



VC-850/2500/3500 VERTICAL CAPSTAN



Contents

Introduction **page 3**

Important Information
Safety

Installation Instructions **page 4**

Standard Base Version
Fixed Base Adaptor Version page 5

Electrical information **page 6**

Circuit breaker
Deck switch
Isolating switch
Batteries
Rotation

Wiring layout page 7

Operation **page 8**

Anchoring
Maintenance Servicing
Line Care

Trouble Shooting **page 9**

Roper Chain Splicing

Warranty and Warranty Registration Card **page 10**

Deck templates

VC850 Deck Template
VC2500 / 3500 Deck template

Wiring Diagrams

VC850 – 3500 12/24V DC Three wire - Single direction
VC850 – 3500 12/24V DC Three wire – Reversing
VC850 – 3500 12/24V DC Three wire – Reversing Solenoid

Exploded Views

VC 850 Exploded View
VC 1600 Exploded View
VC 2500 Exploded View
VC 3500 Exploded View
VC 2500/3500 Direct Drive Hydraulic Exploded View

INTRODUCTION

Thank you for purchasing a Muir Windlass. Muir go to great lengths to develop anchoring systems that not only meet all your performance and safety requirements, but at the same time are designed with a style and finish that enhances the aesthetics of your vessel. With Muir's commitment to quality and the use of superior materials and processes we know you will be pleased with your investment, and rest assured that through the correct installation, operation and maintenance your new Muir Windlass will give you years of reliable performance.

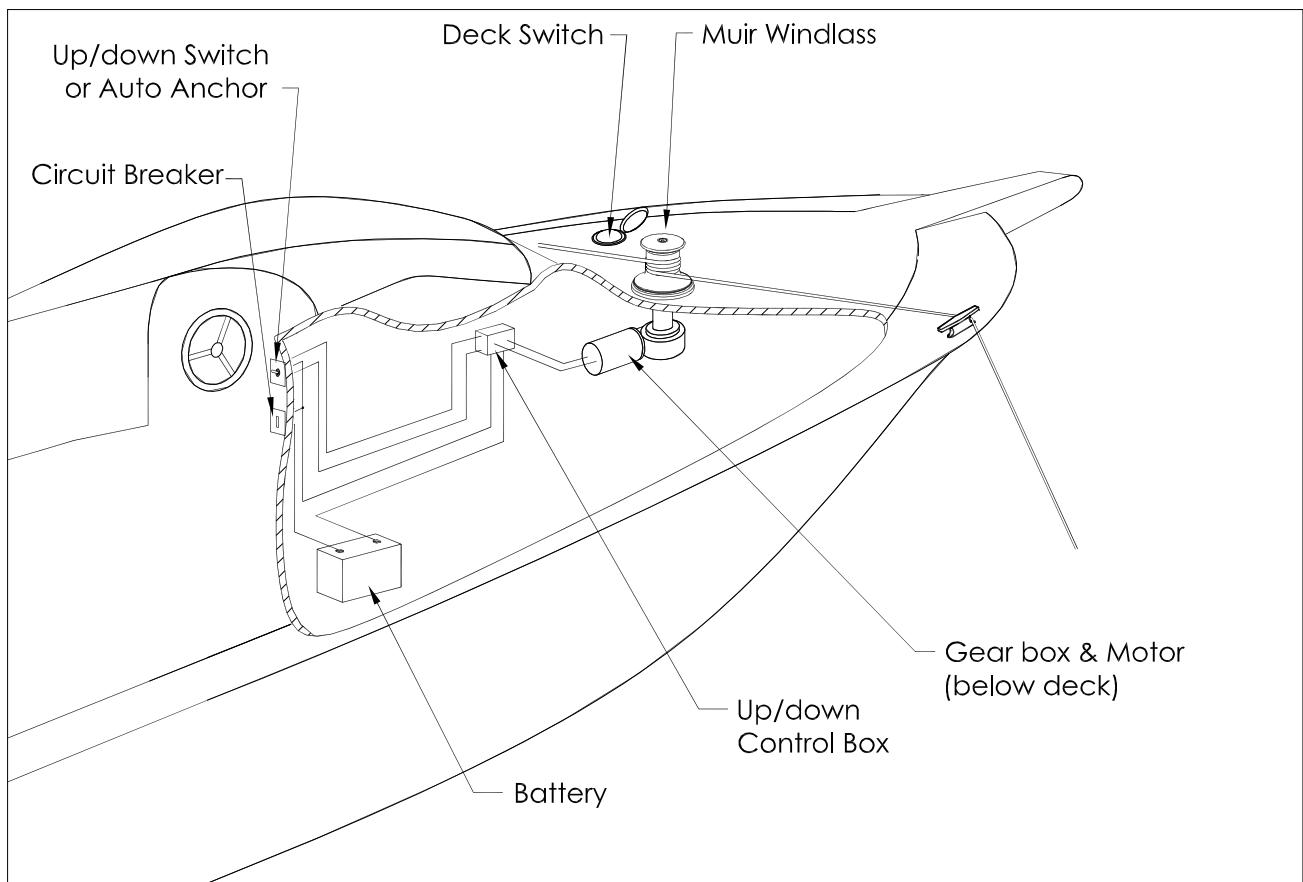
IMPORTANT INFORMATION

To avoid damage to the gear drive, windlass or vessel when bringing the anchor up hard, it is a preferred practice to mark the chain at approximately 5-meter intervals from the anchor, to alert the operator to the anchor position.

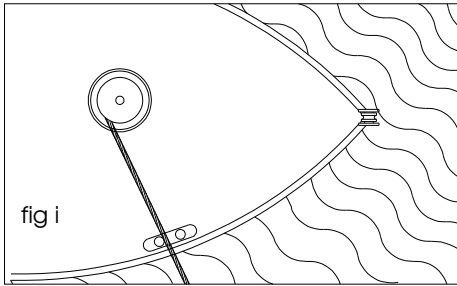
Under no circumstances should the windlass be operated if it is stalled or overloaded.

SAFE OPERATION

- Ensure that hands, feet, hair and clothing are kept clear of the windlass and other loose gear when in operation.
- The windlass should never be used for lifting people aloft.
- Do not use a windlass as a bollard for mooring, towing or being towed.



INSTALLATION INSTRUCTIONS



Figure(i)

Locate the capstan in a suitable position on the deck so there is no interference from other ropes or objects. Ensure that the rope has a clear lead to the capstan. Make sure that the capstan is in a position so that the rope source is as close to perpendicular as possible. Ensure that there is sufficient room to run the electrical cables or hydraulic lines to the capstan underneath the deck.

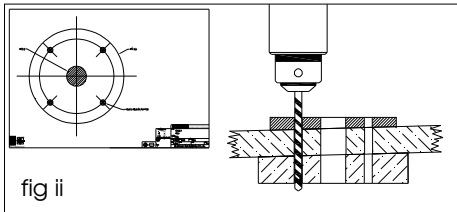


Figure (ii)

If the deck is angled (fore & aft) or curved (port to starboard) a suitably shaped mounting block will be required to spread the load evenly over the deck surface and mount the capstan base on a level and even footing. Depending on the thickness of the deck, a suitable spacer below deck may be required to mount the winch.

Place the shaped mounting block (if required) onto the deck. Using the layout template supplied, mark the mounting centres and drill the holes.

Dissassemble the capstan components for installation.

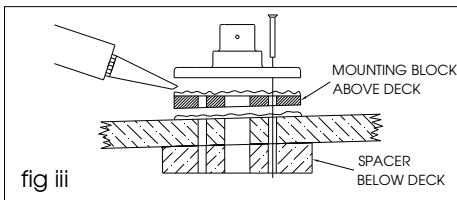


Figure (iii)

Apply an appropriate sealant to the base plate and mounting block (if required), taking care to align mounting holes when assembling. For Aluminium or Steel hull vessels, it is important to insulate the capstan with a non-conductive gasket to avoid corrosion. This also applies below deck with the mounting bolts, nuts and washers. Where the deck construction is light or of foam sandwich construction, a plywood stiffener of at least 16mm (5/8") should be fitted to the underside of the deck to spread the load.

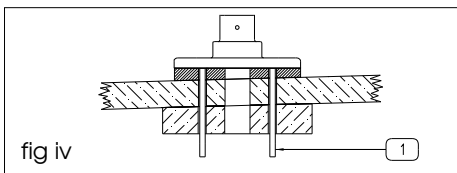


Figure (iv)

Place the base mounting screws into the holes.

1. Check that there is enough thread through the spacer below deck for securing.

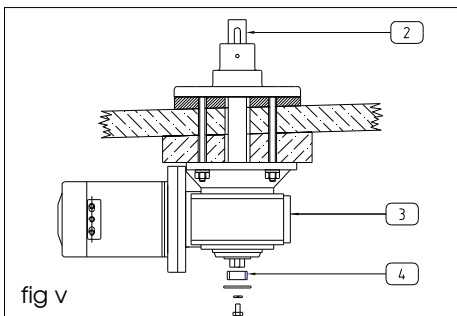


Figure (v)

2. With the shaft in place for proper alignment.

3. Slide the motor / gearbox in place, secure washer and nut on each bolt and tighten. Check that the shaft has free movement and is not jammed on the gearbox key after tightening the screws. Remove excess sealer.

4. Fit a suitable size spacer to the shaft protruding from gearbox, then fit the two washers and fixing bolt to the shaft.

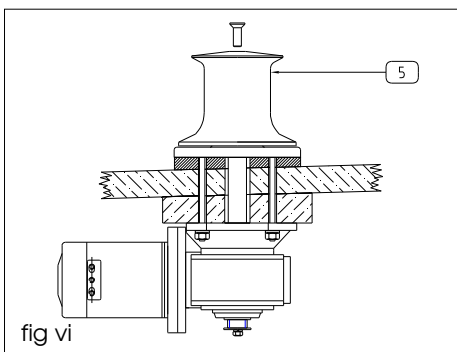
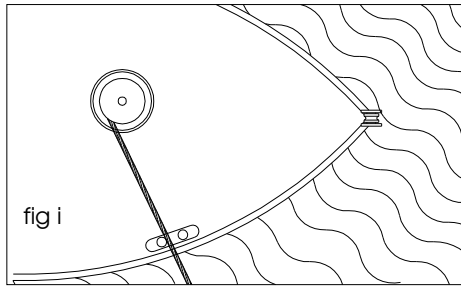


Figure (vi)

5. Grease shaft and key, slide Capstan onto shaft ensuring key is aligned and screw capstan onto shaft. Check that the shaft has approximately 0.5mm up/down movement and the capstan is not jammed to the base after tightening the screws.

NOTE: On assembly, grease all moving parts and the deck plate grease nipple with a Lithium / Teflon based grease. The Motor / gear drive assembly should be protected with anti-corrosion film or grease tape.

INSTALLATION INSTRUCTIONS (FIXED BASE ADAPTOR VERSION)



Figure(i)

Locate the capstan in a suitable position on the deck so there is no interference from other ropes or objects. Ensure that the rope has a clear lead to the capstan. Make sure that the capstan is in a position so that the rope source is as close to perpendicular as possible. Ensure that there is sufficient room to run the electrical cables or hydraulic lines to the capstan underneath the deck.

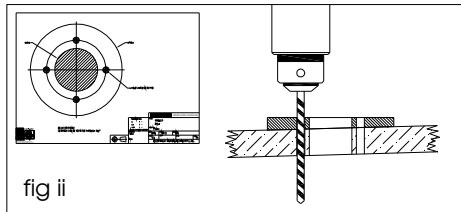


Figure (ii)

If the deck is angled (fore & aft) or curved (port to starboard) a suitably shaped mounting block will be required to spread the load evenly over the deck surface and mount the capstan base on a level and even footing.

Place the shaped mounting block (if required) onto the deck. Using the layout template supplied, mark the mounting centres and drill the holes.

Disassemble the capstan components for installation.

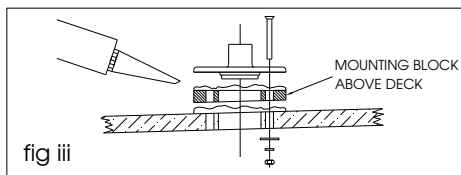


Figure (iii)

Apply an appropriate sealant to the base plate and mounting block (if required), taking care to align mounting holes when assembling.

For Aluminium or Steel hull vessels, it is important to insulate the capstan with a non-conductive gasket to avoid corrosion. This also applies below deck with the mounting bolts, nuts and washers.

Where the deck construction is light or of foam sandwich construction, a plywood stiffener of at least 16mm (5/8") should be fitted to the underside of the deck to spread the load.

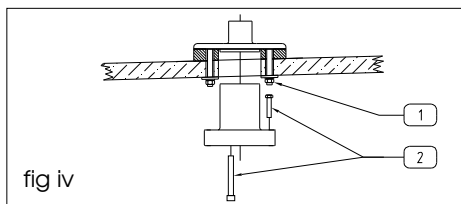


Figure (iv)

1.Place the base mounting screws into the base holes and attach using large diameter washers.

2.Place the gearbox mounting bolts into the adaptor, ready for securing the gearbox. Fit the deck adaptor from below and secure with the socket head cap screws. Remove excess sealer.

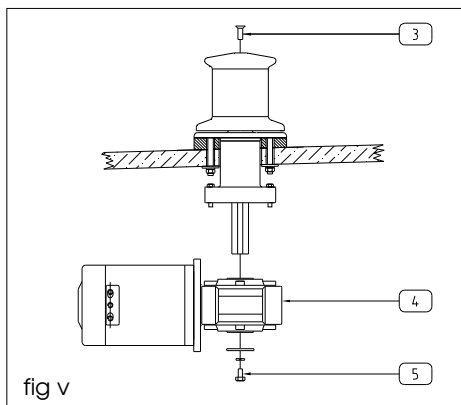


Figure (v)

3.Grease the shaft and top key and using the top screw tighten the capstan to the shaft. Slide the shaft/capstan onto the base plate.

4.Place the gearbox key into the shaft then slide the motor / gearbox onto the shaft and tighten the bolts to the adaptor.

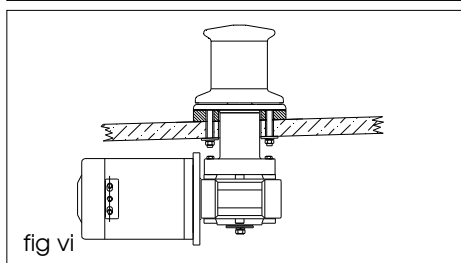


Figure (vi)

5.Check that the shaft has free movement then fit the two washers and bolt to the end of the shaft to secure the shaft/capstan.

NOTE: On assembly, grease all moving parts and the deck plate grease nipple with a Lithium / Teflon based grease. The Motor / gear drive assembly should be protected with anti-corrosion film or grease tape.

HANDY HINTS

Ensure sufficient room to run electric cables to the capstan. Follow the instructions on page 4 including underdeck stiffening, deck camber, alignment, mounting blocks and sealing procedures. Position capstan carefully checking desired rope path before mounting capstan to your deck.

ELECTRICAL

See Wiring Diagrams for wiring instructions.

Circuit breaker (must be fitted to ensure warranty)

If the capstan is overloaded or stalled the circuit breaker automatically cuts off power to the capstan and protects the wiring and motor. The circuit breaker should not be used as an isolating switch, purely for safety reasons.

Deck Switches are best located out to either port or starboard or directly behind the capstan in a position where it can be easily reached with your foot or knee, preferably where you can view the anchor and chain coming aboard.

Isolating Switch should be fitted in an accessible position for safety, ideally close to the battery or switches. The isolating switch is not a circuit breaker.

Batteries are best located as close to the capstan as possible. Larger cables will reduce the voltage drop to the motor and the heat generated when running the capstan. Small diameter cables drop voltage considerably. Use the following table as a guide to your required wire size: (Based on 1500W 12V Motor)

Distance from battery to motor (m)	Cable Size (mm ²) AWG		Cable Core Diameter (mm)
< 8 (26')	25	3	7 (17/64")
9 – 12 (29' – 39')	35	2	8 (5/16")
13 – 18 (42' – 60')	50	1/0	9 (23/64")

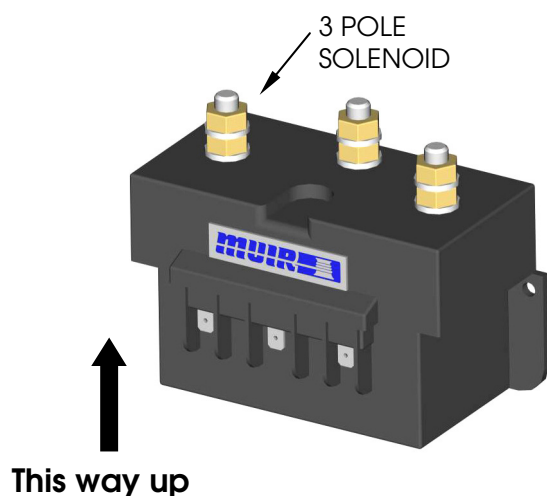
Rotation: Capstan may be wired for single or dual direction, using single or dual deck switches for raising or lowering. Alternatively remote control solenoid packages with Toggle Switch or Hand Pendant are available.

Solenoid Installation

We recommend that the solenoid is installed in an upright position, where it has minimal exposure to sea water and in close proximity to the electric motor of the capstan.

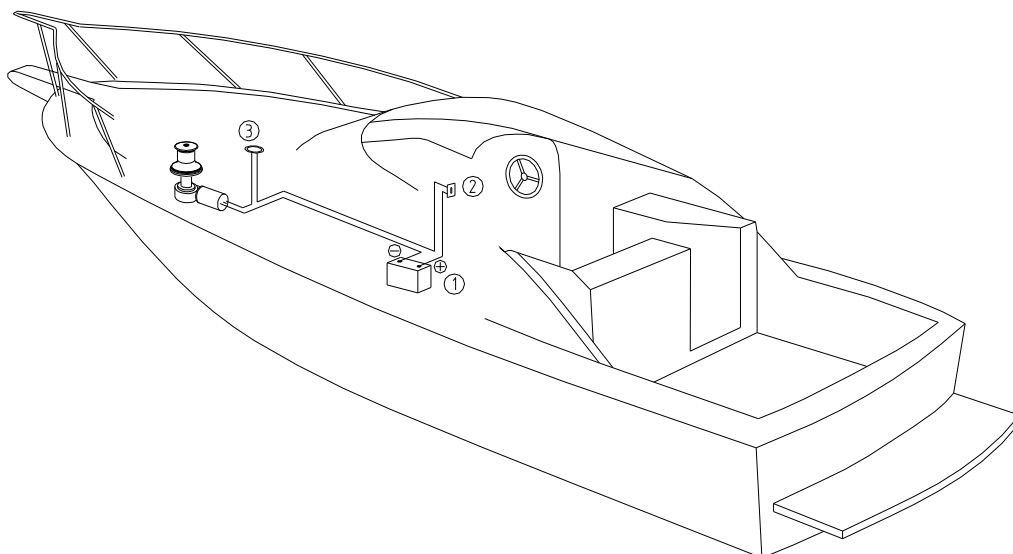
For wiring information, please refer to the appropriate wiring diagram listed in the table below.

WINCH MODEL	MOTOR SIZE	MOTOR TYPE
VC 850	1000W	3 POLE
VC 2500	1200W	3 POLE
VC 3500	1500W	3 POLE



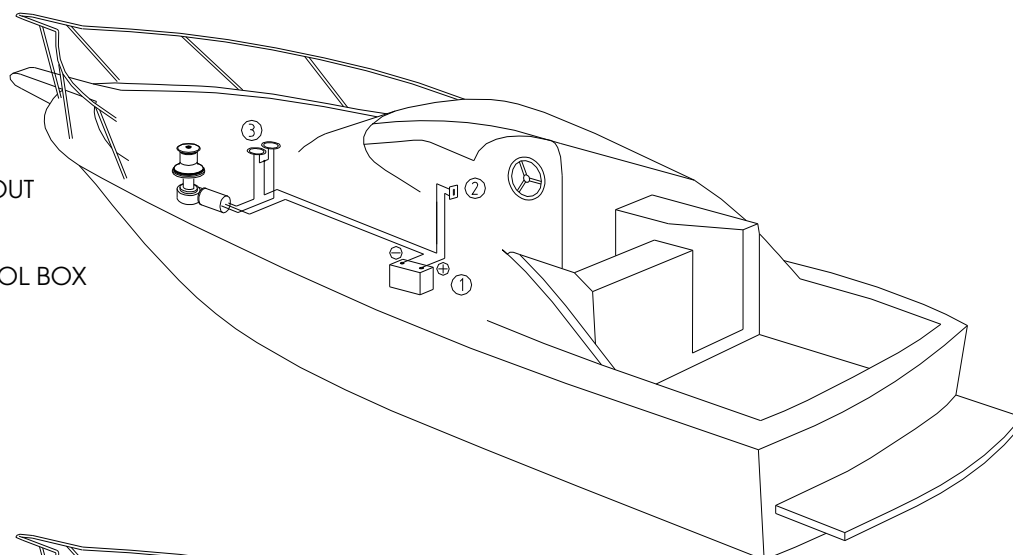
DECK SWITCH LAYOUT

1. BATTERY
2. CIRCUIT BREAKER
3. DECK SWITCH



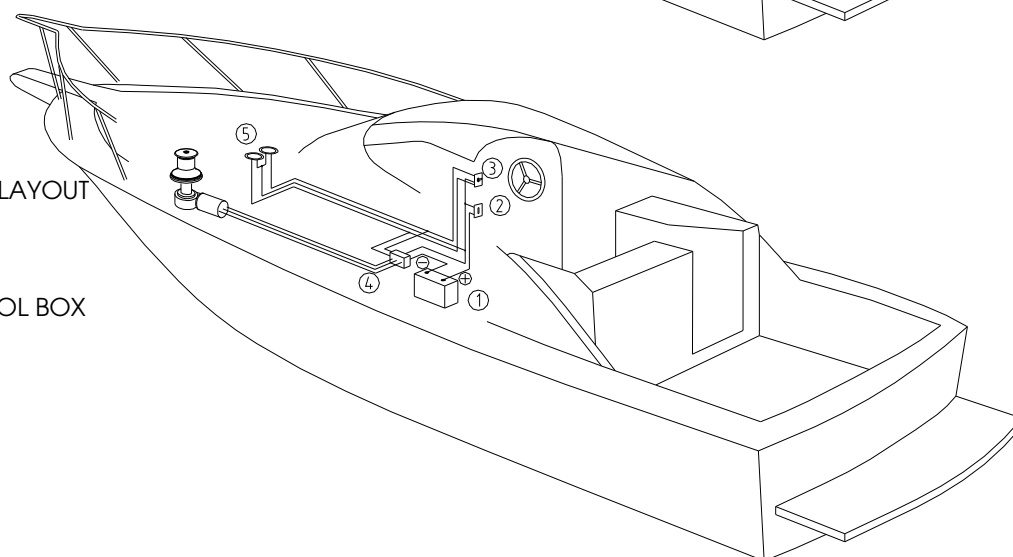
DUAL DECK SWITCH LAYOUT

1. BATTERY
2. CIRCUIT BREAKER
3. SOLENOID/CONTROL BOX
4. DECK SWITCHES



REMOTE / DECK SWITCH LAYOUT

1. BATTERY
2. CIRCUIT BREAKER
3. REMOTE SWITCH
4. SOLENOID/CONTROL BOX
5. DECK SWITCHES



NOT TO BE USED AS WIRING DIAGRAMS

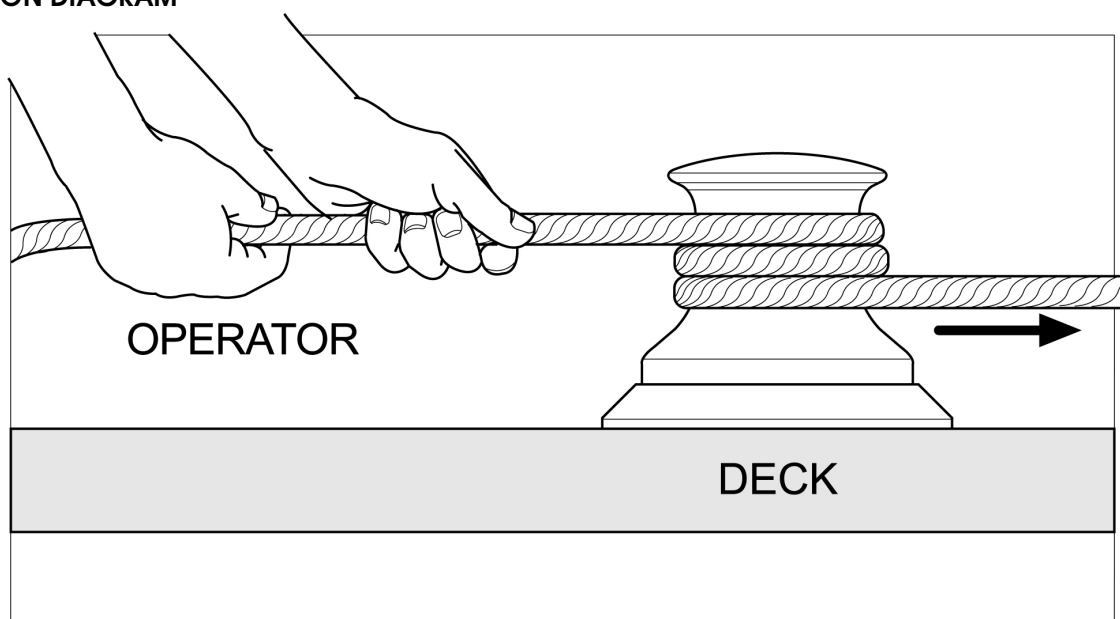
OPERATING INSTRUCTIONS

Anchoring: If the capstan is being used for retrieval of an anchor on smaller boats, ensure that the chain fixing the anchor to the rope does not wrap around the capstan as it will cause damage. Mark the anchor end of the rope at 2 and 5 metre (6.5' & 16.5') intervals which will enable the operator to judge when the anchor is almost up. Go gently with the last two metres of retrieving the anchor, rather than waiting for the anchor to fly up over the roller and bang tight, putting excessive load onto the bow roller, capstan and fore deck. If weather is rough or anchoring overnight, take a turn around a cleat or bollard. Never use the capstan as a mooring bollard!!

Lifting: When lifting light loads such as smaller anchors or sails, two or three turns around the capstan is sufficient. Heavier loads will require additional turns for added grip and less chance of slippage.

Reversing Motor: The motor must be stopped before changing direction. Do not activate the UP & DOWN foot switch at the same time. Motor damage may result from switching operation of the capstan when the motor is running in the other direction.

OPERATION DIAGRAM



MAINTENANCE AND SERVICING

A grease nipple is located at the capstan deck plate, which lubricates the drive shaft and deckplate bearing. Apply one pump six times annually, or twelve times annually if the capstan is being used every day.

We recommend that the capstans on Pleasure Vessels are stripped yearly and all moving parts cleaned and greased with a Marine Grease, Teflon or Lithium based grease (e.g. Duckhams'Keenol'; 'Castrol LMX'.). **Do not use a soap based grease.**

In the case of Work and Charter Vessels we suggest it is carried out more frequently.

The geardrive is filled and sealed at the factory with long life synthetic oil and does not require replacement. A rinse of fresh water on all your deck gear after every excursion ensures all salt deposits and corrosion are kept to a minimum.

Line Care

Muir Capstans are designed to run on 3-strand nylon line (supplied by Muir) which has been specially treated with fabric softener to prevent it from hardening. It is recommended to soak your rope in fresh water containing fabric softener every 3 months.

Trouble Shooting

ELECTRICAL

1. Check the battery circuit breaker and ensure the isolating switch is on.
2. Check battery is charged up and can deliver 12 or 24 volts under load.
3. Check that the foot switch plunger is contacting
4. Check that the remote control solenoid is contacting, if this is clicking the problem may be low voltage, a faulty solenoid or a wire not properly connected.
5. Check the wiring between controls, solenoid and motor is in-tact.
6. If the motor will not turn after checking the above points, check that the motor bushes are not worn or sticking.

MECHANICAL

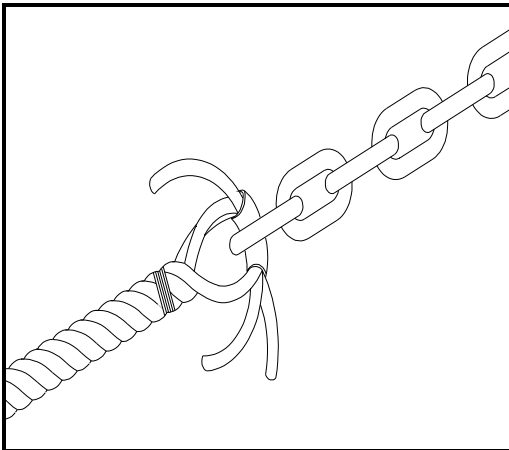
If the capstan running gear will not turn or operate check the following.

1. Check the drive key on main shaft to capstan.
2. Check the drive key on main shaft to gearbox output.
3. Check the drive key between the gearbox and motor input.

HYDRAULIC MOTOR

Refer any problems with your hydraulic motor to a Muir service agent or Muir Hobart.

Rope/Chain Splice.



1. To stop rope unravelling, seize rope 400mm(16") from end with whipping twine. Unlay strands.
2. After placing 20mm (3/4") of heat shrink sleeve tubing through the last link of chain, pass one strand of rope through sleeve and chain from one side and the other two strands of rope from the opposite side. (See illustration).
3. While pulling all three strands tight, shrink the sleeve tightly onto the rope using a hairdryer / fan heater or by immersing in boiling water.
4. Remove seizing and complete back splice in normal manner for two full tucks. With a hot knife pare down the three strands by 1/3 and insert two further tucks. Pare down by another 1/3 and finish with two tucks. Cut any remaining tails.

Warranty Limited for period of Three years (First Owner)

We warrant each new product manufactured by us to be free from defects in material and workmanship for a period of 3 years (first Owner).

This warranty shall become effective only upon receipt of a completed warranty registration, which shall identify the product so registered by serial number. This warranty shall remain in effect for a period of three (3) years from the date of purchase. For vessels in charter or hire the warranty is one (1) year due to various operators and overloading which may occur.

Conditions

While this warranty applies to defects in material and workmanship, it does not apply to:

- Normal worn parts or to damage caused by neglect, lack of maintenance, accident or improper service/installation or service by persons other than an authorised Muir representative.
- Muir shall not be responsible for failures due to products being used in applications that they are not intended for, or exceed the products performance specifications.
- For warranty claim, defective product must be returned to Muir for inspection.
- Muir will not be responsible for freight charges, removal or installation labour on warranty claims.
- Damage due to unsatisfactory storage or use of equipment prior to installation in the approved/intended manner.

Exclusions

Warranty is limited to twelve months for:

- Electric motors / controls / equipment
- Hydraulic pumps / controls / valves
- Weather seals
- Use on charter/hire/commercial boats

All incidental and/or consequential damages are excluded from this warranty. Warranties of merchantability and fitness are excluded from this warranty. Implied warranties are limited to the life of this warranty. Some countries do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above may not apply to you.

We reserve the right to improve the design or materials used on any product without assuming any obligation to modify any product previously manufactured or used.

Liability

Muir Engineering liability under this warranty shall be to the exclusion of all other warranties or liabilities (to the extent permitted bylaw). In particular (but without limitation):

Muir Engineering shall not be liable for:

Any indirect or consequential loss including (without limitation) any loss of anticipated profits, damage to reputation or goodwill, loss of expected future business, damages, costs or expenses payable to any third party or any other indirect losses. Any damage to yachts or equipment. Death or personal Injury (unless caused by Muir Engineering negligence).



WARRANTY REGISTRATION CARD

Return To

MUIR ENGINEERING PTY. LTD.
100 Browns Rd, Kingston
Tasmania, Australia, 7050

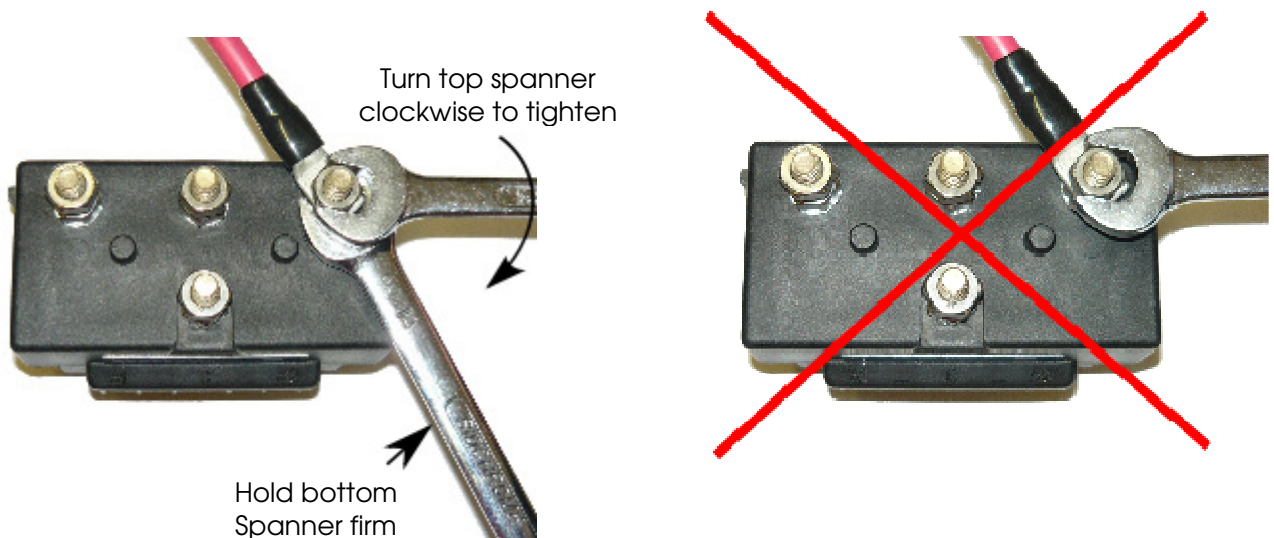
**WARRANTY VOID UNLESS CIRCUIT
BREAKER OR RELIEF VALVE FITTED**

Customer Name :	Address / Contact :
Winch Model :	Serial No :
Date of Purchase :	
Supplier Name :	Address :

WARNING

Do not over tighten terminal nuts.
It may cause internal damage.
Ensure bottom nut is held with a spanner
when tightening top nut.

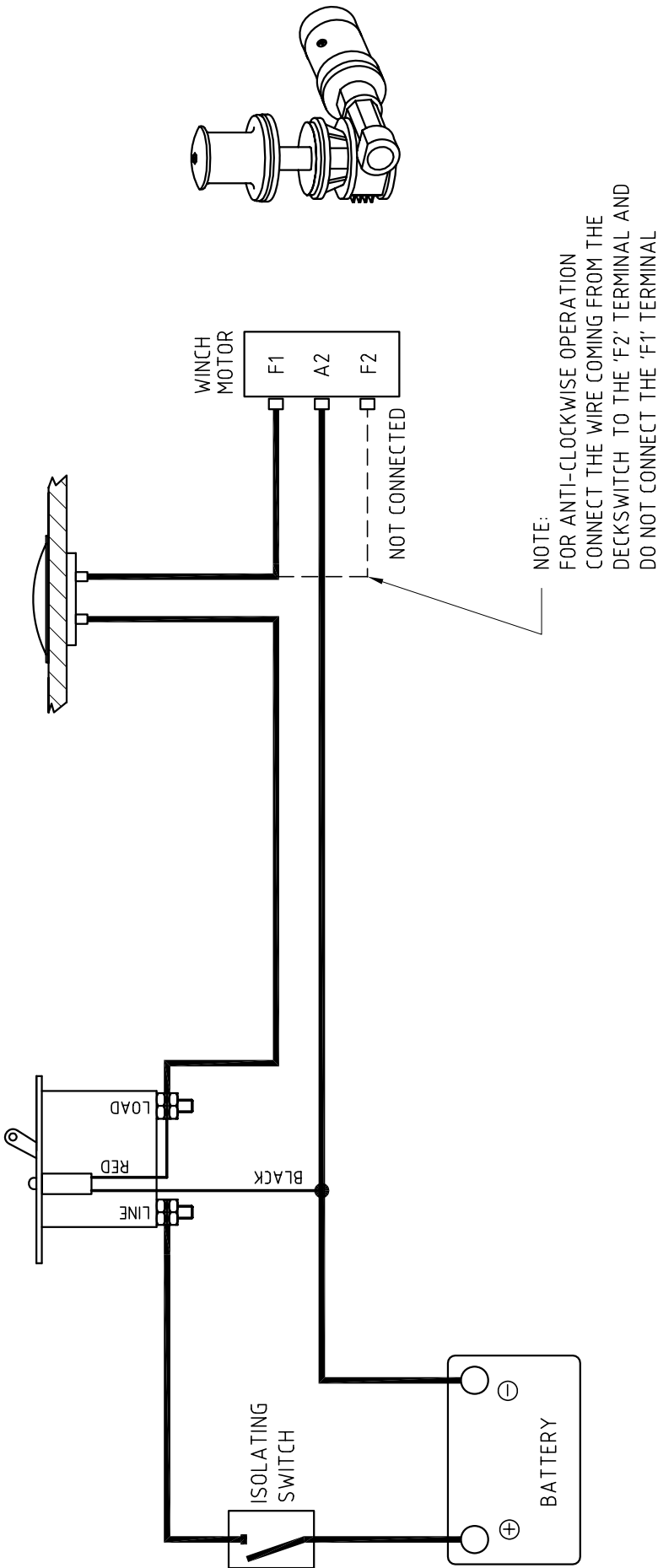
Please apply this method to all
reversing solenoids, circuit breakers
and motor terminals.



Correct method using 2 spanners. Incorrect method using 1 spanner.

CIRCUIT BREAKER
P/N: F80-CB

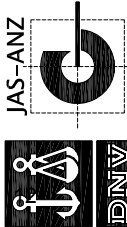
DECK SWITCH
P/N: F80-DS



- REFER TO MANUAL FOR WIRING INDICATED BY HEAVY LINES
- LIGHTER LINES INDICATE LIGHT WIRING.
- DASHED LINES INDICATE OPTIONAL WIRING.

NORMALLY APPLIES TO THESE WINCHES AND MOTORS

MOTOR 12/24V	1000W	1200W	1500W
WINCH MODEL	VC 850	VC 2500	VC 3500



DNV Certification Pty Ltd
Quality Assured ISO9001:2000



WINDLASSES AUSTRALIA

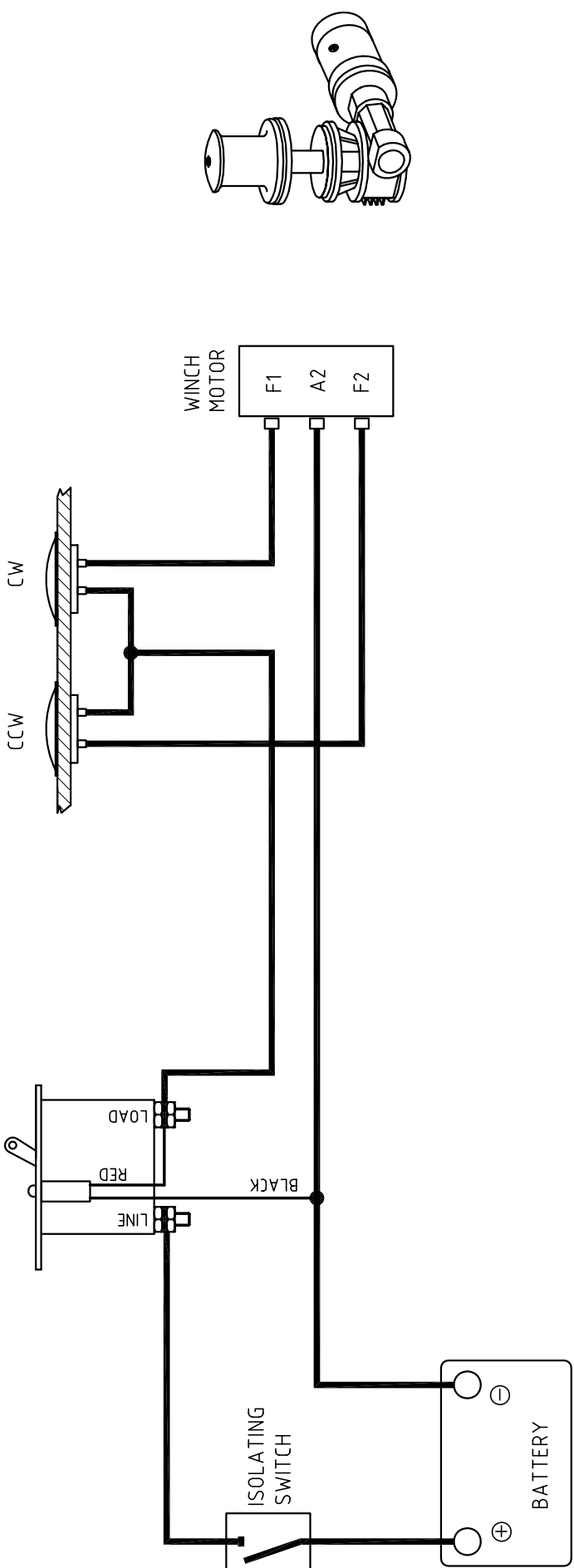
TITLE		THREE TERMINAL MOTOR (SINGLE DIRECTION)	
PART No.		WIRING DIAGRAM (SINGLE DECK SWITCH)	
DRN	WQ	DATE	10/06/05
SCALE	NTS	APP1	APP2
FINISH		SIZE	
		A4	

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CIRCUIT BREAKER
P/N: F80-CB

DECK SWITCHES
P/N: F80-DS

WARNING:
DO NOT ACTIVATE THE UP & DOWN DECK SWITCHES AT THE
SAME TIME. REFER TO MANUAL FOR MORE INFORMATION



— REFER TO MANUAL FOR WIRING INDICATED BY HEAVY LINES
— LIGHTER LINES INDICATE LIGHT WIRING.

NORMALLY APPLIES TO THESE WINCHES AND MOTORS

MOTOR 12/24V	1000W	1200W	1500W
WINCH MODEL	VC 850	VC 2500	VC 3500

**WINDLASSES AUSTRALIA**

TITLE
THREE TERMINAL MOTOR (REVERSING)
WIRING DIAGRAM (DUAL DECK SWITCHES)

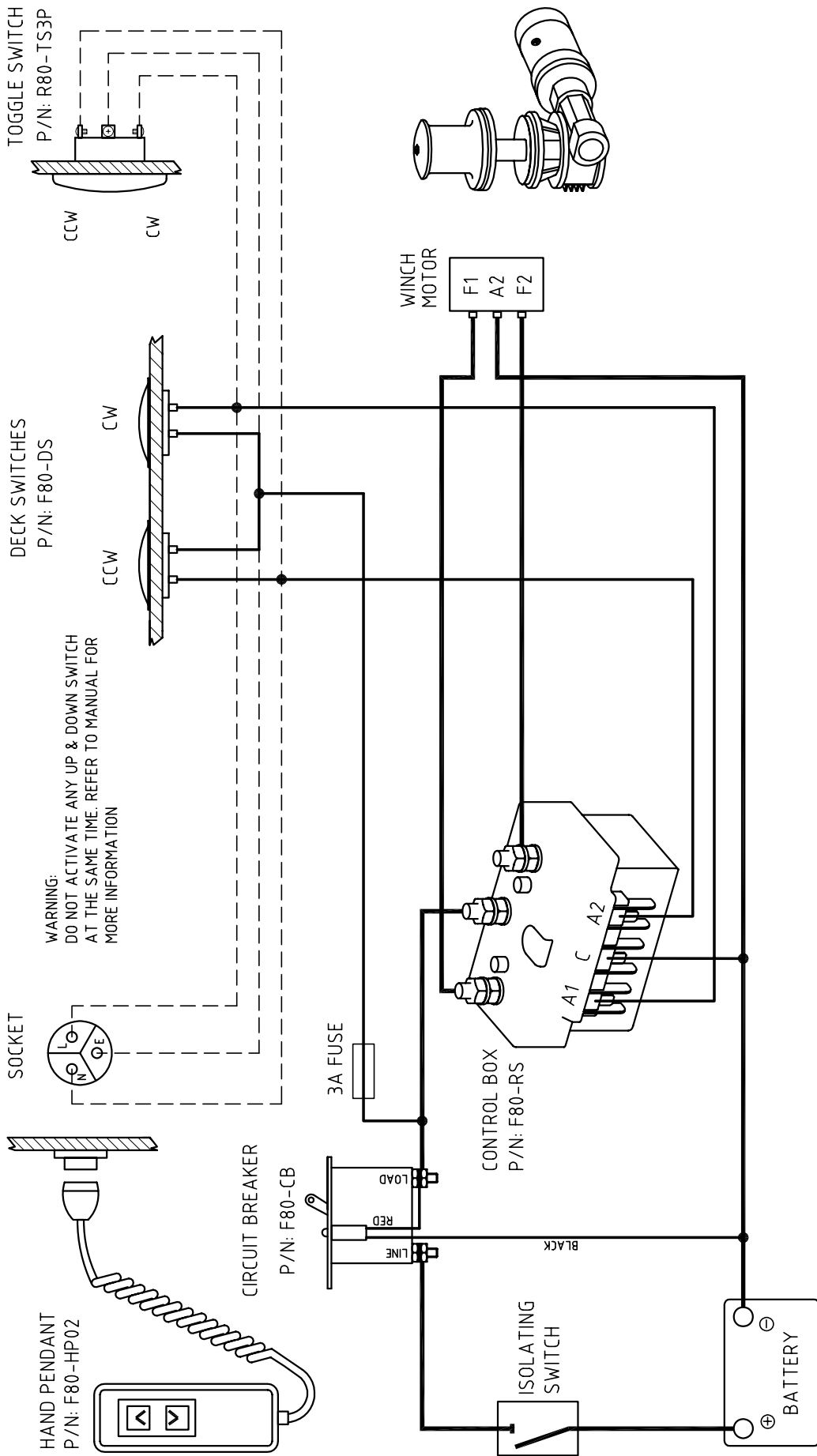
PART No.
SA
DATE 24/03/95
SCALE NTS
DRG No WIRE0005
APP1
APP2

TOLERANCES (mm)
X ±
X.X ±
X.XX ±
UNLESS OTHERWISE SPECIFIED

MATERIAL
FINISH

SIZE
A4

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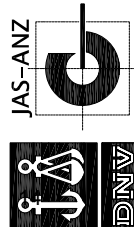
— REFER TO MANUAL FOR WIRING INDICATED BY HEAVY LINES

— LIGHTER LINES INDICATE LIGHT WIRING.

— DASHED LINES INDICATE OPTIONAL WIRING.

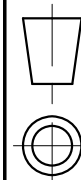
NORMALLY APPLIES TO THESE WINCHES AND MOTORS

MOTOR 12/24V	1000W	1200W	1500W
WINCH MODEL	VC 850	VC 2500	VC 3500



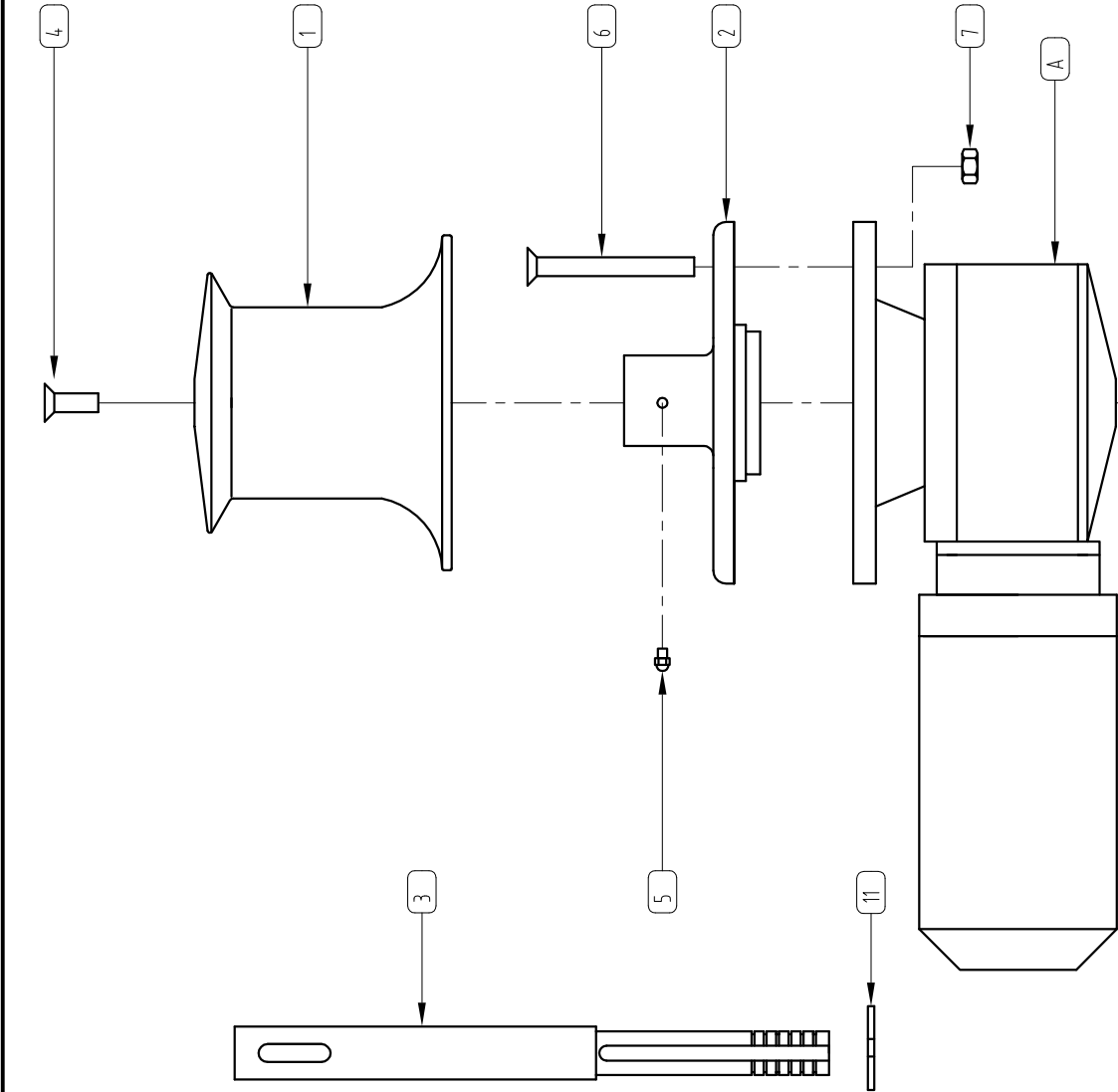
DNV Certification Pty Ltd
Quality Assured ISO9001:2000

WINDLASSES AUSTRALIA			
TITLE			
THREE TERMINAL MOTOR (REVERSING)			
WIRING DIAGRAM (POSITIVE ACTING SOLENOID)			
PART No.			
DRN	WQ	DATE	10/06/05
SCALE	NTS	APP1	APP2
DRG No.			WIRE0086
SIZE			A4
COPYRIGHT MUIR ENGINEERING PTY. LTD.			



FINISH

ITEM	PART NUMBER	DESCRIPTION	QTY
1	P04-CAPBRZ00850S	CAPSTAN BRONZE VC850S	1
2	P22-BSEBRZ00850S	BASE BRONZE VC850S CAPSTAN	1
3	P18-SFT303V/C00850S	SHAFT ASSEMBLY VC850 SAILOR	1
4	S33-30410.00025	SCREW CSK SL MT 304 M10 X 25 MM	1
5	R43-NIP3166.35ST	GREASE NIPPLE SS316 1/4"UNF STRAIGHT	1
6	S33-30409.52102	SCREW CSK SL MT 304 0-3/8 X 4 INCH	4
7	S20-30409.52	NUT HEX SS304 0-3/8 INCH	4
8	P21-BRS050.0010.503	WASHER BRASS 50 X 10.5 X 3MM	1
9	S76-30410.00	WASHER SPRING SS304 10MM	1
10	S36-30410.00025	SCREW HEX HD SS304 10MM X 25MM	1
11	S94-CIRSS025	25mm CIRCLIP	1

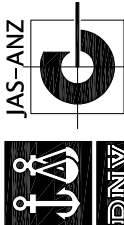


A MOTOR / GEARBOX ASSEMBLY



WINDLASSES AUSTRALIA

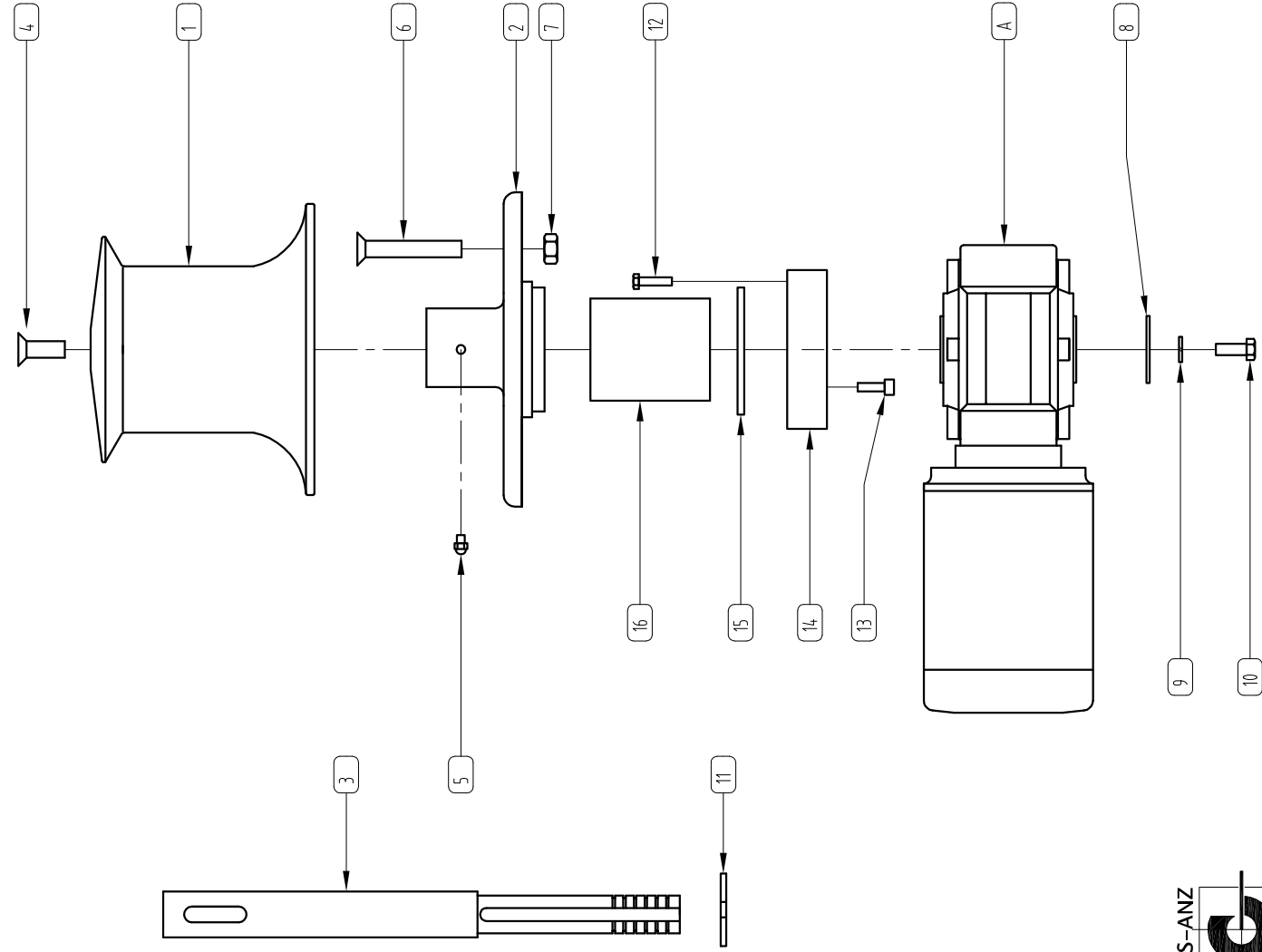
TOLERANCES (mm)		TITLE	
X.	±	SAILOR VC850 CAPSTAN	
X.X	±	EXPLODED VIEW	
X.XX	±	PART No. K08-SAIVC00850	
UNLESS OTHERWISE SPECIFIED		DRN	
MATERIAL		DATE	DRG No
		07/04/00	K08-SAIVC00850
		APP1	APP2
		NTS	SIZE
			A4
		FINISH	
		© COPYRIGHT MUIR ENGINEERING PTY. LTD.	
		2	



DNV Certification Pty Ltd
Quality Assured
ISO9001

REV No. 3
DESC PART #4 CHANGED TO METRIC
BY MW
DATE 7/03/14

ITEM	PART NUMBER	DESCRIPTION	QTY
1	P04-CAPBRZ00850S	CAPSTAN BRONZE VC850S / VC850S / JAGUAR	1
2	P22-BSEBRZ00850S	BASE BRONZE VC850S CAPSTAN	1
3	K06-SFTV/C00850S	SHAFT ASSEMBLY VC850 SAILOR	1
4	S33-30410.00025	SCREW CSK SL MT 304 M10 X 25 MM	1
5	R43-NIP3166.35ST	GREASE NIPPLE SS316 1/4"UNF STRAIGHT	1
6	S33-30409.52051	SCREW CSK SL MT 304 0-3/8 X 2 INCH	4
7	S20-30409.52	NUT HEX SS304 0-3/8 INCH UNC	4
8	P21-BRS050.0010.503	WASHER BRASS 50mm X 10.5mm X 3mm	1
9	S76-30410.00	WASHER SPRING SS304 10MM	1
10	S36-30410.00025	SCREW HEX HD SS304 10MM X 25MM	1
11	S94-CIRSS025	25mm CIRCLIP	1
12	S36-30406.00025	BOLT HEX HD SS304 6MM X 25MM	4
13	S45-30408.00030	SCREW SHCS SS304 8MM X 30MM	4
14	R50-QADP3160850AB	QUICK FIT ADAPTOR - GEARBOX SIDE	1
15	R50-QADP3160850AC	QUICK FIT ADAPTOR - RETAINING CLIP	1
16	R50-QADP3160850AT	QUICK FIT ADAPTOR - BASE SIDE	1



A MOTOR / GEARBOX ASSEMBLY



WINDLASSES AUSTRALIA

SAILOR VC850 CAPSTAN FIXED
EXPLODED VIEW

TOLERANCES (mm)

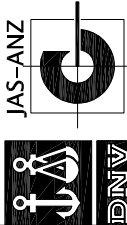
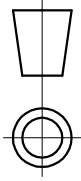
X. ±
X.X ±
X.XX ±
UNLESS OTHERWISE SPECIFIED

PART No. K08-SAIVC00850FIXED

DRN WQ DATE 15/06/05 DRG No. K08-SAIVC00850FIXED

SCALE NTS APP1 APP2 K08-SAIVC00850FIXED

FINISH SIZE A4

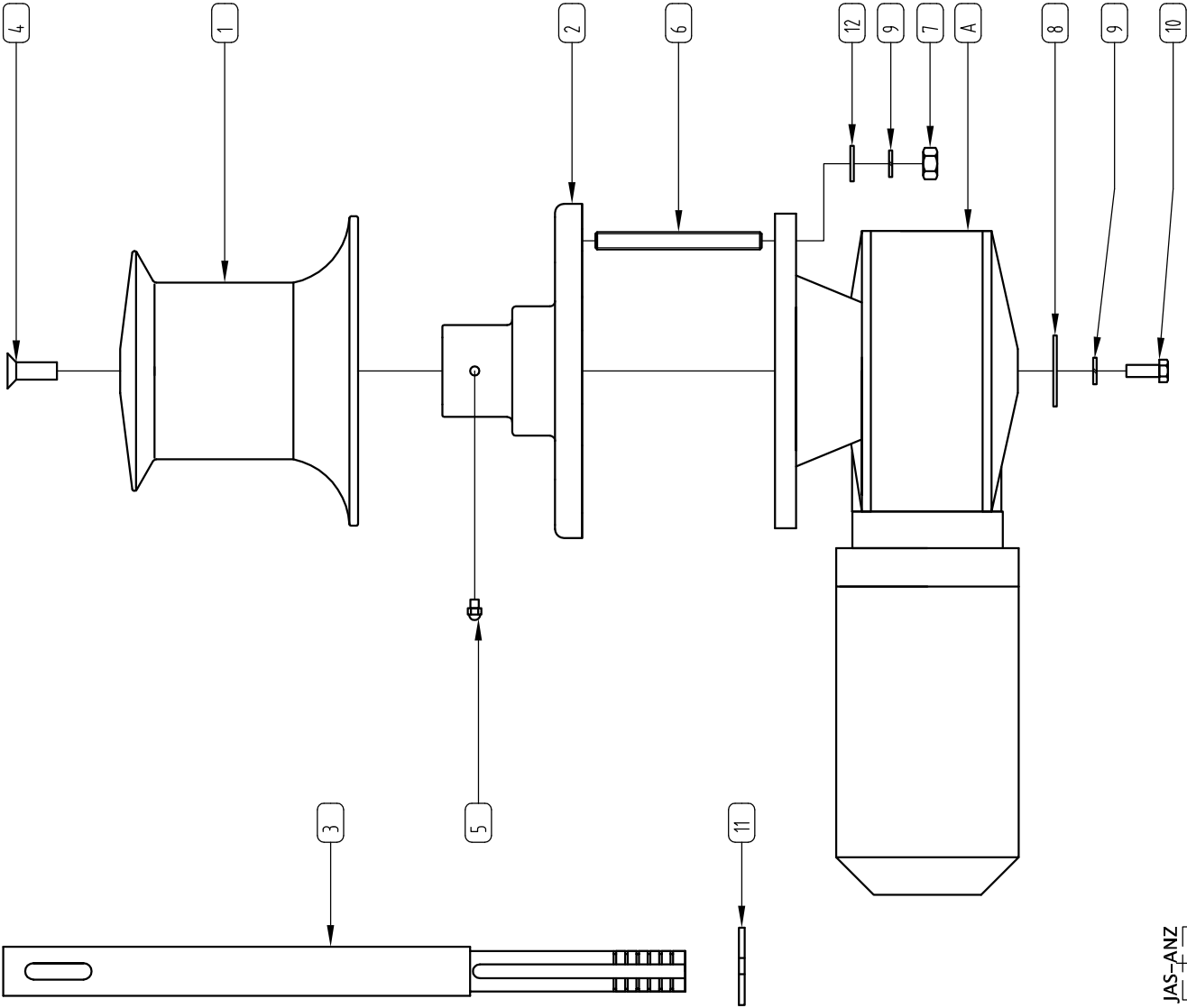


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REV No. 2 DESC PART #4 UPDATED TO METRIC, QFIT ADPT ADDED BY MW DATE 7/03/14

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ITEM	PART NUMBER	DESCRIPTION	QTY
1	P04-CAPBRZ01600S	CAPSTAN BRONZE VC1600S	1
2	P22-BSEBRZ02500S	BASE BRONZE VC2500S CAPSTAN	1
3	K06-SFTV/C01600S	SHAFT ASSEMBLY VC1600 SAILOR	1
4	S33-31612.00025	SCREW CSK SL MT 316 M12 X 25	1
5	R43-NIP3166.35ST	GREASE NIPPLE SS316 1/4"UNF STRAIGHT	1
6	P24-STD3160850A	STUD SS304 VR/C850A	4
7	S20-30410.00	NUT HEX SS304 10MM	4
8	P21-BRS050.0010.503	WASHER BRASS 50 X 10.5 X 3MM	1
9	S76-30410.00	WASHER SPRING SS304 10MM	5
10	S36-30410.00025	SCREW HEX HD SS304 10MM X 25MM	1
11	S94-CIRSS025	25mm CIRCLIP	1
12	S75-30410.00	WASHER FLAT SS304 10MM	4



A MOTOR / GEARBOX ASSEMBLY



WINDLASSES AUSTRALIA

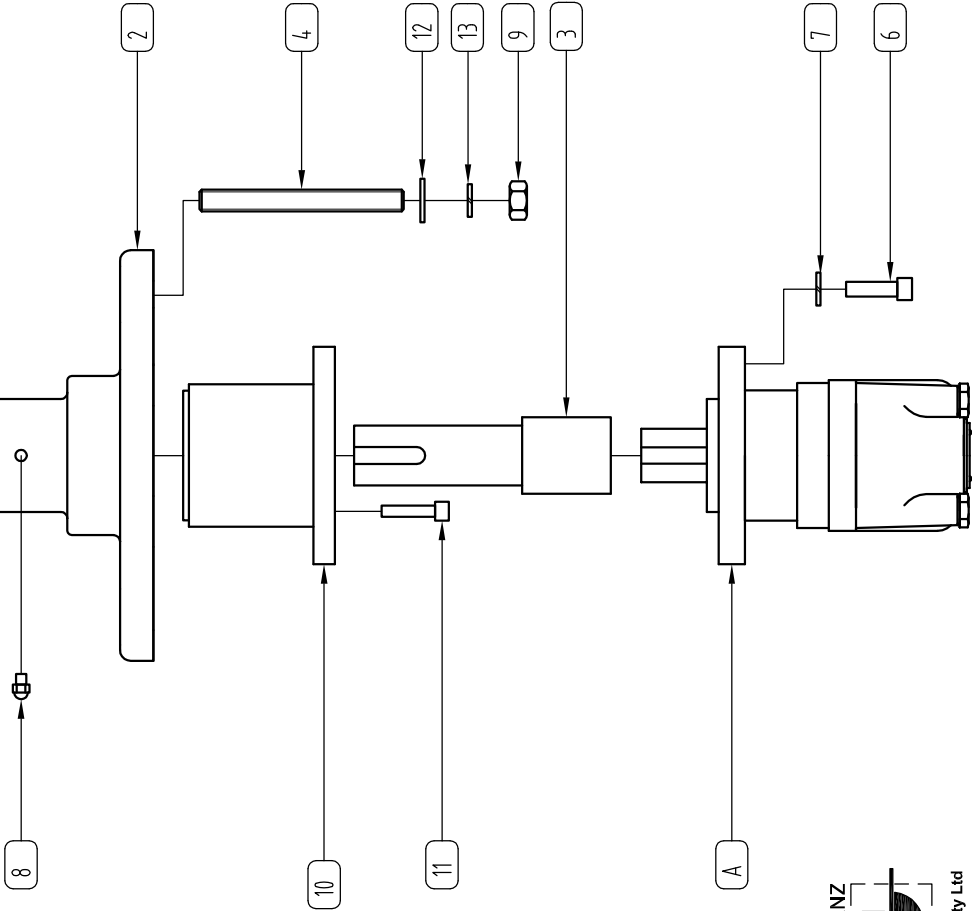
TOLERANCES (mm)		TITLE	
X.	±	SAILOR VC1600/2500/3500 CAPSTAN	
X.X	±	EXPLODED VIEW	
X.XX	±	PART No. K08-SAIVC01600	
UNLESS OTHERWISE SPECIFIED		DRN	DATE
MATERIAL		AJN	07/04/00
FINISH		SCALE	APP1
		NTS	APP2
		K08-SAIVC01600	
		SIZE A4	
		© COPYRIGHT MUIR ENGINEERING PTY. LTD.	
		3	



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REV No. 2 DESC DECK BOLT S REPLACED WITH STUDS BY JT DATE 27-07-10

ITEM	PART NUMBER	DESCRIPTION	QTY
1	P04-CAPBRZ01600S	CAPSTAN BRONZE VC1600S	1
2	P22-BSEBRZ02500S	BASE BRONZE VC2500S CAPSTAN	1
3	K06-SFTVC03500SH	SHAFT ASSEMBLY VC3500 HYDRAULIC SAILOR	1
4	P24-STD3040850A	STUD SS304 VR/C 850A M10 X 95MM	4
5	S33-31612.00025	SCREW CSK SL MT 316 M12 X 25	1
6	S45-30412.70UNC038	SCREW SHCS SS304 1/2 UNC X 1-1/2 INCH	2
7	S76-30412.70	WASHER SPRING SS304 1/2 INCH	2
8	R43-NIP3136.35ST	GREASE NIPPLE SS303 1/4"UNF STRAIGHT	1
9	S20-30410.00	NUT HEX SS304 10MM	4
10	P01-ADPOMP400VC2500	ADAPTOR VC1600-3500 DIRECT DRIVE	1
11	S45-31609.00040	SCREW SHCS SS316 M8 X 40MM	6
12	S75-30410.00	WASHER FLAT SS304 10MM	4
13	S76-30410.00	WASHER SPRING SS304 10MM	4



A HYDRAULIC MOTOR

REV No.	DESC.	BY.	DATE.
1	DECK BOLTS REPLACED WITH STUDS	JT	27-07-10
WINDLASSES AUSTRALIA			
TITLE SAILOR VC1600/2500/3500 HYDRAULIC CAPSTAN EXPLODED VIEW			
PART No. K08-SAIVC01600DD			
DRN	DATE	DRG No	
AJN	07/04/00	K08-SAIVC01600DD	
SCALE	APP1	APP2	SIZE
NTS			A4
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Notes

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WINDLASS
SERIAL NUMBER

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