

Owners Installation & Operation Manual

Please read this user manual carefully before using the product



W SERIES:

WN700 with nylon base

WA700(C), WA1100(C) with aluminum base

WS700(C), WS1100(C), WS1500(C) with stainless steel base



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I FEATURES

- Self tailing rope/chain combination stainless steel gypsy
- Improved strong structure with self-locking gear box provide tremendous lifting and high stress capacity
- Heavy duty DC motor with long life and high output torque
- Motor can be installed in eight different horizontal positions to suit anchor well
- A torque limiter built-in(ex. WS1500) can absorb sudden impact to deliver smoother operation and greater reliability
- Heavy duty control system included
- Manual retrieval capable

II PACKAGE CONTENTS

- | | |
|--------------------------|-----|
| ● WINDLASS | × 1 |
| ● CONTROL DEVICE | × 1 |
| ● HANDLE BAR(ex. WS1500) | × 1 |
| ● USER MANUAL | × 1 |
| ● MOUNTING TEMPLATE | × 1 |
| ● HARDWARES (PACK) | × 1 |

III SPECIFICATIONS

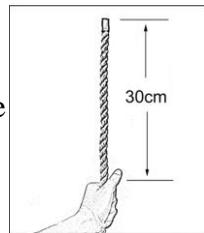
	W700 series	W1100 series	W1500 series
Suit Boats Size	5.4~9M/18~30ft	8.4~12.7M/28~42ft	12~18M/40~60ft
Handle Anchor Size	13.6kg/30lb	18kg/40lb	27kg/60lb
Comparable Model	700W Model	1100W Model	1500W Model
Input Voltage	DC 12V	DC 12V	DC 12/24V
Max. Working Load	318kg/700lb	500kg/1100lb	680kg/1500lb
Typical Working Load	55kg/120lb	85kg/188lb	120kg/265lb
Max. Retrieval Speed	24m(80ft)/min.	23m(76ft)/min.	20m(67ft)/min
Pay-out Speed	27m(90ft)/min.	26m(86ft)/min.	22m(73ft)/min
Continuous Working	Max. 15 minute	Max. 15 minute	Max. 15 minute
Typical Current Draw	45A(12V)	65A(12V)	90A(12V)/45A(24V)
Motor Type	Permanent magnet	Permanent magnet	Permanent magnet
Motor Wattage	700W	1100W	1500W
Motor Efficiency	75%	82%	82%
Suit chain Size	6, 7, 8mm, 1/4", 5/16"		8,10mm,5/16",3/8"
Rope Size	12, 14mm, 1/2", 9/16"		14,16mm/9/16",5/8"
Weight	7.7~10kg/17~22lb	9~12kg/20~26lb	16~18kg/35~40lb

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

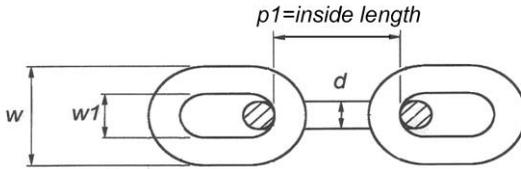
It is very important to choose the correct type of rope and chain, to ensure proper running of the windlasses.

Rope- Must use three strand, low stretch medium-lay (hold 30cm from the end it can stand up)

We recommend Filament PE, Polyester or Nylon rope **Do not use soft rope**. Soft rope will slip and cause a rope jam in the gypsy. It will also lock the gypsy and cause circuit breaker to pop-up often.



Chain- Must ensure that the inside length “p1” is suitable for the gypsy. Otherwise, the chain will jam(too small) or slip(too big) in the gypsy and eventually damage the release arm. Please refer to the chart below.



Gypsy	Inside Length	Chain Size	Rope Size
R0050 nylon	18~20mm	6mm DIN766, ISO	12mm, 1/2"
A0001-2 nylon	18.5~22mm	7mm DIN766, 1/4"BBB, G4HT	12mm, 1/2"
R0014B sus	18~20mm	6mm DIN766, ISO	12mm, 1/2"
R0156-2 sus	19~22mm	7mm DIN766, 1/4"BBB, G4HT	12mm, 1/2"
R0067-2 sus	23.5~26.5mm	8mm DIN766, 5/16"BBB	12~14mm
R0380 sus	23.5~26.5mm	8mm DIN766, 5/16"BBB	12~14mm
R0360 sus	28~32mm	10mm DIN766, 3/8"BBB	14~16mm

Note: The rope size indicated is its actual diameter measured

IV INSTALLATION

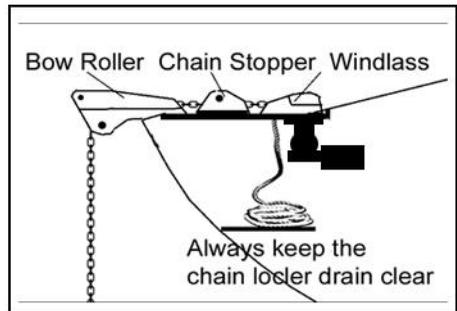
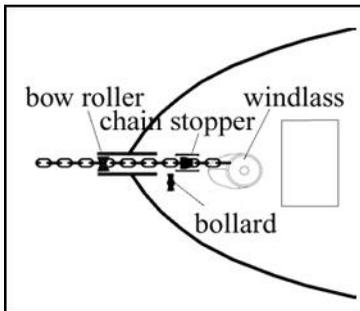
1. TOOLS REQUIRED

- a. Electric drill b. Spanner c. Hole saw d. Jig saw



2. PLAN

- First of all, a suitable Bow Roller must be installed to support the anchor, chain and rope.
- A bollard or snubbing device should be installed between the bow roller and windlass to tie the rope on while being anchored 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. Ensure there is a drain in the chain locker and always keep it clear to prevent the water level rising and make sure the chain locker is deep enough to store the rope and chain. If the anchor well is not deep enough the rope and chain will build very quickly and block the entrance.

3. CONSTRUCTION

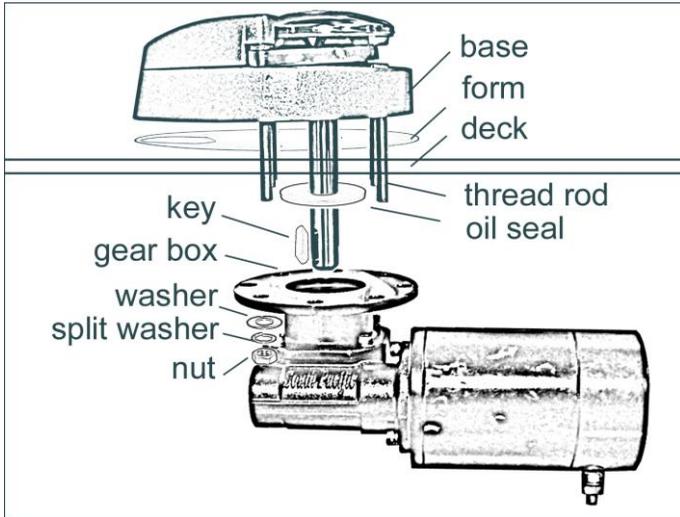
a. Find a suitable position for the windlass, with reference to the vessel's bow roller, rope and chain locker below.

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 hole saw and drill to make a hole for the drive shaft and four holes for the mounting thread rods and with a jig saw, cut the hole for 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

d. Secure thread rod to the base of the windlass, then secure the windlass firmly to the deck from below using the nuts and washers supplied.

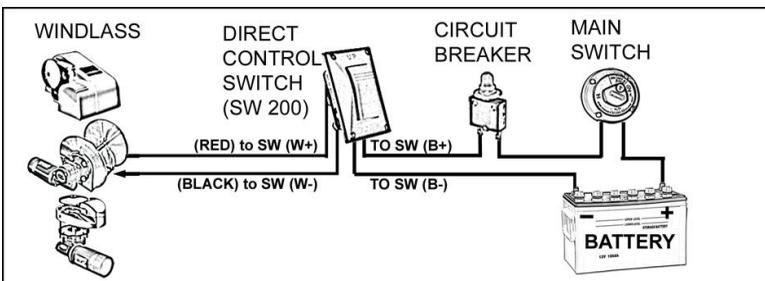
e.



f. Mount control device at a suitable position either in the cabin or close to the operating area.

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

◆ Direct control system(single station):

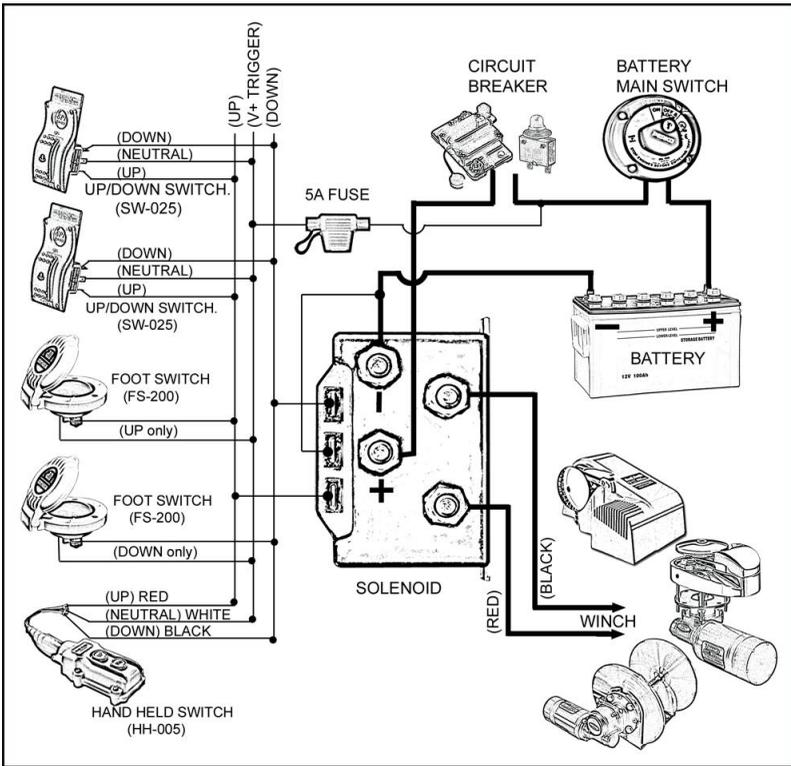


SW-200 with dynamic brake, can not be parallel.

◆ Indirect control system:

Using multiple up/down switches, foot switches or hand held switch for multiple control, a solenoid is necessary.

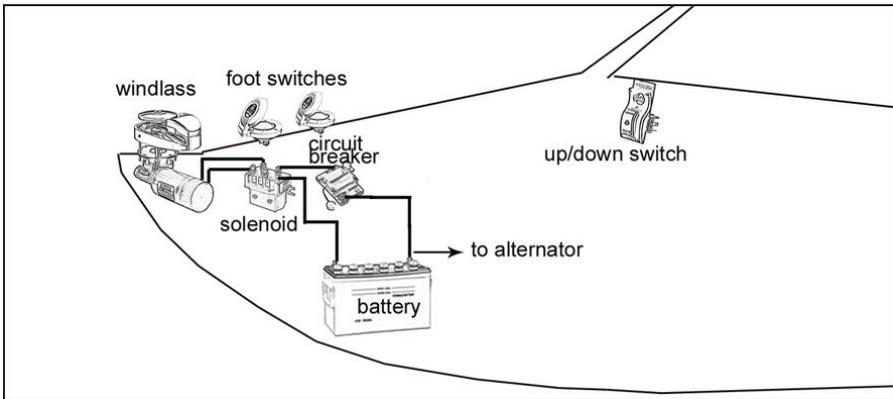
If you have an existing control unit, you **must remove it** before installing this indirect control system. **Do not** attach SW-200 to solenoid as an up/down switch (SW-025).



- h. 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	Main Heavy Cable	Switches Cable	Circuit Breaker
W700(12V)	AWG6 or 13mm ² or 105A rating	AWG18 or 8A rating	50A
W1100(12V)	AWG4 or 21mm ² or 145A rating		90A
W1500(12V)	AWG2 or 33mm ² or 200A rating		140A
W1500(24V)	AWG4 or 21mm ² or 145A rating		90A

Due to the heavy current draw from the W1100 and W1500 series, we recommend the use of an independent battery (also require charge from an alternator) with a minimum capacity of 55AH seated close to the windlass to minimize power loss and reduce cost of electrical cable. Please refer to the diagram below.



Note: For safety reasons, cut off the winch power from the main or circuit breaker while not in use.

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

If the winding direction is not as desired, you can switch over the wires on the winch.

4. TO INSTALL ANCHOR ROPE AND CHAIN

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



STEP 1:

Unravel the end of the rope for about 20cm and secure the end of the strands with 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. 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 remained 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.



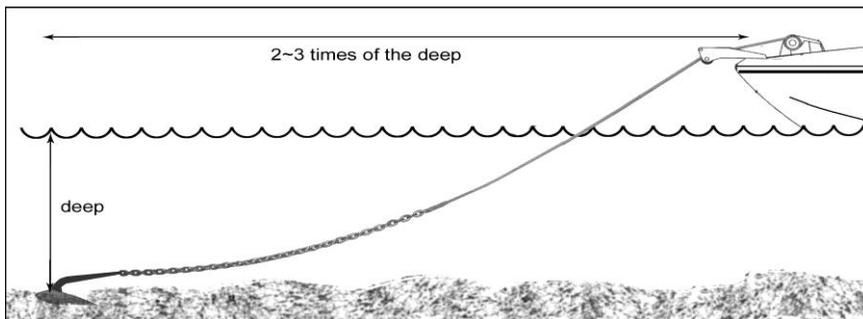
STEP 7:

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

You Tube: <https://www.youtube.com/watch?v=c1Qnv1TRfwM>

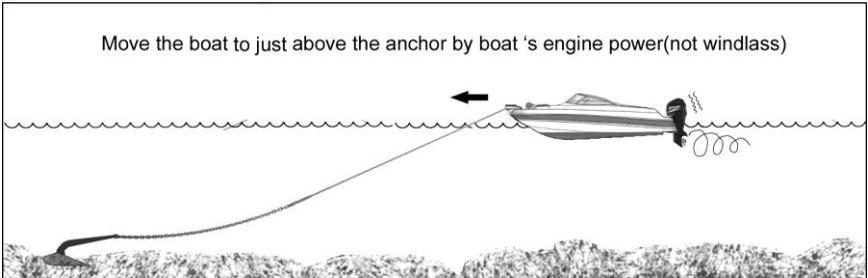
V OPERATING

1. During operating, if the circuit breaker bounces it means the motor is overloaded. After about 10 seconds press the button to reset.
- 2 Pay out the rope and chain approximate 2~3 times the water's depth for a firm casting while being anchored.

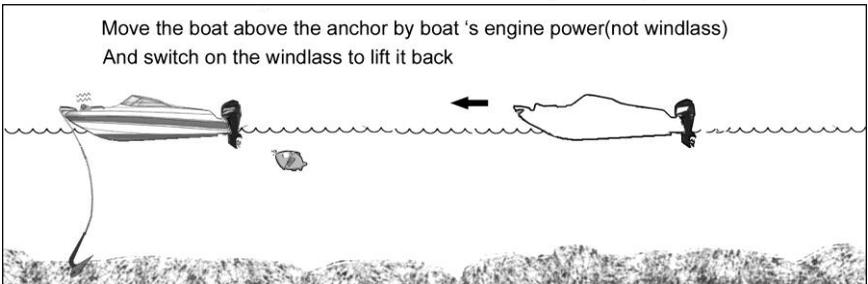


3. Keep limbs, fingers, clothing and hair clear of the windlass and anchor to avoid possible personal injury during operation.
4. ***Tie the anchor rope firmly to the bollard when the anchor is cast and the boat is moored.*** Do not allow the windlass to take the force of a boat's drag. If using all chain, a chain stopper is necessary between the bow roller and windlass to take the force off the boat's drag.

5. When retracting, untie the rope from the bollard. Then move the boat to the position just above the anchor by boat's engine power(not by winch's power) and switch on the winch to lift it.



and switch on the windlass to lift 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.

6. If the anchor is stuck on the sea bed or reef, tie the rope on the bollard and detach it by the boat's engine power before operating the windlass or else it may cause damage or overstrain the windlass.
7. ***After use, secure the anchor firmly in place*** in the boat by an extra device (such as hook, shackle...) to avoid damage caused by the anchor falling during transport.



8. The anchor windlass is not designed for continuous operation. Do not use for more than **15 minutes** at a time under loading. Allow an interval of 30 minutes after each operation.

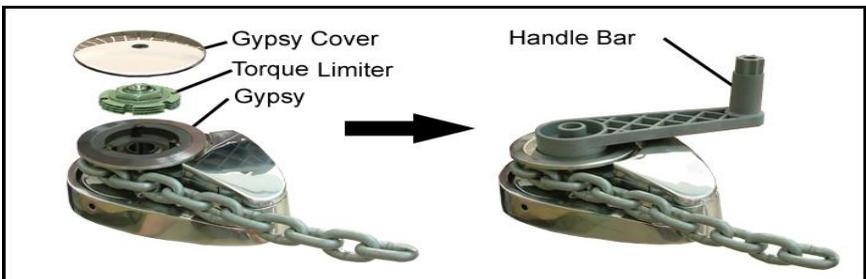
9. For windlasses with capstan model only:

You may operate the capstan only, by loosening the nut on the top of the capstan approx. one turn and the windlass drive shaft will drive only the capstan but not the gypsy.

10. Emergency manual retrieval:

For W700 and W1100 without capstan:

If there is a power failure or unit failure, you can remove the gypsy cover and the torque limiter and attach the crank to the gypsy for manual operation.



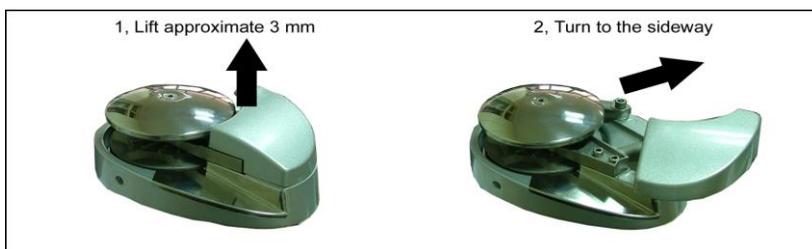
For W1500 without capstan:

By loosening the nut on the top of the gypsy approx. one turn and attach the crank to the gypsy for manual operation.

For windlasses with a capstan:

You need to remove the capstan from the drive shaft and attach the crank to the gypsy for a manual operation.

11. The chain tunnel cover can be opened by lifting it up for approximately 3mm and turning it sideways..



★OPERATING SAFETY IS THE FIRST PRIORITY★

VI MAINTENANCE

1. The W Series comes with a sealed oil lubricated gear box. There is no need for extra lubrication. please check oil level after every 500 uses and using synthetic 10W-40 engine oil if needed .
2. In order to allow the windlass to perform at optimum capacity and extend its life, use fresh water to wash off salt water after each use.
3. ***Always keep the chain locker drain clear to prevent water damage on the motor.***

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 to your local distributor with the proof of purchase. However, the cost of postage or removal from the boat will be borne by the owner.

3. LIMITATIONS AND EXCLUSIONS

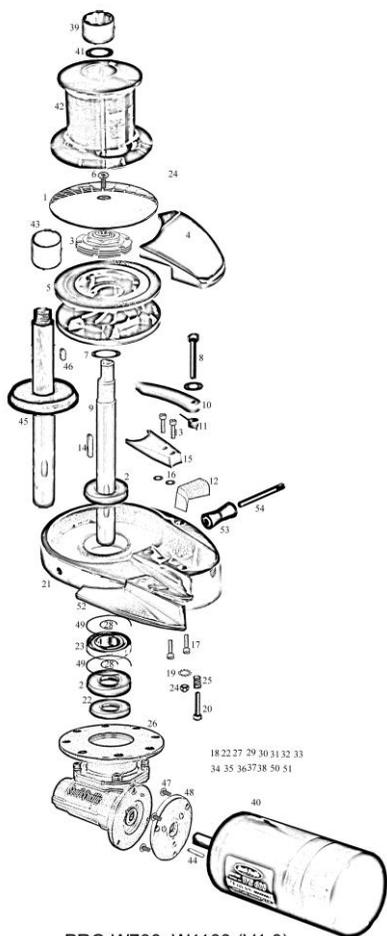
The warranty will be deemed effectively only if used on a non-commercial basis and will be invalid under the following conditions:

- a. Operation exceeds the designed 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.

VIII 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:



PRO W700, W1100 (V1.0)

Gypsy	Suit Chain	Suit Rope
R0014-B	6mm	12mm, 1/2"
R0156-2	7mm, 1/4"	12mm, 1/2"
R0067-2	8mm, 5/16"	12-14mm

A0027-W1-36GL	W1100 gear box
A0027-W1-64GL	W700 gear box
A0027-W1-64GLX	W1500, DW1100, DW1500
A0027-W1-80GLX	DW700 gear box

0	Parts No.	Item: PRO W series(V1.0)
1	R0346	Gypsy Cover
2	R0433	Oil seal 20x42x4
3	A0002(14)(24)	Torque Limiter(6)(1)
4	R0170(N)(A)(S)-2	Chain Tunnel Cover
5		Gypsy refer to the chart below
6	R0024-15	Screw M6x15 sus
7	R0121	Sus Washer M18x1.5
8	R0197-40	Sus M6x40
9	R0347(R0171-2)	Pro V Drive Shaft
10	R0169S	Tension Arm sus
11	R0184	Tension Arm Spring
12	R0268	Bush sus(A)
13	R0023-(15)	M5x15 Screw sus
14	R0095-1	key
15	R0168S	Release Arm sus
16	R0222	M5 Bronze Washer
17	R0023-(12)	M5x12 sus(A)
18		
19	R0194	Washer
20	R0197(40)	Screw M6x40 sus
21	R0166(N)(A)(S)	Base VN,VA,VS
22	R0434	Oil seal 20x55x6
23	R0451	Ball Bearing 20x42x8
24	R0216	M6 Nut
25	R0200	Spring
26	A0027	Gear Box
27		
28	R0431	Spring 1.0x18
29		
30		
31		
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33		
34		
35		
36		
37		
38		
39	R0206-S	Capstan Nut(C)
40	R0440/R0441	Motor W700/W1100
41	R0221	M16 bronze washer(C)
42	R0187	Capstan
43	R0339	VC shaft socket(C)
44		Key 4x4x15
45	R0171(C)	Main Drive Shaft(C)
46	R0095-s	6x15 key sus(C)
47	R0019	Screw M5x10
48	R0444	Motor adapter(7)
49	R0432	Spring 1.0x55
50		
51		
52	R0217	Chain way panel (A)
53	R0218	Roller(N)
54	R0219	Roller shift(N)
55		
	Note: (N): WN series only (A): WA series only (S): WS series only (C): with capstan model (1): W1100 series only (7): W700 series only	

Thank you for choosing South Pacific products

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