

Venta Pontoon Anchor Winch with Fixed Bow Roller — (anchor sold separately)



Venta Pontoon Anchor Winch with Extendable Bow Roller — (anchor sold separately)

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Venta[™] Pontoon Anchor Winch with Bow Roller Installation and Owner's Manual

(For Aftermarket Applications)

Pontoon Anchor Winch with Bow Roller Kits		
Part #	Description	
2024008888	Venta Standard Kit (with Fixed Bow Roller)	
2024008889	Venta Extended Kit (with Extendable Bow Roller)	

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Introduction

The Venta[™] Pontoon Anchor Winch with Bow Roller is an electrically operated anchoring system by use of a deck-mounted foot control to raise and lower the anchor with ease at the touch of a button while safely observing the action for proper deployment and retrieval of the anchor.

The Venta Pontoon Anchor Winch with Bow Roller is available in two configurations; a fixed bow roller and an extendable bow roller.

An optional mounting plate to ease installation and removal of the anchor winch system is available and sold separately as an accessory. Installation instructions and use of this plate are **NOT** included in this manual.

The Venta Pontoon Anchor Winch with Bow Roller system is only compatible with the Lewmar 14 lb Stainless Steel Epsilon Anchor (P/N 2020221486) and Lewmar 14 lb Galvanized Delta Anchor (P/N 2020202223).

In this manual the term "rode" is used to define the length of rope and chain that attaches the winch to the anchor. The term "rope" is used to define the rope that is used in conjunction with the chain to make up the rode.

Additional information about this product can be obtained from <u>lci1.com/support</u> or by using the LippertNOW app. Replacement kits can be ordered from <u>https://store.lci1.com/</u> or by using the LippertNOW app.

The LippertNOW app is available for free on Apple App Store[®] for iPhone[®] and iPad[®] and also on Google Play[™] for Android[™] users.

App Store[®] and iPad[®] are registered trademarks of Apple Inc.

Google Play[™] and Android[™] are trademarks of Google Inc.

Safety

Read and fully understand all instructions before installing or operating this product. Adhere to all safety labels.

This manual provides general instructions. Many variables can change the circumstances of the instructions, i.e., the degree of difficulty, operation and ability of the individual performing the instructions. This manual cannot begin to plot out instructions for every possibility, but provides the general instructions, as necessary, for effectively interfacing with the device, product or system. Failure to correctly follow the provided instructions may result in death, serious personal injury, severe product and/or property damage. Consult the boat manufacturer for information regarding the strength or suitability of the mounting location chosen for this product.

During installation and/or removal of the Venta Pontoon Anchor Winch with Bow Roller system, individual and assembled components maybe too heavy or unwieldy for one person to safely manage. Seek additional help as needed before attempting difficult procedures.

AWARNING

ALWAYS PROPERLY STOW THE ANCHOR AND RODE BEFORE LEAVING PORT/ANCHORAGE ACCORDING TO PREVAILING SEA/LAKE/RIVER CONDITIONS. ACCIDENTAL DEPLOYMENT MAY CAUSE SIGNIFICANT PROPERTY DAMAGE OR HARM INCLUDING DEATH.

AWARNING

KEEP LIMBS, DIGITS, CLOTHING AND HAIR CLEAR OF WINDLESS, RODE AND ANCHOR DURING OPERATION. SEVERE BODILY HARM COULD RESULT.

A WARNING

NEVER DROP THE ANCHOR WHEN SWIMMERS OR DIVERS ARE PRESENT.

AWARNING

WINCHES MUST NOT BE USED AS THE SOLE MEANS OF SECURING THE ANCHOR TO THE BOW FITTING, PARTICULARLY IN STORM CONDITIONS.

A WARNING

DO NOT USE THE WINCH FOR ANY PURPOSE OTHER THAN DEPLOYMENT AND RECOVERY OF THE ANCHOR.

AWARNING

ALWAYS PROPERLY STOW THE ANCHOR AND RODE ACCORDING TO PREVAILING SEA/LAKE/ RIVER CONDITIONS. ACCIDENTAL DEPLOYMENT MAY CAUSE SIGNIFICANT PROPERTY DAMAGE OR HARM INCLUDING DEATH.



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A CAUTION

WINCHES ARE INTENDED AND SUPPLIED FOR ANCHOR CONTROL IN MARINE APPLICATIONS AND NOT TO BE USED IN CONJUNCTION WITH ANY OTHER USE.

A CAUTION

THE CIRCUIT BREAKER INCLUDED WITH THIS PRODUCT MUST NEVER BE DEACTIVATED OR BYPASSED. DOING SO MAY CAUSE DAMAGE TO THE MOTOR AND CABLES FORM OVERHEATING.

A CAUTION

FLYING DUST, DIRT AND DEBRIS CAN CAUSE SEVERE IRRITATION AND DAMAGE TO SOFT TISSUE. USE APPROPRIATE PERSONAL PROTECTIVE EQUIPMENT (PPE), SUCH AS SAFETY GLASSES AND GLOVES BEFORE INSTALLATION.

ALL ELECTRICAL WIRING HARNESSES SHALL BE LOOMED AND SECURED TO PREVENT POSSIBLE DAMAGE AND INSTALLED IN ACCORDANCE WITH THE LATEST ABYC (AMERICAN BOAT AND YACHT COUNCIL) ELECTRICAL STANDARDS.

Specifications

Rope Specifications

A CAUTION

ONLY LEWMAR-SUPPLIED REPLACEMENT ROPE KITS ARE COMPATIBLE WITH THIS PRODUCT. DO NOT USE OTHER ROPE KITS OR THE AUTO-STOP FEATURE WILL NOT FUNCTION CAUSING DAMAGE TO THE UNIT.

The winch comes equipped with 28.04 m (92') of 8 mm (0.3") rope and 2 m $(6 \frac{1}{2})$ of setting chain.

Product Dimensions



Operational Specifications

Maximum Line	Maximum Tackle
Speed	Weight
3 m/minute	40 kg
(75 ft/minute)	(88 lbs)
Maximum Pull*	Product Weight

NOTE: *Maximum Pull refers to the maximum amount of weight the winch can experience for **ONLY** short bursts while breaking the anchor free from the bottom of the bed of water.



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Parts List



Venta Standard Anchor Winch Kit PN 2024008888		
Letter	PN	Description
А	2022120902	Venta pontoon winch
В	2022375378	Composite drum
С	2023041350	Rope/chain rode with sensor clasps
D	2022373342	Bearing support
E	2022373347	Chute cover
F	2022373349	Drum Bearing
G	2022375378	Motor gearbox
Н	2023032311	Rope guide with chain sensor
I	2022448705	Slack line sensor
J	2023025031	Chain sensor clasp
N/A	2022453745	Mounting hardware kit
N/A	N/A	Wire harness, controller to switch, 5 m (16')
К	2022452043	Windlass Control Panel
L	2020209575	Bow roller, pontoon, standard (fixed)
М	2022375380	Control box

NOTE: Part numbers are shown for identification purposes only. Not all parts are available for individual sale. All parts with a link to the Lippert Store can be purchased.



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Parts List (cont'd)

Venta Extended Anchor Winch Kit PN 2024008889			
Letter	PN	Description	
A	2022120902	Venta pontoon winch	
В	2022375378	Composite drum	
С	2023041350	Rope/chain rode with sensor clasps	
D	2022373342	Bearing support	
Е	2022373347	Chute cover	
F	2022373349	Drum Bearing	
G	2022375378	Motor gearbox	
Н	2023032311	Rope guide with chain sensor	
I	2022448705	Slack line sensor	
J	2023025031	Chain sensor clasp	
N/A	2022453745	Mounting hardware kit	
N/A	N/A	Wire harness, controller to switch, 5 m (16')	
К	2022452043	Windlass Control Panel	
L	2023060738	Bow roller, pontoon extendable	
М	2022375380	Control box	

NOTE: Part numbers are shown for identification purposes only. Not all parts are available for individual sale. All parts with a link to the Lippert Store can be purchased.

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Resources Required

- Electric drill
- 8.5 mm (²¹⁄₆₄") drill bit
- 5.5 mm (7/32") drill bit
- Crimping tool
- Painter's tape
- 25 mm (1") drill or hole saw
- 70 mm (2 ³⁄₄") drill or hole saw
- Jig saw
- Flat head screwdriver (medium)

- Allen[®] wrench/hex key
- Adjustable wrench
- 6 mm Allen/hex key
- 5 mm Allen/hex key
- 4 mm Allen/hex key
- Four #6 (%4") screws
- Hand file or sandpaper
- Suitable electrical cable and crimp terminals (see the Wiring section of this manual)
- Marker/pen/pencil

Installation

Installation of the Venta Pontoon Anchor Winch with Bow Roller is best performed under dry dock conditions; with the pontoon on land supported by storage blocks or secured on a trailer.

Installation instructions apply to both the fixed and extendable bow rollers with the following exceptions when mounting the extendable bow roller:

- Make sure the bow roller extension is fully retracted when locating it's mounting position.
- Make sure the bow roller extension is fully retracted during anchor installation.

To facilitate the winch and bow roller beneath the deck of the boat it may be necessary to use a mounting plate. The mounting plate (2023011357) is an optional accessory sold separately by Lewmar and will bolt to the lateral aluminum structural beams of the vessel.

There are several options for installing the winch and bow roller depending on the setup of the vessel. It may be installed directly to the deck itself if the deck has the requisite thickness of 10 mm (0.39"), on the lateral aluminum structural beams of the vessel or to an optional mounting plate.

NOTE: Instructions for the installation of an optional mounting plate is **NOT** covered in this manual.

Follow the appropriate instructions guidelines in this manual for your vessel's setup.

Winch and Bow Roller to Decking

The deck must be flat and a minimum of 10 mm (0.39") thick for proper mounting.

If the deck is **NOT** thick enough or flat, a suitable mounting plate is required to take up camber or sheer. The mounting plate **MUST** bolt to the lateral aluminum structural beams of the vessel and be a minimum of 10 mm (0.39") thick. The plate will act as the decking.

Lewmar recommends one plate be used for both the winch and the bow roller. Double check the length of the intended plate to make sure it can accommodate the overall length of the winch and the bow roller with a maximum of 2.54 cm (1") gap (Fig.1A) between the winch and roller (Fig.1).

NOTE: If in doubt about the suitable construction of a mounting plate or mounting location, consult a qualified marine engineer. The deck/plate is an integral component of the winch's mounting; it must secure the winch and bow roller and be strong enough to cope with the high stresses involved in recovering the anchor.



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1. Turn off the boat's battery power supply.

2. The bow roller should be installed forward of the winch with the aft end of the bow roller spaced a maximum of 2.54 cm (1") (Fig.2A) from the fore end of the winch.

NOTE: A gap greater than 2.54 cm (1") can allow the chain and rope (rode) to become slack and snag.



Fig.2

3. Dry fit the winch and bow roller to the decking and mark the position of each.

NOTE: During installation of the Venta Pontoon Anchor Winch with Bow Roller system, individual and assembled components maybe too heavy or unwieldy for one person to safely manage. Seek additional help as needed before attempting difficult procedures.

4. Make sure the assemblies are in line and parallel with each other (Fig.2).

5. Make sure the center line of the anchor shank and bow roller rollers align with the center line of the winch housing and bow roller (**Fig.2**).

6. The lead from the bow roller should be fed horizontally back to the winch rope feeder, and not at an angle (Fig.3).



Fig.3

7. Fasten the winch chassis to the decking using two of the included M8 ($\frac{5}{16}$ ") bolts in the two aft-most holes (Fig.4A).

8. Install the remaining four bolts based on the layout of the mounting location. Lewmar recommends that;

A. Two bolts be placed symmetrically near the fore of the winch (Fig.4B),

B. And two bolts be placed symmetrically near the middle of the winch (Fig.4C).



Fig.4

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9. Fasten the bow roller to the decking using six of the included button head fasteners. Use two screws at the aft-end (Fig.5A), two at the fore (Fig.5B) and two at the center of the bow roller (Fig.5C).



Fig.5

Winch and Bow Roller to Aluminum Beams

1. Switch off the boat's battery power supply.

2. Examine the beams. If the beams are **NOT** flat, a mounting plate is required. Follow the instructions in the "Winch and Bow Roller to Decking" section for guided installation instructions.

3. Dry fit the winch assembly to the beams and mark its location.

NOTE: During installation of the Venta Pontoon Anchor Winch with Bow Roller system, individual and assembled components maybe too heavy or unwieldy for one person to safely manage. Seek additional help as needed before attempting difficult procedures.

A. The aft-most mounting holes on the winch **MUST** align with a beam (Fig.6A).

B. One pair of symmetrical, left and right holes near the middle of the winch **MUST** align with a beam (Fig.6B).

C. One pair of symmetrical, left and right holes near the fore of the winch **MUST** align with a beam (Fig.6C).

NOTE: If the beams do **NOT** line up with the pre-drilled mounting holes of the winch, a mounting plate is required for installation. Follow the instructions in the "Winch and Bow Roller to Decking" section in this manual for guided installation instructions.

4. Dry fit the bow roller to the beams noting the marked location of the winch.



Fig.6

NOTE: During installation of the Venta Pontoon Anchor Winch with Bow Roller system, individual and assembled components maybe too heavy or unwieldy for one person to safely manage. Seek additional help as needed before attempting difficult procedures.

A. The bow roller **MUST** be installed forward of the winch with the aft-end of the bow roller spaced a maximum of 2.54 cm (1") from the fore-end of the winch (**Fig.7A**).

NOTE: A gap greater than 2.54 cm (1") can allow the chain and rope (rode) to become slack and snag.

B. The aft-most mounting holes (Fig.7B) and fore-most holes (Fig.7D) on the bow roller **MUST** align with a beam (Fig.7). Optionally, for extra security a set of third holes can be aligned near the center of the bow roller where a beam is available (Fig.7C).

C. The winch and bow roller assemblies **MUST** be in line and parallel with each other.

D. Make sure the center line of the anchor shank and bow roller rollers align with the center line of the winch housing and bow roller (**Fig.7**).

I. If the beams do **NOT** line up with the pre-drilled mounting holes of the bow roller,

II. or the winch and bow roller can not be placed close enough together,

III. or the assemblies can not be placed parallel and centered in relation to each other, a mounting plate is required. Refer to the "Winch and Bow Roller to Decking" section for additional mounting plate information.

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Fig.7

NOTE: If in doubt about the suitable construction of a mounting location, consult a qualified marine engineer. The aluminum beams are an integral component of the winch's mounting; they **MUST** secure the winch and be strong enough to cope with the high stresses involved in recovering the anchor.

5. The lead from the bow roller should be fed horizontally— not at an angle—back to the winch rope feeder (**Fig.8**).



6. Fasten the winch chassis to the aluminum beam using two of the included M8 (5/16") bolts in the two aft-most holes (Fig.9A).

7. Install the remaining four bolts based on the layout of the remaining beams. Lewmar recommends two bolts be placed symmetrically near the fore-end of the winch chassis (Fig.9B) and two bolts be placed symmetrically near the middle (Fig.9C).



Fig.9

8. Fasten the bow roller to the aluminum beams using the six included button head fasteners. Use two screws at the aft-end (Fig.10A), two at the fore (Fig.10B) and two at the center of the bow roller (Fig.10C) if possible.



Fig.10

Fig.8

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The Control Box

The control box should be installed in a dry compartment above deck to a solid surface (Fig.11).

NOTE: Do **NOT** connect or power-on the control box during installation.





Fig.11

1. Use a flat head screwdriver to remove the control box lid (**Fig.12A**) by turning the plastic screws (**Fig.12B**) counterclockwise.

2. Locate the mounting pads at each corner of the box. Mark holes through the four pad holes to the mounting surface.

3. Use four #6 (%4") screws to fasten the box in place.

4. Replace the box lid and gently tighten the plastic screws to form a good seal.

NOTE: Do **NOT** interfere with the internal electrical circuitry of the box. Interfering with the box's internal electrical circuitry will void product warranty.





The Foot Switch

The operating foot switch should be installed in a suitable deck location where the operator has a clear view of the anchor payout when operating the winch via the switch to ensure no snags or tangles impede operation (Fig.13).

The operator also needs a clear view of the anchor during retrieval to ensure proper stowing.



Fig.13

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NOTE: Printer settings may vary. To ensure the printed template is accurate, measure the diameter of the holes when printed. The diameter should be 70 mm ($\sim 2 \frac{3}{4}$ ") (**Fig.14**). Lewmar recommends verifying the template against the actual foot switch prior to starting installation.



Fig.14

1. Print or remove the switch mounting template, figure 21, and place it on the deck where there is sufficient space and no underlying equipment or wiring will be damaged by installation. Once satisfied with switch position, tape the template to the intended mounting location using painter's tape.

- Optionally, adhere the paper template to a sheet of cardboard to stiffen the template when used to drill and saw the required openings.
 - Cut through the cardboard the three mounting holes and the foot switch area previously cut out of the paper template.
 - Use painter's tape to adhere the stiffened template to the intended mounting location.

2. Using an electric drill and 5.5 mm (7_{32} ") drill bit, drill holes at the three marked locations on the switch template (Fig.21A).

3. Using a 70 mm $(2 \frac{3}{4})$ drill or hole saw, cut two holes where indicated by the template for either side of the switch (Fig.21B).

4. Use a jigsaw to connect the two 70 mm (\sim 2 $\frac{3}{4}$ ") holes into one hole following the template (**Fig.21C**).

5. De-burr, sand or file any rough edges around the foot switch opening.

6. Place the foot switch into the hole to test for fit, adjusting the opening as needed.

7. Secure the foot switch to the deck using the provided M5 nuts and bolts. Do **NOT** over tighten nuts.

8. Wire the switch to the controller using the included 5 m (16') harness. Refer to Wiring Diagram (**Fig.17**).

NOTE: Do **NOT** loosen any existing screws on the deck-mounted foot switch.

The Anchor

The Venta Pontoon Anchor Winch with Bow Roller system is only compatible with the Lewmar 14 lb Galvanized Delta Anchor and the Lewmar 14 lb Stainless Steel Epsilon Anchor.

Refer to the Compatible Lewmar Anchors table for additional anchor information.

Compatible Lewmar Anchors			
Part # Description			
2020202223	6 kg (14 lbs) Galvanized Delta Anchor		
2020221486	6 kg (14 lbs) Stainless Steel Epsilon Anchor		

NOTE: The Lewmar 14 lb Galvanized Delta and the 14 lb Stainless Steel Epsilon anchors are **NOT** included in either Venta Pontoon Anchor Winch with Bow Roller Kit. Both anchors are sold separately as accessories by Lewmar.

The controller and foot switch **MUST** be fully installed and wired before installing an anchor. If necessary, refer to the Wiring Diagram (Fig.17).

Anchor installation instructions apply to both the fixed and extendable bow rollers with the following exception for the extendable bow roller:

• Make sure the bow roller extension is fully retracted during anchor installation.

1. Firmly hold the winch chain then release it from the winch by cutting the transit cable-tie.

NOTE: Make sure you have a firm grip before cutting the cable-tie to prevent the chain from sliding back into the winch.

NOTE: Only after the winch and bow roller have been installed, and the anchor is on-hand, should the chain be released from the winch by cutting the transit cable-tie.

2. Run the winch chain over the top of the bow roller.

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3. Place the anchor inside the bow roller and connect it to the chain using a suitable shackle or swivel (**Fig.15A**). If additional chain is required to connect the anchor to the winch, refer to the "Releasing Additional Chain for Anchor Installation" section.

NOTE: During installation of the Venta Pontoon Anchor Winch with Bow Roller system, individual and assembled components maybe too heavy or unwieldy for one person to safely manage. Seek additional help as needed before attempting difficult procedures.



Fig.15

4. Installation is complete.

Releasing Additional Chain for Anchor Installation

ONLY follow these steps if more chain is needed to install the anchor. Keep in mind the winch will need to be fully wired to the switch, control box and power supply before performing this procedure.

AWARNING

DO NOT TOUCH CHAIN OR MOVING PARTS. DO NOT PLACE HANDS NEAR THE ANCHORING EQUIPMENT DURING OPERATION.

A WARNING

UNLESS THERE IS NOT SUFFICIENT CHAIN TO REACH THE ANCHOR, DO NOT ATTEMPT TO POWER ON OR OPERATE THE WINCH UNTIL THE BOW ROLLER AND ANCHOR ARE INSTALLED TO COMPLETE THE ANCHOR SYSTEM.

1. Check that all fasteners are tight before operating the winch.

2. Make sure all persons are clear of the winch and maintain a safe distance until anchor is properly attached to the chain.

3. Switch on the boat's battery or power supply.

4. Open both protective lids of the deck foot switch (Fig.16). Use a quick pulse on the "Down" (**DWN**) button (Fig.16A) to verify the spooling direction is correct and wiring is correct.



Fig.16

5. If wiring and spooling is correct, release the required amount of chain needed to reach the anchor.

6. Close the foot switch button covers.

7. Turn boat power and disconnect isolator (Fig.17) off before approaching the anchor and chain.

- **8.** Place the anchor inside the bow roller and connect it to the chain using a suitable shackle or swivel (**Fig.15A**).
- 9. Installation is complete.

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Wiring

A WARNING

COMPLY WITH ALL LOCAL WIRING AND ELECTRICAL SAFETY REGULATIONS. WHEN UNSURE, ALWAYS SEEK GUIDANCE FROM A QUALIFIED MARINE ELECTRICIAN.

General Wiring

The winch must be connected to a suitable 12V DC power supply.

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

The wiring system should be fully insulated to avoid possible electrolytic corrosion. It is recommended to use type III stranded, tinned copper wire with copper crimp terminals. Most modern installations are negative return (negative ground) but polarity should be checked.

The winch is supplied with a 5 m (16') harness to allow through-deck connection to the control box. The control box should be installed in an enclosed, dry area above deck.

Circuit Protection

The winch is supplied with circuit protection for overload protection. Circuit protection **MUST** be installed between the power source (battery) and the winch control box on the positive cable. The button on the circuit breaker will pop out when an overload occurs. Depress the button to reset the breaker. The breaker may need time to cool to allow reset. Do **NOT** hold button in to attempt an override.

Installation **MUST** use the supplied circuit protection to protect the wiring between the power source and the winch control box. Refer to local standards for exceptions and restrictions.

DO NOT remove circuit protection from unit or otherwise bypass.

Disconnect Isolator

The installation requires a customer-supplied power disconnect isolator switch (Fig.17) between the power source (battery) and the provided circuit protection. The isolator switch should be appropriately sized to safely handle both the current draw at maximum pull and the momentary current draw in a stall condition.

The disconnect isolator is to be used to switch off the winch system for safety when it is not in use.

See the Power Specifications table for assistance in determining a proper isolator.

Electric Cable Selection

Cable connecting the winch control box to the power supply must be customer supplied. Note the total cable length needed [(Fig.17A) plus (Fig.17B) in Wiring Diagram (Fig.17)] prior to choosing cable and refer to the Appropriate Cable Gauge/Size by Cable Length table to determine the gauge of wire needed. Longer runs will require cable with a smaller gauge.

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

Appropriate Cable Gauge/Size by Cable Length

A CAUTION	
CONFUSE CABLE LENGTH WITH THE	

DO NOT CONFUSE CABLE LENGTH WITH THE LENGTH OF THE VESSEL.

Up to 14 m	Up to 40 ft	15-24 m	41-66 ft
16 mm ²	4 AWG	25 mm ²	2 AWG

Power Specifications

Motor	Motor	Zero-Load Current	Current Draw While	Current Draw While	Maximum Draw in
Supply	Power	Draw	Hoisting Tackle	at Maximum Pull	Stall Condition
12 Volts	850 Watts	40A	65A	100A	447A

ALL ELECTRICAL WIRING HARNESSES SHALL BE LOOMED AND SECURED TO PREVENT POSSIBLE DAMAGE AND INSTALLED IN ACCORDANCE WITH ABYC (AMERICAN BOAT AND YACHT COUNCIL) ELECTRICAL STANDARDS.



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Wiring Diagram



Fig.17

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Operation

Prior to Operation

The winch includes a slack line sensor that prevents the rope jamming or entangling during deployment. The winch will stop paying out if it senses slack in the line. If this occurs during operation, either gently power the boat astern or wait for tidal forces to take up the slack so that the winch continues paying out.

The winch features "a bitter end sensor" which automatically prevents deployment of the final 2 m (6') of anchor rope. This ensures that a few turns of rope always remain on the drum for safety purposes; preventing the spool from deploying too much rope and reverse winding. When enough rope is deployed to trigger the bitter end sensor, winding will stop and the sensor will override the "Down" (**DWN**) button (**Fig.16A**).

The "Auto Pulse" feature automatically pulses the anchor when the shank is 100 mm (4") away from entering the bow roller. This provides the anchor adequate time to settle and right itself and protects the winch from shock loads as the anchor homes against the bow roller. The winch senses the incoming chain and enters pulse mode while the anchor is homing. Once the anchor is homed, the pulses continue until the foot switch is released. The "Auto Pulse" feature will remain in place until a set number of pulses have completed or the "Down" (**DWN**) button is pressed.

Both the bitter end sensor and Auto Pulse feature serve to protect equipment and reduce noise. Exercise good anchoring practice and pay careful attention to equipment and surroundings when using the winch.

Before operating the winch, check that retrieval of the anchor will not foul or entangle other vessels or objects in the water.

Dropping the Anchor

A WARNING

KEEP LIMBS, DIGITS, CLOTHING AND HAIR CLEAR OF WINDLESS, RODE AND ANCHOR DURING OPERATION. SEVERE BODILY HARM COULD RESULT.

A WARNING

NEVER DROP THE ANCHOR WHEN SWIMMERS OR DIVERS ARE PRESENT.

AWARNING

DO NOT HOLD THE CHAIN, RODE OR ANCHOR WHEN WINCH IS IN USE.

1. Check that power is turned on and that the circuit breaker is not tripped—if breaker is tripped, press the button to reset it.

2. Flip open the protective lid with the downward-facing arrow on the deck switch (Fig.18A). Hold the revealed "Down" (**DWN**) button (Fig.18B) to drop the anchor.



Fig.18

3. Release button when the desired length of rode has been deployed. The bitter end sensor will automatically stop the winch if all the available rope has been deployed.

4. If the winch stops operating prematurely, there is slack in the system. Gently power the boat astern or wait for tidal forces to take up the slack so that the winch continues paying out.

5. Close the protective lid of the foot switch.

Raising the Anchor

When retrieving the anchor, avoid overloading or stalling the winch.

1. Check that power is turned on and that the circuit breaker is not tripped—if breaker is tripped, press the button to reset it.

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ACAUTION

ALWAYS WATCH THE ANCHOR STOWING ONTO THE BOW ROLLER

2. Flip open the protective lid with the upward-facing arrow on the deck switch (Fig.19A). Hold the revealed "Up" button (Fig.19B) to retrieve the rode and anchor.



Fig.19

3. To aid recovery, slowly and safely power the vessel in "idling-in-gear" (a.k.a., idle-speed; lowest navigational speed) mode towards the anchor. Do **NOT** travel over or beyond the location of the anchor, which would slacken the rope causing a risk of entanglement and damage to topsides.

4. When the boat is positioned above the anchor, the anchor should easily break out from the bed of water using the winch. If the anchor is set deeply, do **NOT** overload the winch in an attempt to break it out; instead use the engine and boat movement. Be aware of underwater obstacles, debris and other boat's mooring lines which may pose an entanglement hazard.

5. Continue retrieving the anchor and rode by pressing the "Up" button. As the chain passes through the bow roller and into the windlass, Auto Pulse mode will be triggered and the retrieval speed will slow. When the anchor homes onto the bow roller it will come to a stop. Release the "Up" button when this happens.

6. Close the protective lid of the deck-mounted foot switch.

Foot Switch Stickers

The provided stickers for the foot switch can be applied to the outside and inside of the switch covers after the function of each switch has been defined. Various stickers have been provided to suit the boat owner's preference.

Locations for the most popular stickers on the switch covers are shown in figure 20.



Fig.20

Maintenance

The service period is determined by the frequency of use. Frequent users will need to carry out maintenance more often than weekend or casual users.

ACAUTION

BEFORE PERFORMING ANY MAINTENANCE OR SERVICE, ISOLATE THE WINCH FROM THE POWER SOURCE VIA THE CIRCUIT BREAKER/ISOLATOR.

1. Check that the winch chassis mounting bolts are tight, and tighten if required.

Venta[™] Pontoon Anchor Winch with Bow Roller

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2. Use light machine oil sparingly to lubricate moving parts including drum bearings and slack line sensor pivot.

3. Examine all electrical connections to make sure they are sound and corrosion hasn't set in. Tighten and/or protect connections if needed.

4. Check rode and rode entry guide for wear and replace either if severely worn.

5. Check main chassis case for damage and replace if needed.

6. Check the motor gearbox plastic cover for any impact damage or cracks.

7. If any screws need to be re-engineered, use a medium strength thread locker such as Loctite $^{\textcircled{R}}$ 243.

Troubleshooting

What is happening?	Why?	What should be done?
Anchor will not donlow or roturn	Circuit breaker is tripped.	Let breaker cool, then rest by pressing button on breaker.
when buttons are pressed.	Motor not engaging.	Check wiring connections. If voltage is reaching the motor wires when the DWN button is pressed, the motor must be replaced.
Anchor stops deploying mid-payout.	Winch sensor not triggered.	Gently power the boat astern or wait for tidal forces to take up the slack so that the winch continues paying out under load.
Rode is becoming tangled.	Rode is tangled or snagged.	Check for debris, rode caught on the chassis of the winch or knotted in the drum. Remove any debris and free any snags.
	Improper rope used in unit.	Only use approved Lewmar rope.
Rode is backwound.	Switch/button pressed for too long during deployment.	Press the UP button for 5 seconds to unspool the chain past the red section of rope then rewind it.
	Electronic logic malfunction.	Press the DWN button until 2 m (6') of rope/ chain is deployed. Wait 30 seconds, then try retrieval.
Auto Pulse mode isn't engaging.	Chain sensor not triggered.	Check chain clasp for signs of damage and replace if necessary. Check chain rope guide module (with integral sensor) for damage and replace if necessary. Any replacement of the clasp should only be performed with the boat secured by means other than the winch and with the winch isolated from the power source via the circuit breaker/isolator.
Auto Pulse mode engages too early.	Chain Sensor clasp is too far away from anchor.	Move clasp towards anchor two links at a time until pulsing starts 50 mm (2") before entering bow roller.
Auto Pulse mode engages too late.	Chain Sensor Clasp is to close to anchor.	Move clasp away from anchor 2 links at a time until pulsing starts 50 mm (2") before entering bow roller.
Bitter end sensor isn't engaging.	Bitter end rope clasp damaged.	Trailer and secure the boat (or remove the winch from the boat for service) and remove the chute cover to access the rope clasp. Check that the clasp is intact and clamped onto the rope 2 m (6') from the bitter end. Replace clasp if necessary.

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.
- 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 de- signed 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 con- ducted 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.
- 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
 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 w by the end user to the Lewmar outlet the supplied the product or to Lewmar Limit Southmoor Lane, Havant, Hampshire PO England.

E SEVERANCE CLAUSE

If any clause of this warranty is held by a court or other competent authority to be i or unenforceable in whole or in part, the v of the remaining clauses of this warranty the remainder of the clause in question : not be affected.

F OTHER RIGHTS

This warranty gives you specific legal rigl and you may also have other legal rights, vary from state to state and country to co In the case of European States a Consur customer (as defined nationally) has lega rights under the applicable national law governing the sale of Consumer Goods; Warranty does not affect those rights.

G LAW

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

H DISPUTES

Any dispute arising under this warranty at the option of the end-user, be referre alternative dispute resoloution under th rules of the British Marine Federation or to Courts of the State whose law shall gove the warranty of to the Courts of England Wales.

The British Marine Federation may be contacted at:

Marine House Thorpe Lee road, Egham, England TW20 8BF



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Foot Switch Mounting Template

NOTE: Printer settings may vary. To ensure the printed template is accurate, measure the diameter of the holes when printed. The diameter should be 70 mm ($\sim 2^{3}$ /4"). Lewmar recommends verifying the template against the actual switch prior to starting installation.

1. Print this page or tear it out of the manual. Tape it using painters tape to the intended mounting location where the switch will be installed.

- Optionally, adhere the paper template to a sheet of cardboard to stiffen the template when used to drill and saw the required openings.
 - Cut through the cardboard the three mounting holes and the foot switch area previously cut out of the paper template.
 - Use painter's tape to adhere the stiffened template to the intended mounting location.

2. Using an electric drill and 5.5 mm (7/32") drill bit, drill three holes (Fig.21A) where indicated by the template.

3. Using an electric drill and a 70 mm $(2^{3}4^{"})$ drill bit or hole saw, cut two holes **(Fig.21B)** where indicated by the template for either side of the switch.

4. Using a jigsaw, follow the lines (Fig.21C) on the template to connect the two 70 mm (\sim 2 ³/₄") holes to create one opening.



Fig.21

MARINE GROUP EUROPE





For Product Support: United States

Lippert Customer Care Center T: 432-LIPPERT (432-547-7378) Email: <u>customerservice@lci1.com</u>

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