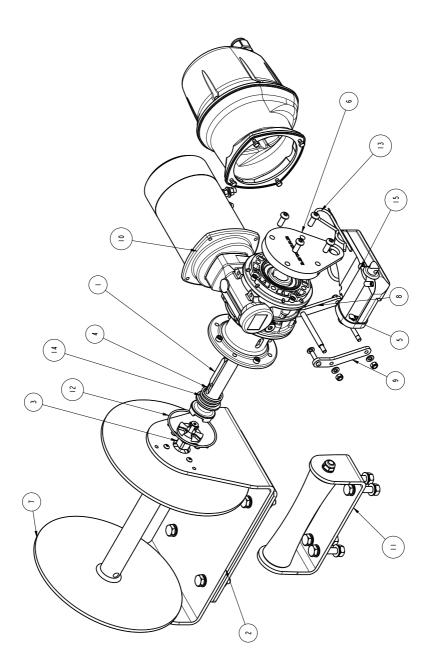
	PART NO.	DESCRIPTION	ITEMS INCLUD- ED (QTY)
1	65000177	DRIVE KEY BRASS 8 X 8 X 60	1
2	65004076	DRUM SHAFT ADAPTOR FF	1
3	65004077	DRIVE SHAFT FF	1
4	65004078	PIVOT SHAFT FF	1
5	65004080	ACTUATOR BAR FF	1
6	65004081	MOTOR END CAP FF	1
7	68001381	SMALL DRUM ASSY	1
8	68001384	RMU50 1/70 MGB	1
9	68001390	WELDED LEVER A FF	1
10	68001391	WELDED LEVER B FF	1
11	69001025	DRUM WINDLASS GUIDE ROLLER ASSY	1
12	B17764	O RING	1
13	B17807	ACTUATOR	1
14	B17808	SS316 R CLIP	1
15	B17809	SS316 SPRING	1

8.5 Large Drum Windlass Free Fall - 69001018,



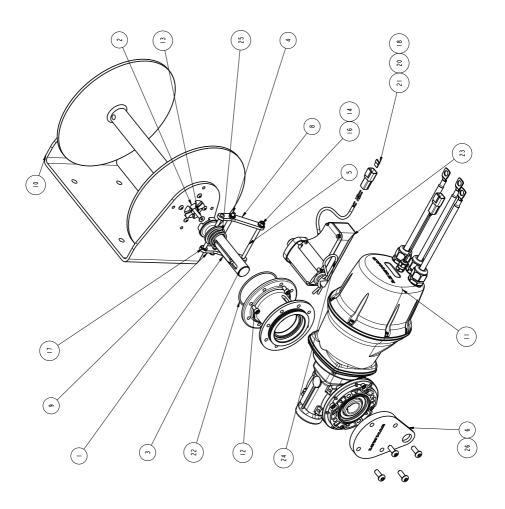
	PART NO.	DESCRIPTION	ITEMS INCLUD- ED (QTY)
1	65000177	DRIVE KEY BRASS 8 X 8 X 60	1
2	65004076	DRUM SHAFT ADAPTOR FF	1
3	65004077	DRIVE SHAFT FF	1
4	65004078	PIVOT SHAFT FF	1
5	65004080	ACTUATOR BAR FF	1
6	65004081	MOTOR END CAP FF	1
7	68001382	LARGE DRUM ASSEMBLY	1
8	68001384	RMU50 1/70 C/IRON MGB	1
9	68001390	WELDED LEVER A FF	1
10	68001391	WELDED LEVER B FF	1
11	69001025	DRUM WINDLASS GUIDE ROLLER ASSY	1
12	B17764	O RING	1
13	B17807	ACTUATOR	1
14	B17808	SS316 R CLIP	1
15	B17809	SS316 SPRING	1

8.6 Large Drum Windlass Free Fall 24v- 69001092,



	PART NO.	DESCRIPTION	ITEMS INCLUD- ED QTY)
1	65000177	DRIVE KEY BRASS 8 X 8 X 60	1
2	65004071	DRUM WINDLASS CHASSIS	1
3	65004076	DRUM SHAFT ADAPTOR	1
4	65004077	DRIVE SHAFT FF	1
5	65004080	ACTUATOR BAR FF	1
6	65004081	MOTOR END CAP FF	1
7	68001380	WELDED DRUM	1
8	68001390	WELDED LEVER A FF	1
9	68001391	WELDED LEVER B FF	1
10	68001438	RMU50 1.70 P-FLANGE CIRON 24V 1KW	1
11	69001025	DRUM WINDLASS GUIDE ROLLER ASSY	1
12	B17764	O RING	1
13	B17808	4MM R CLIP SS316	1
14	B17809	SPRING	1
15	B18255	ACTUATOR	1

8.7 Large Drum WSS Windlass Free Fall - 69001078,



	PART NO.	DESCRIPTION	ITEMS INCLUD- ED QTY)
1	65000177	DRIVE KEY, BRASS, 8 X 8 X 60	1
2	65004076	DRUM SHAFT ADAPTOR FF	1
3	65004077	DRIVE SHAFT FF	1
4	65004078	PIVOT SHAFT FF	1
5	65004080	ACTUATOR BAR FF	1
6	65004081	MOTOR END CAP FF	1
7	68000350	CIRCUIT BREAKER 110A 9328	1
8	68001390	WELDED LEVER A FF	1
9	68001391	WELDED LEVER B FF	1
10	68001431	LARGE DRUM ASSEMBLY ROBALO	1
11	68001432	RMU50 1/70 P-FLANGE C/IRON ROBALO	1
22	B17764	O RING	1
23	B17808	ACTUATOR	1
24	B17808	SS316 R CLIP	1
25	B17809	SS316 SPRING	1

9 - Warrantu

Limited Warranty and Key Terms of Supply by Lewman

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.

a. 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
- 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 vear 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
- Hvdraulic 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.

GIAW

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

UK & International Distribution

Lewmar Southmoor Lane Havant Hampshire P09 1JJ England

Tel: +44 (0)23 9247 1841 **Fax:** +44 (0)23 9248 5720 **Email:** info@lewmar.com

USA

Lewmar / Taylor Made Products 65 Harrison St Gloversville,

New York

12078 USA

Tel: +1 203 458 6200 **Fax:** +1 203 453 5669 **Email:** info@lewmarusa.com



www.lewmar.com
Part No B18039 iss5