

Owners Installation, Operation Manual

Please read this user manual carefully before using the product



MODEL: PRO 800H(c) Power out with sus gypsy
PRO 800F(c) Free fall with sus gypsy
PRO 900E(c) Free fall with sus gypsy
PRO 900M(c) Free fall with sus gypsy



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I FEATURES

Efficient spur gears, low current draw, high output power
Heavy duty DC motor with long life and high output torque
Heat radiating system can prevent motor overheating
Build-in torque limiter for extra protection
Stainless steel Gypsy takes both rope and chain
Selectable free fall or power out mode (free fall model only)
Compact one-piece housing to ensure water resistance
Aluminum alloy housing with powder coated finish
Strong structure ensures long performance life
Simple deck mounting with no parts under deck

II PACKAGE CONTENTS

- WINDLASS x 1
- CONTROL DEVICE x 1
- USER MANUAL x 1
- MOUNTING TEMPLATE x 1
- ACCESSORIES : Thread rod M8 X 100mm x 4
 - Nut M8 x 4
 - Washer M8 x 4
 - Spring Washer M8 x 4

III SPECIFICATIONS

800 SERIES	800H / 800F
Suit Boats Size	6~9 m (20~30 ft)
Comparable Model	700W Model
Operating Voltage	12V DC
Max. Working Load	300 kg (700 lb)
Typical Working Load	45 kg (100 lb)
Retrieval Speed	19 m/min (63 ft/min)
Pay-Out Speed 800H 800F	Power-out 22 m/min (73 ft/min) free fall or power out
Continuous Working Time	20 min.
Typical Current Draw	18 amp
Motor Type / Efficiency	Permanent Magnet / 74 %
Motor Wattage I/O	700W / 300W
Gear Type / Efficiency	Spur Gear / 92%~98%
Chain Size	6, 7, 8 mm, 1/4", 5/16"
Rope Size	12 ~ 14mm (1/2"~ 9/16") Three strand, medium lay
Dimension(LxWxH)	304 mm x 197mm x 153mm 12" x 7.75" x 6"
Weight 800H / 800F	7.8 kg (17lb) / 8.2 kg (18lb)

900 SERIES	900 EXPRESS	900 MIGHTY
Suit Boats Size	8.4~10.5m(28~35ft)	8.4~13.5m(28~45ft)
Comparable Model	700W model	1100W model
Operating Voltage	12V DC or 24V DC	
Max Working Load	320 kg (700lb)	500 kg (1100lb)
Typical Working Load	50 kg (110 lb)	72 kg (160lb)
Retrieval Speed	30 m(100ft)/min	18 m(60ft)/min
Pay-Out Speed	free fall or power out	
Continuous Working Time	Max. 20 min.	
Typical Current Draw	25 amp(12V) or 13 amp(24V)	
Motor Type / Efficiency	permanent magnet / 82 %	
Motor Wattage I/O	1100W / 450W	
Gear Type / Efficiency	spur gear / 92%~98%	
Chain Size	6, 7, 8 mm, 1/4", 5/16"	
Rope Size	12 mm ~ 14 mm (1/2" ~ 9/16") three strand, medium lay	
Dimension(LxWxH)	304 mm x 197 mm x 153mm 12" x 7.75" x 6"	
Weight	9.2 kg (20.4lb)	

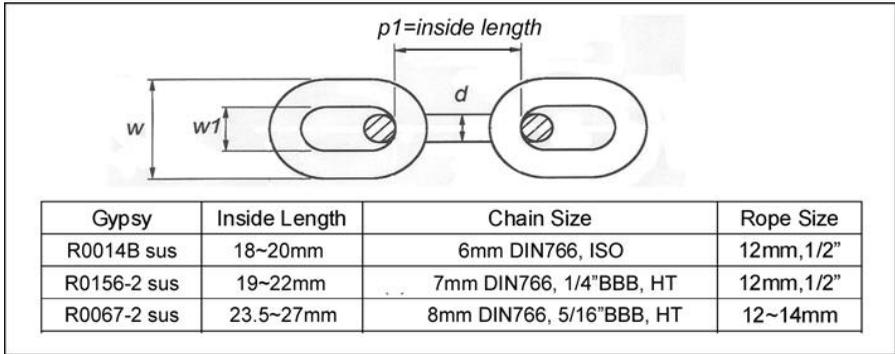
South Pacific Industrial Pty Ltd reserves the right to alter or change specifications without notice.

It is very important to choose the correct type of rope and chain, to ensure proper running of the windlasses.

Rope- Must use three strand, medium-lay. We recommend Filament Polyester, Premium Nylon or Silver rope(Australia). **Do not use soft rope.** Soft rope (either polyester or nylon) will slip and cause a rope jam in the gypsy. It will also lock the gypsy and cause circuit breaker to pop-up often. Please refer to the chart below.

Chain- Must ensure that the inside length “p1” is suitable for the gypsy. Otherwise, the chain will get stuck(too small) or slip(too big) in the

gypsy and eventually damage the release arm. Please refer to the chart below.



Note: The rope size indicated is its actual diameter measured

IV INSTALLATION (Reference to Video CD)

1. TOOLS REQUIRED

a. Electric drill



b. Adjustable spanner



c. Jig saw



d. File

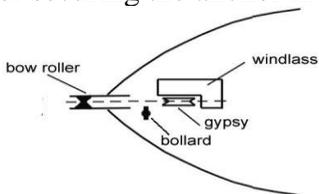
f. Philips head screwdriver

g. Silicon glue

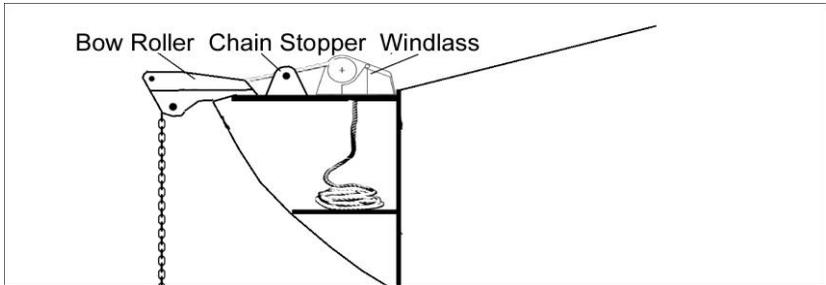


2. PLANE

- a. First of all, a suitable Bow Roller must be installed to support the anchor, chain and rope.
- b. A bollard or snubbing device should be installed between the bow roller and the windlass to tie the rope on while laying anchor or securing the anchor in the fully raised position.

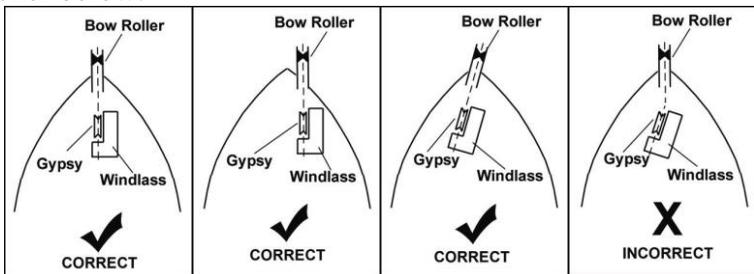


- c. If you are using only chain, a chain stopper should be installed between the bow roller and the windlass to take the drag force away from the windlass while being anchored.
- d. Make sure the anchor well or the chain locker is deep enough to store chain and rope. The minimum depth is 40cm(1 $\frac{1}{3}$ ft) to store about 30 metre(100ft) of rope. If the anchor well is not deep enough the rope will build up very quickly and block the entry.



3. CONSTRUCTION

- a. Place the windlass on the deck and find a suitable position for it, with reference to the vessel's bow roller, rope and chain locker below.



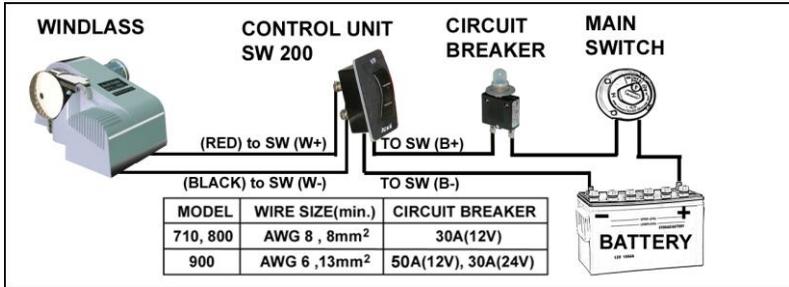
- b. Place the mounting template on the deck in the desired position for the windlass and hold it in place using adhesive tape.
- c. Use a 10mm (3/8") diameter drill to make four holes for the mounting thread rods and make a fifth hole to pass power supply cables through.

- d. With a jigsaw, cut the hole for the rope and chain to pass through. Use a file to smooth any rough edges. To avoid water absorption by the deck, apply paint to the cut hole edges.
- e. Secure thread rod to the base of the windlass, then apply a silicon sealant around thread rod. Secure the windlass firmly to the deck from below using the nuts and washers supplied.
- f. Mount control device at a suitable position either in the cabin or close to the operating area.
- g. Connect the windlass, control unit and power source using electric cable indicated below. Keep the power supply cable as short as possible. Too thin and/or too much length of electric cable will reduce the performance of the windlass or cause the circuit breaker to work incorrectly

Model	Heavy Cable Size	Switches cable size	Circuit Breaker
710, 800, V600 series (12V)	AWG 8 or 8mm ²	AWG 18-20	CB-001-30 (30A)
900, V1000 series (12V)	AWG 6 or 13mm ²	AWG 18-20	CB-001-50 (50A)
900, V1000 series (24V)	AWG 8 or 8mm ²	AWG 18-20	CB-001-30 (30A)
V1500 series (12V)	AWG 4 or 21mm ²	AWG 18-20	CB-003-90 (90A)
V1500 series (24V)	AWG 6 or 13mm ²	AWG 18-20	CB-003-50 (50A)

There is one control system that is included in the package, please refer to the connection diagram below.

◆ Direct control system:



Note: For safety reason, do not connect the power source direct to the battery. Please connect the power cable to the main power switch on your boat.

SW-200 with dynamic brake, can not be parallel.

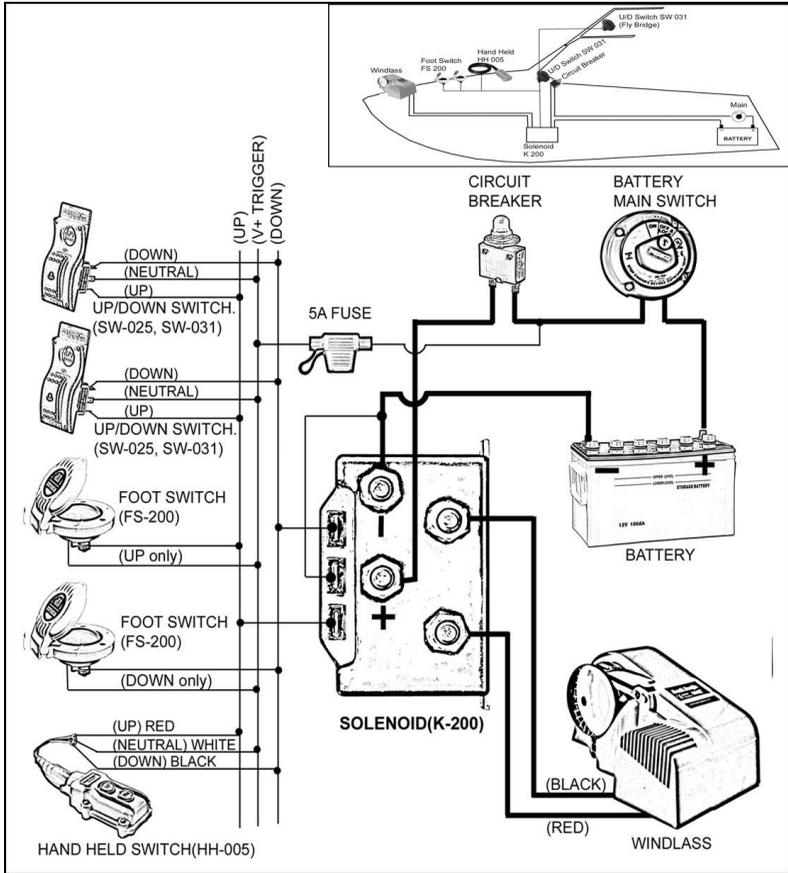
◆ Indirect control system:

Using foot switches or hand held switch for multiple control, a solenoid K-200 is necessary.

If you have an existing control unit (SW-030 or SW-200), you **must remove it** before installing this indirect control system. Also, **do not** attach control unit (SW-030 or SW-200) to K-200 as an up/down switch (SW-025).

The direct control system and indirect control system can not exist concurrently.

If the winding direction is not as desired, please change over the wires from the windlass to the solenoid K-200.



4. TO INSTALL ANCHOR ROPE AND CHAIN

To splice rope to the chain, please follow the steps below. Do not use a hook or shackle.



STEP 1:

Unraveling the end of the rope for about 20 cm and secure the end of strands by tape.



STEP 2:

Pass three strands through the last link of the anchor chain. Untwist the rope to raise a strand just below the tie on the standing part of the rope and insert one strand under it, then pull the strand through. Twist the strand to keep it tightly wound as you pull it through.



STEP 3:

Take the next strand on the left. Tuck it under the next strand to the right of the one under which the first strand was tucked. Pull it through as before.



STEP 4:

Now turn the whole eye over. Take the last strand and make the tuck as before under the only strand on the standing part of the rope not used yet. Now stop and ensure that each working strand has gone over a strand and under a strand, and that the whole lot is pulled tight and twisted in its natural sense. No two strands should come from under the same strand.



STEP 5:

For the remaining rounds of tucks, take each end over one strand and under the next one to the right, in the same order as before.



STEP 6:

To finish, pull the ends tight. Cut the excess off with a hot knife. A good way to do this is by heating a butter knife with a butane torch, or a gas

stove if handy. This cuts and seals the individual strands resulting in an excellent frayless finish.



STEP 7:

After you've spliced the rope to the chain, tie both ends of spliced rope to prevent the rope from loosening.

V OPERATING

1. During operating, if the circuit breaker bounces it means the motor is overloaded. Press the button to reset.
2. **For free fall model only:** when releasing anchor, press switch "DOWN" *once*(clutch will stay at open) to free fall the anchor to the sea bed, until the current has drifted the boat to a desired location and the anchor has cast firmly in the sea bed, press the switch "UP" once to engage the clutch.

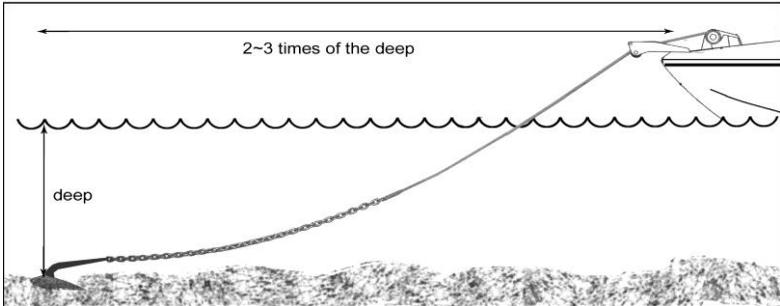


You can set the rotating "free fall" switch(in the right hand side of windlass) by a flat screw driver to be a "on" free fall mode or "off" Power Out mode.

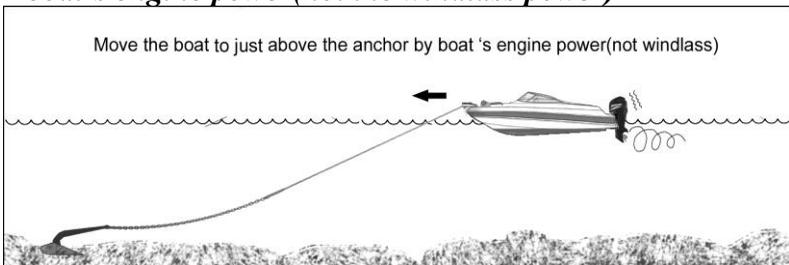
Note: It is normal for the free fall switch can be rotated 360 degree

★Do not use free fall function when using all chain★

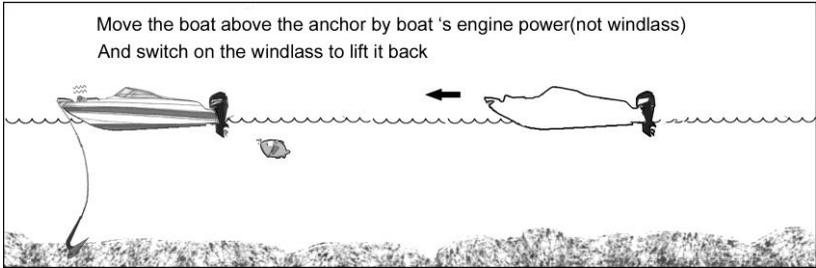
3. Pay out the rope and chain approximate 2~3 times the water's depth for a firm casting while being anchored.



4. Keep limbs, fingers clothing and hair clear of the windlass and anchor to avoid possible personal injury during operation.
5. ***Tie the anchor rope firmly to the bollard when the anchor is cast and the boat is moored.*** Do not allow the windlass to take the force of a boat's drag. If using all chain, a chain stopper is necessary to be installed between bow roller and windlass to take the force of boat's drag.
6. When retracting the anchor, untie the rope from bollard. Then move the boat to the position just above the anchor ***by boat's engine power(not the windlass power)***



and switch on the windlass to drag it back. When the anchor is close to the bow roller, ***slow down the roll in by pausing the switch.***



Note: The windlass is designed to lift the anchor rather than to drag the boat or for mooring.

7. If the anchor is stuck on the seabed or reef, detach it by the boat's engine power before operating the windlass or else it may cause damage or the load may overstrain the windlass.

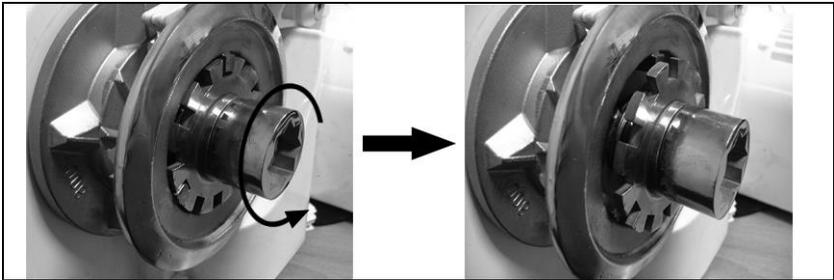
After use, secure the anchor firmly in place in the boat by extra device(such as hook, shackle...) to avoid damage caused by anchor falling during transport.



8. The anchor windlass is not designed for continuous operation. Do not use for more than 20 minutes at a time under loading. Allow an interval of 20 – 30 minutes after each operation.

9. For windlasses with capstan model only:

You may operate gypsy and capstan separately by loosening the nut on the gypsy, until the clutch and the gypsy disengaged and the windlass drive shaft will drive only the capstan.



CAUTION: Before release the gypsy clutch you need to secure the anchor chain/rope. Once the gypsy clutch released the gypsy may free spin and cause the anchor fall.

★ OPERATING SAFETY IS THE FIRST PRIORITY ★

VI MAINTENANCE

- 1 The windlasses come with a grease lubricated gear box. There is no need for extra lubrication.
- 2 In order to make the windlass perform at optimize capacity and extend its life, use fresh water to wash off salt water after each use.
- 3 Periodically check the electric joiner and the silicon sealant.

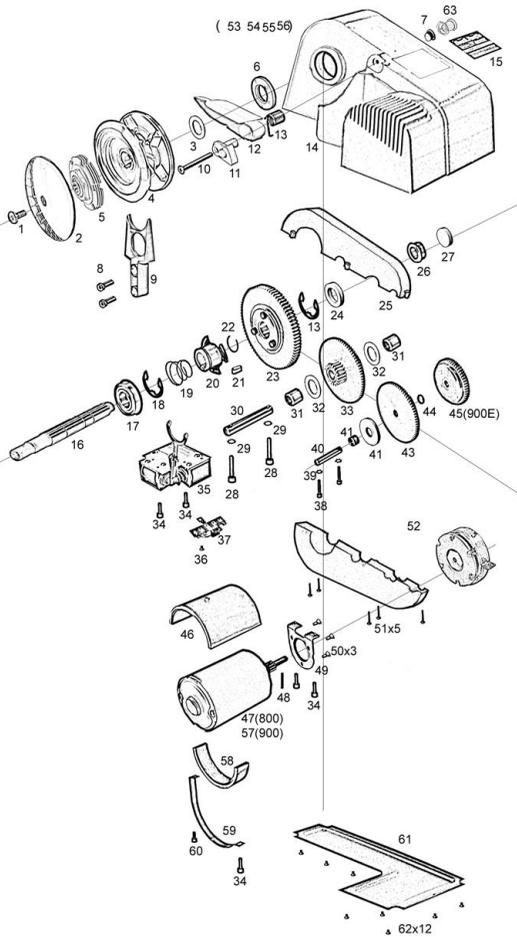
VII WARRANTY

1. The warranty is deemed as effective only under conditions of normal operation, maintenance and without modification of the product.
2. **CLAIMS**
If the product needs servicing, please send it back (or bring it to us) with the proof of purchase and we will investigate the product free of charge before repairing. However, the cost of postage or removal from the boat will be borne by the owner.
3. **LIMITATIONS AND EXCLUSIONS**
The warranty will be deemed effective only if the windlass is used on a non-commercial basis and will be invalid and excludes the following conditions.
 - a. Operation exceeds the design specifications
 - b. Use for purposes other than indicated
 - c. Disassembly or modification of the product
 - d. Installation of other parts on the product.
 - e. Third party products even if associated or used together with this product.

VII IMPORTANT INFORMATION

1. In every circumstance, the operator must make safety as the first priority. An inexperienced person or a child should not operate this product. The manufacturer takes no responsibility for any damage, property loss or injury caused from improper operation.
2. If a product is accepted for refunding, the manufacturer is not responsible for any renovation of the boat.

IX PARTS LIST



Model: PRO 800,900

No.	Parts Name	
1.	R0024	Screw M6x15 ss
2.	R0346	Gypsv cover
3.	R0121	Sus washer 18x1.5
4.	Gypsv	Refer to page 4
5.	A0002	Torque limiter(12)(24)
6.	R0072	Oil sealant
7.	R0161	Water sealant
8.	R0023	Screw M5x15 ss
9.	R0073S	Release Arm sus
10.	R0025	Screw m6X45 ss
11.	R0015	Tension arm holder
12.	R0013S	Tension arm sus
13.	R0029	Tension spring
14.	R0066	Housing
15.	R0109	Sticker
16.	R0074-	Main drive shaft
17.	R0075	Ball bearing
18.	R0070	E Clip Φ19
19.	R0104	Clutch spring
20.	R0076	Chutch
21.	R0095-I	6x15Key
22.	R0077	Gear spring
23.	R0078	Gear #4
24.	R0117	washer
25.	R0085	Gear cover
26.	R0003	Bush bearing
27.	R0017-	Water sealant
28.	R0113	Screw M6x30
29.	R0150	Washer
30.	R0083	Shaft #3
31.	R0099	Bush
32.	R0098	Washer
33.	R0079	Gear #3
34.	R0020	M5x15
35.	A0019	Clutch Solenoid Set
36.	R0065	Screw M3x4
37.	A0017	Connector
38.	R0111	Screw M4x20
39.	R0115	Washer
40.	R0084	Shaft #2
41.	R0100-	Bush
42.	R0149	Washer
43.	R0080	Gear #2
44.	R0100-	Bush
45.	R0081	Gear #2-1
46.		
47.	R0102-	H700 Motor
48.		
49.	R0006	Motor front Bracket
50.	R0019	Screw M5x10
51.	R0153	Screw M3x15
52.	A0010H	Electric Brake
53.		
54.		
55.		
56.		
57.	R0130	900Motor
58.	R0125	H700 motor socket
59.	R0090-	Motor tie
60.	R0164	Screw M5x8
61.	R0097	Bottom cover
62.	R0021	Screw M3x6 ss
63.	A0024	Free fall switch
64.	A0024	

Thank you for choosing South Pacific products

Purchase Date:	Model:
Supplier Name:	
Address:	
Phone:	Fax: