

# PACIFIC WINDLASS SERIES

OWNER MANUAL 600| 900| 1000 | 1500 MOTORS



#### SAVE THESE INSTRUCTIONS

Important safety instructions are included in this manual.

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## 1- Introduction

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

#### **Product Support**

Five Oceans products are supported by a network of distributors and Authorized Service Representatives. If you encounter any difficulties with this product, please contact your national distributor, or your local Five Oceans dealer. Details are available at: www.five-oceans.com.

#### 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

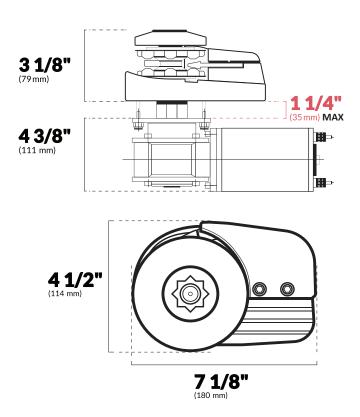
		3888	D W					
			D (mm)	D (in)	P (mm)	P (in)	W (mm)	W (in)
Pacific 600	1/2" (12mm)	1/4" HT G4	6.96	0.274	21.46	.845	10.41	.410
Pacific 900	1/2" (12mm)	1/4" HT G4	6.96	0.274	21.46	.845	10.41	.410
Pacific 1000	9/16" (14mm)	5/16" HT G4	8.36	0.329	26.16	1.030	12.70	.500
Pacific 1500	5/8" (15mm)	3/8" HT G4	10.01	0.394	30.99	1.220	15.24	.600

## **Electric Specifications**

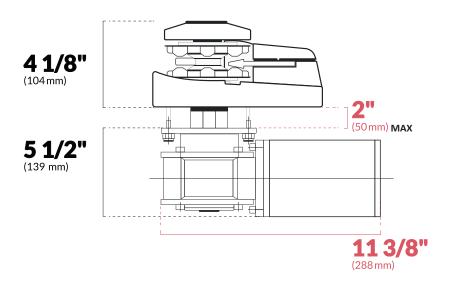
MAXIMUM WORKING							NORMAL CURRENT		
MODEL	MO <sup>·</sup> Voltage	TOR Watt	PULL kg   lb		DROP m/min.	SPEED ft/min.	LOAD LIMIT		DRAW Amp
Pacific 600	12	600	450	990	26	85	150	330	33
Pacific 900	12	900	657	1450	40	131	220	484	55
Pacific 1000	12	1000	750	1650	40	131	250	550	60
Pacific 1500	12	1500	1200	2640	40	131	485	1067	95

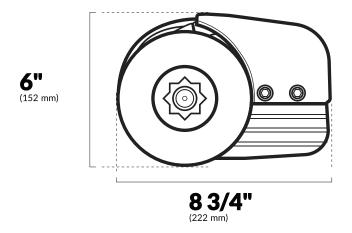
## **Dimensions Diagram**

Pacific 600 & Pacific 900



## Pacific 1000 & Pacific 1500





## **3- Protection Notice**

At all times it is the responsibility of the boat user 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.
- Five Oceans 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 and anchor rope/chain and anchor during operation. Severe bodily harm would result.
- Ensure there are no swimmers or divers nearby when dropping anchor.
- When the Windlass is not in use the anchor must be tied off onto a cleat or equivalent strong point to prevent damage to the boat.
- Windlass 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.
- Do not wrap chain around a capstan barrel or drum where fitted.
- A circuit breaker/isolator should always be used with this windlass 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 or 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

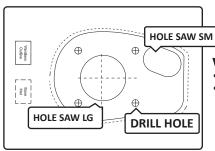
- Make sure you have switched off the power before you start installing this product.
- This product requires installation by a suitably qualified electrical engineer.

## 4- Installation

## 4.1 Basic requirements

Each installation requires the following tools: Windlass Installation

	DRILL	-	HOLE SAW SM		HOLE S	AW LG
MODEL	in	mm	in	mm	in	mm
Pacific 600	5/16"	8	1 11/16"	44	2 3/32"	52
Pacific 900	5/16"	8	1 11/16"	44	2 3/32"	52
Pacific 1000	5/16"	8	2 3/32"	52	2 9/16"	65
Pacific 1500	5/16"	8	2 13/32"	61	2 9/16"	65



#### WIRING INSTALLATION

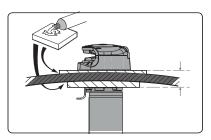
- Crimping Pliers / Wire Stripper
  - Suitable electrical cable and crimp terminals

#### 4.2 Accessories

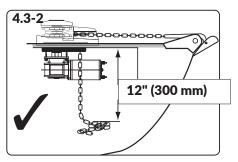
Use only genuine Five Oceans parts and accessories to ensure top performance and eliminate the risk of voiding your warranty. For replacement parts, please visit your dealer or www.five-oceans.com

## 4.3 Fitting The Windlass to the Deck

#### 4.3-1

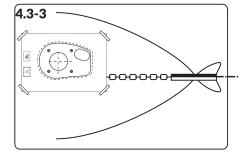


- If the deck is not flat, a suitable mounting pad may be required to take up camber or sheer. Decks that are thin, or of foam or balsa laminate construction, will require reinforcement in order to spread the loads that will be applied to the deck while the windlass is in use. The standard 5/16" (8 mm) threaded mounting studs supplied suit deck and packing thickness of up to 1 1/4" (35 mm) for Pacific 600/900 and up to 2" (50 mm) for Pacific 1000/1500. These are adequate for most installations.
- 2. Place the windlass on the deck and decide upon a position for it with reference to the vessel's bow roller (Fig. 4.3-2) and the chain locker below. Rode lead from the roller should ideally be fed horizontally back to the top of the gypsy and along its centerline (Fig. 4.3-3). There must be sufficient vertical fall for the chain or rope, even with a full locker, to draw the rode from the gypsy when hauling in.

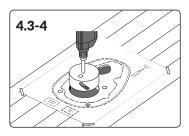


Place the mounting template on the deck or mounting pad in the desired position for the windlass and hold it in place using adhesive tape.

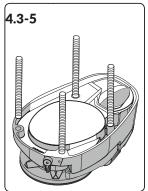
**NOTE**: Check the scale of the template matches the winch.



4. Using a 5/16" (8mm) diameter drill, make the four (4) holes for the mounting studs. With a 2 1/2" (44 mm) diameter hole saw, make the hole for the rode to pass throughwith a 4 1/2" (52 mm) diameter hole saw, make a hole for the motor gearbox to pass through. When all the holes have been made, remove the template. To help avoid water absorption by the deck, apply an appropriate marine sealant to the freshly cut hole edges.

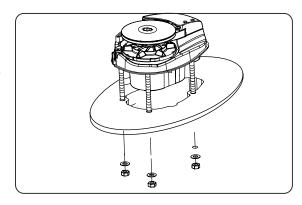


- Fully screw the four (4) mounting studs into the base of the windlass. Screw the studs into the base finger tight, with the flats towards the base as shown (Fig 4.3-5).
- 6. Next, tighten the studs until they bottom out in their holes. Do this to each of the studs in turn.



Optionally, apply a suitable sealant to the base of the windlass and around the studs.
 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. Trim the studs back to 6 mm (1/4") below the fully tightened nuts.

Pass all the studs through the deck and fit them security on the motor piece which is on the underside of the deck and secure the unit with the fixings provided.



## 5- Electrical wiring

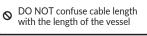
#### 5.1 Electric cable selection

Five Oceans recommends the installer source and install cable that meets the requirements of the standards and regulations relevant to the installation and codes of practice.

The cable table gives recommended cable sizes based on total length of cable required, from the battery, following the route of the cables.

#### CABLE SIZING FOR LENGTH OF CABLE RUN

MODEL	up to 24 ft (up to 8 m)	24 - 50 ft (8 - 16 m)
Pacific 600	6 AWG (16 mm²)	2 AWG (25 mm²)
Pacific 900	2 AWG (25 mm²)	1 AWG (35 mm²)
Pacific 1000	2 AWG (25 mm²)	1 AWG (35 mm²)
Pacific 1500	1 AWG (35 mm²)	0 AWG (50 mm²)



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

#### 5.2 Wiring

Plan the installation to suit the controls and give the operator a full view of the windlass. 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 (*NOTE*: we recommend that the cable are shorter if possible.). Most modern installations are negative return (negative ground) but polarity should be checked. Overload protection, in the form of the circuit breaker provided must be built into the windlass wiring circuit.

Circuit breaker supplied:

Pacific 600 Series (Circuit Breaker: 60 Amps - 80 Amps)

Pacific 900 Series (Circuit Breaker: 80 Amps)
Pacific 1000 Series (Circuit Breaker: 100 Amps)
Pacific 1500 Series (Circuit Breaker: 135 Amps)

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

#### Warning

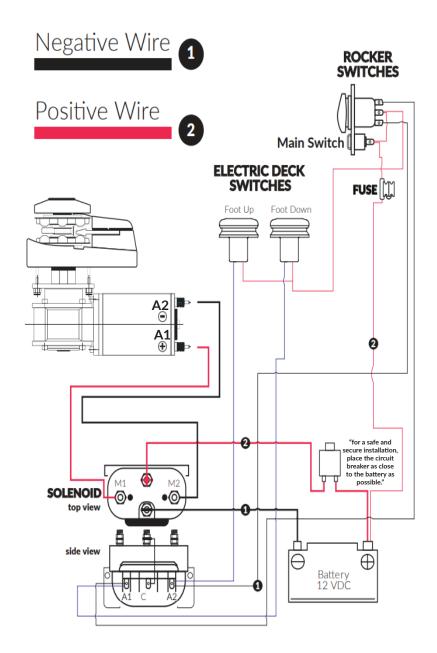
If you are not sure you understand these guidelines, seek professional help. Ensure that the installation complies with USCG, ABYC, NMMA or other local regulations.

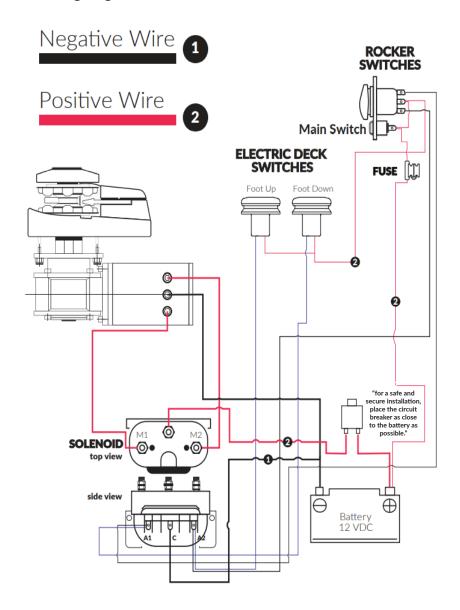
#### 5.3 Control switch installation

The unit is supplied with

Visit www.five-oceans.com for more information

Contactor box (should be located within an dry area) and control box used in some installation refer to wiring diagram S 5.4





<sup>\*</sup>For a safe and secure installation, place the Circuit Breaker as close to the battery as possible.

## 6- Operation

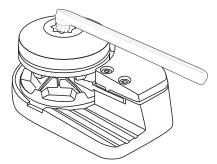
#### 6.1 Manual Control

Use this method for quicker anchor deployment, in an emergency involving loss of power or to save battery power. Observe maritime anchor deployment safety rules.

∧=Always remove the handle after use.

▲ WARNING! Isolate (Turn off) the windlass using circuit breaker / isolator.

⚠ WARNING! Trapping, crushing or entanglement danger whilst operating windlass manually or under power



- Turn off all power to motor windlass and release any anchor locks.
- 2. When safe insert the Five Oceans wrench in to the capstan drive cap. Rotate clockwise to grip the gypsy and anticlockwise to free the gypsy controlling the rate of descent of the anchor. Once deployed adjust desired scope if using a rope/chain, lock the clutch by turning the drive cap clockwise and engage the anchor locks. Remove the wrench handle.

## DONT FORGET

**∧** WARNING! Always remove wrench handle after use.

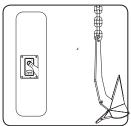
#### 6.2 Power Down/Up

#### To release anchor:

- 1. Check unit is not in manual mode.
- 2. Release any anchor locks.
- Engage the circuit breaker/isolator. 3.
- Press down button continuously until you've reached the necessary length of chain/ 4. rope.
- 5. Disengage the circuit breaker/isolator.
- 6. Lock anchor locks.

#### To retrive anchor:

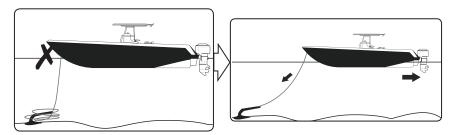
- 1. Release any anchor locks
- 2. Engage the circuit breaker/isolator.
- 3. Press the UP button continuously to retrieve the anchor.
- Disengage the circuit breaker/isolator. 4.
- Lock anchor locks.



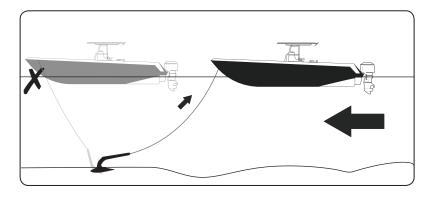
#### 6.2 Windlass Operating Procedures

This is an anchor recovery device. DO NOT use the windlass to pull the boat to the anchor as it will damage the mechanism. Vessels at anchor will snub on the rode and this can cause slippage or apply excessive loads to the windlass. Best practice is to use a bollard or other strong point when at anchor and use the vessels engines to break the anchor free. Otherwise excessive load will cause the freefall function to seize and can cause damage to the gearbox.

- When retrieving anchor do not overload or stall in windlass.
- The rode should be secured directly to a bollard, sampson post or cleat and a chain secured by a chain stopper.



When anchoring, power rode out allowing the vessel to take up stern away preventing the rode tangling with anchor. Use this method for mooring stern first to a jetty. To aid recovery, under power, move vessel towards anchor but not over and beyond, as this can cause damage to topside. As anchor approaches the vessel 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. When stowing it is important to make sure, particularly with rode lines that there is at least 300mm (12") of free space below the windlass (See §4.5). Stop and check during the stowing process to determine if there is sufficient space on you vessel. If the rode pile is too close to the underside of the windlass, re-distribute the rode away from directly below the windlass. If the rode gets too close to the underside of the windlass it will cause problems with good rode recovery and may cause damage to the line.

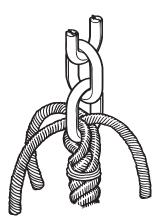


#### 6.3 Joining Rope to Chain

When splicing rope to chain, select a length of chain that will avoid having the splice positioned in the gypsy when the anchor comes over the stemhead. Furthermore, ensure that the splice is no tighter than the rope.

A hard splice is not desired.

- With whipping twine or similar, seize your rope 8" (200 mm) from the rope's end and unlay the strands.
- Pass one strand through the chain link from one side and the other two strands from the opposite side. Remove seizing and complete a back splice in the normal manner for four full tucks.
- With a hot knife pare down the three strands by one half of their diameter and continue with two further tucks.
- With a hot knife, carefully melt the ends back into the line. Because of wide variations in rope type and construction some experimentation may be required.
- Whip the line with permanent whipping at the beginning of the taper.
- The method of joining illustrated is designed to minimize chafe between the rope and chain but as a matter of prudent seamanship the splice should be checked regularly and remade if there is any evidence of wear.



## 7- Servicing

▲ WARNING! Isolate the windlass using circuit breaker/isolator

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

#### 7.1 Servicing Schedule

The service period is determined by the frequency of use. Professional user 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.

- 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 studs are firmly clamped and tighten if required.

#### After use:

- Wash down the windlass using fresh water.
- Ensure rode is at least 12" (300mm) below the windlass
- Check anchor locker drain
- Check rode and splice for wear.

#### Annually or more often if frequent user:

- 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 studs are firmly clamped and tighten if required.
- Check rode and splice for wear.
- Check gypsy as it is a high wear item

## 8 Troubleshooting

- Anchor falls down independently while windlass is not in use.
  - This problem is a result of not securing the anchor rode combined with the gypsy drive cap being slack. Tighten the gypsy drive cap using the Five Oceans wrench and always secure the anchor rode independently of the windlass when not in use.
- Failure to operate or sluggish operation.
- The majority of these problems are electrical in nature. It is essential that the proper voltage be maintained. The proper voltage on a 12 Volt system is 13.5 Volts, constant low voltage will damage motor.
- Ensure electrical cable size is large enough to handle the current draw and keep voltage drop within acceptable limits (maximum 10%).
- Check control switches, connections, battery condition, isolator switch, fuse and motor for operation failure.
- 3. Failure to operate.
  - Is there a voltage at the input terminals to the contactor and switches. Check the circuit breaker/isolator switch and any fuses.
- Operate the switch. Is there voltage at the positive switch terminal on the solenoid. If not, the switch (or its wiring), is difective.
- Keep the switch activated. Is there voltage at the main output terminal on the contactor. If not check the contactor coil ground circuit. If okay, replace the contactor.
- Check the voltage at the motor. If voltage of at least 12.5 volts is present and the motor does not operate, the motor is defective.

## 9 - Warrantv

All Five Oceans® products sold by Baron USA, LLC or any of the product resellers is warranted to be free from defects in material and workmanship from date of purchase.

1. **PRODUCT**: Windlass Series (Altantic & Pacific)

#### 2. WARRANTY PERIOD:

Exclusive five (5) Windlass Series Warranty from purchase date

- 1 year warranty: motor+gear box, electrical component including solenoid, switch panel, foot switch,
- 5 year warranty: product housing

#### 3. CONDITIONS AND LIMITATIONS:

- This warranty only applies to the original Buyer and it is not transferable.
- b. Proof of purchase is required for warranty service. If a product purchased in the USA. Please register within ninety (90) days from the date of purchase. Simply complete registration by including a copy of the purchase receipt as proof of original purchase. All Buyer must register their product purchased directly at Five-Oceans.com within the USA territory at https://www.five-oceans.com/pages/register.
- The warranty shall be limited to the repair or replacement of any parts of the product which are defective in materials or workmanship.
- d. Responsibility for the selection of products appropriate for the use intended by the Buyer shall rest solely with the Buyer.
- This warranty does not cover any incidental costs, incurred for the investigation, e. removal, carriage, transport or installation of the product.
- f. A unit provided as an exchange or replacement parts will be subject to the warranty of the original unit. The length of the warranty governing the exchanged unit will remain calculated by reference to the purchase date of the original unit.

#### 4. WARRANTY EXCLUSIONS:

This warranty does not cover the following:

- Normal wear: Products with mechanical and electrical components need periodic parts and service to perform well. This warranty does not cover repair when normal use has exhausted the life of a part or the equipment as a whole.
- b. Environmental conditions, including but not limited to extreme temperatures, etc.
- c. Normal maintenance is not covered by this warranty.
- d. Failures due to acts of God and other force majeure events beyond the manufacturer's control.

#### Other Exclusions - This warranty excludes:

- Cosmetic defects such as paint, decals, etc.
- Corrosion & Normal Wear and tear of items such as winch cable, chains, hooks. power/electric cables, etc.
- Accessory parts such as storage covers.

#### 5. VOIDING OF THE WARRANTY:

This warranty under the following circumstances:

- a. Use of a product in an application for which it was not designed or intended;
- Failure to service or maintain the product in accordance with the manufacturer's recommendations;
- c. Faulty or deficient installation of the product
- d. Any modification or alteration of the product;
- Conditions that exceed the product's designed capacity, performance, specifications or safe working loads.
- f. This warranty will not apply if the product is deemed to have been misused, abused, neglected, involved in an accident, abused, used/loaded beyond the product's limits, modified, installed improperly or connected incorrectly to any electrical component.
- g. Use of parts that are not original Five Oceans

#### 6. LIMITS OF IMPLIED WARRANTY AND CONSEQUENTIAL DAMAGE:

- a. Baron USA, LLC or any of the product resellers disclaims any obligation to cover any loss of time, use of this product, freight, or any incidental or consequential claim by anyone from using this product.
- THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.
- c. Baron USA, LLC or any of the product resellers will not be liable for death, injuries to persons or property or for incidental, contingent, special or consequential damages, loss or expense arising in connection with the use or inability whatever, regardless of whether damage, loss or expense results from any act or failure to act by Baron USA, LLC or any of the product resellers, whether negligent or willful, or from any other reason.

#### CONTACT INFORMATION

**Five Oceans** 

**Customer Service** 

11200 NW 107th St Suite 6-B, Miami, FL 33178 USA info@five-oceans.com | www.five-oceans.com

#### **Technical Service**

info@five-oceans.com

Inquiries outside the United States, please view our  $\frac{\text{dealer page}}{\text{dealer page}}$  for the region which pertains to you.

## 10 - Product Guide

Pacific 600 Vertical Windlass (Product Number: 3931) For more info click here. Pacific 900 Vertical Windlass (Product Number: 3287) For more info click here. Pacific 1000 Vertical Windlass (Product Number: 3288) For more info click here. Pacific 1500 Vertical Windlass (Product Number: 3444) For more info click here.

#### Package Include (one (1) circuit breaker per windlass)

- Rocker Switch Panel w/Main Switch (Product Number: 3290) For more info click here.
- Circuit Breaker 60 Amp (Product Number: 3295) For more info click here.
- Circuit Breaker 80 Amp (Product Number: 3294) For more info click here.
- **Dual Direction Solenoid** (Product Number: 3292) For more info click here.
- Foot Switch (Product Number: 3291) For more info click here.

#### Not Included in Package (examples)

- Stainless Steel Chain Stopper (Product Number: 75) For more info click here.
- Stainless Steel Chain Stopper (Product Number: 2990) For more info click here.
- Anchor Roller | 11" (Product Number: 72) For more info click here.
- Stainless Steel Self-Lauch Anchor Roller (Product Number: 3696) For more info click here.
- Stainless Steel Hinged Anchor Roller (Product Number: 4184) For more info click here.



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VOLUME ONE

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