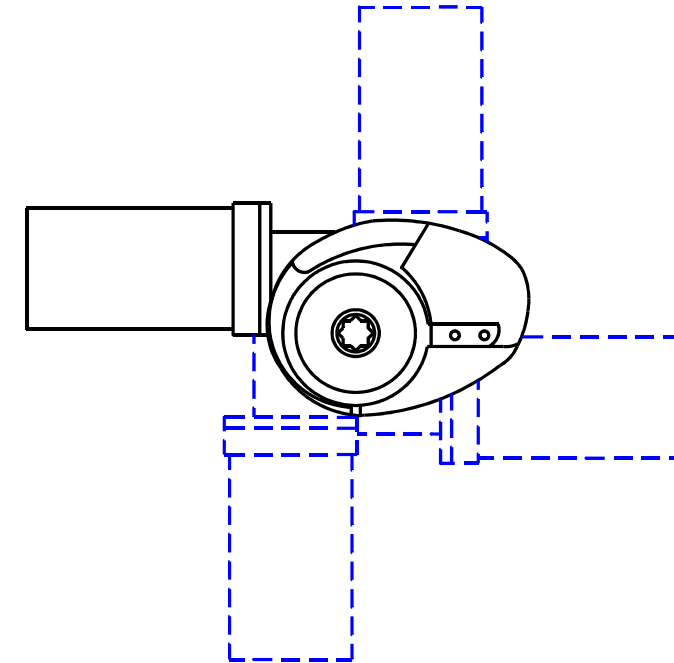




VR/VRC2500/3500/4000



INSTALLATION/OPERATION MANUAL

READ INSTRUCTIONS THOROUGHLY BEFORE PROCEEDING WITH INSTALLATION

Head Office:

100 Browns Road,
Kingston Tasmania,
Australia 7050
Tel Int: +61 (0) 3 6211 8811
Fax Int: +61 (0) 3 6229 7030
Email: info@muir.com.au
www.muir.com.au

WINDLASS
SERIAL NUMBER

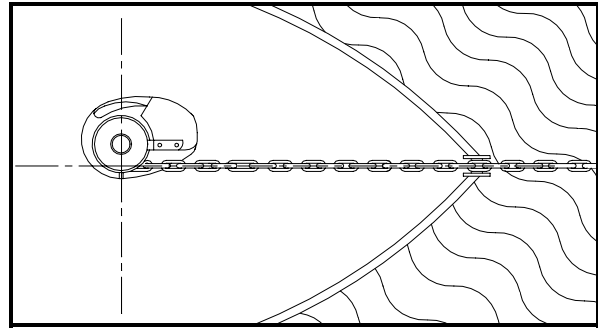
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While all due care and attention has been taken in the preparation of this manual no responsibility shall be taken for errors or omissions.



ATLANTIC SERIES

VR/VRC INSTALLATION



Figure(i) Locate the windlass centrally fore and aft. Check that the chain leads unhindered to the bow roller. The chain leads onto the starboard side of the gypsy, wraps around 180° and drops below deck through the chain pipe(hawser). Ensure there is sufficient room around the windlass to allow full rotation of the windlass manual handle (if supplied).

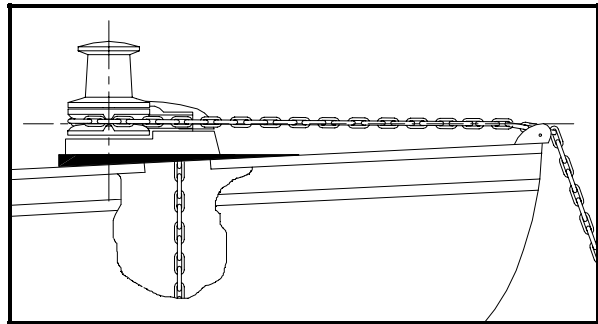


Figure (ii) The centre of the gypsy must be in the same plane as the chain lead from the bow roller. If the deck is angled (fore & aft) or curved (port to starboard) a suitably shaped mounting block will be required.

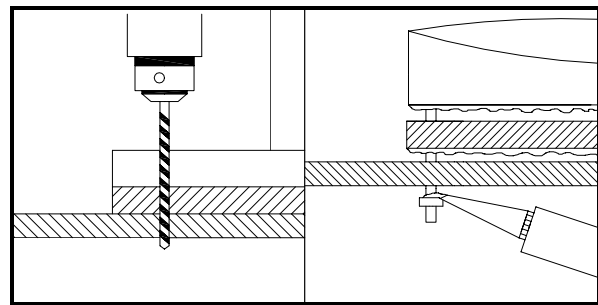


Figure (iii) Place the shaped mounting block (if required) onto the deck. Using the layout template supplied, mark the mounting centres and drill the holes, (Refer template).

Figure (iv) Apply silicon or mastic sealer to the base plate and mounting block (if required) and carefully tighten the nuts onto the threaded studs under the deck. Remove excess sealer.

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 and to prevent the bolts from pulling through the deck.

Large diameter washers on the underside of the ply would also help spread the load.

NOTE: Remove grease nipple prior to installation and refit when installed.

On assembly, grease all moving parts and deck plate nipple with a teflon based grease.

HANDY HINTS

It is a common mistake to locate the windlass too far forward, or too close to the bulk head, where there is insufficient room for the chain and anchor stowing.

The chain fall position should be in the centre of the chain locker, the bottom of which should be at least 750mm (30") below the deck or 450mm (18") of clearance above the chain end when all stowed.

If the chain falls alongside a bulkhead or onto the stem it will pyramid and jam.

If the chain fall is into an undesirable position, a metal tube can be fitted under the hawser to redirect the chain to a preferred position. This pipe should have a maximum length of 450mm (18") and be at least 1 ½ times the diameter of the chain. It should also have as much vertical angle as possible.

INSTALLATION

The below deck installation is identical to the above installation. Position the windlass in the best location with the chain hawser facing forward. Ensure sufficient room to run electric cables to the windlass. Follow the instructions on the previous page including underdeck stiffening, deck camber, alignment, mounting blocks and sealing procedures.

The gearbox and motor can be located in one of four positions. This design feature eliminates deck alignment and thickness problems, thus dramatically reducing installation time.

A circuit breaker must be fitted to ensure warranty

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ATLANTIC SERIES

VR/VRC INSTALLATION

The circuit breaker automatically cuts off power to the windlass and protects the electrical system. Manual or automatic units available. VR/VRC-1000/1200 use a 100amp circuit breaker.

The Deck Switch is best located out to either port or starboard or directly behind the windlass in a position where it can be easily reached with your foot or knee, preferably where you can see the anchor and chain coming aboard.

The Isolating Switch should be fitted in an accessible position, ideally close to the battery or switches.

Batteries are best located as close to the windlass as possible.

If located within 7m (23') use a cable of min.

36sqmm, 8mm (5/16") core.

For longer runs, 9-17m (30'-55') use 50 sqmm, 10-12mm (3/8" - 7/16") core.

The larger the cable, the greater voltage is delivered to the motor and overheating will not occur. Small diameter cables drop voltage considerably.

Rotation: Windlasses can be wired for single or dual direction, using one or two deck switches for up & down. Alternatively a remote control solenoid package with a toggle switch or touch control is available.

PROCEDURE FOR CHANGING THE GYPSY

The procedure for changing a gypsy on the Atlantic winch is as follows.

1. Remove the Nylon peeler arm.
2. Remove the two stripper securing screws located in the peeler.
3. Remove the stripper to the rear of the windlass.
4. Disassemble the windlass and change the gypsy.
5. Reassemble the windlass.
6. Repeat steps 1-3 in reverse order.

To successfully achieve the above you will need the clutch handle, allen keys, 1/4" & 1/8" and a small and large flat screwdriver.

Manually: When releasing rope/chain, place the handle into the central Bi-square and release the clutch anti-clockwise. Let the anchor go and control the chain run by rotating the handle clockwise.

Anchoring: When laying on rope, a turn should be taken around a cleat or bollard. In bad weather, use a nylon bridle on the anchor to prevent snatching and direct load on the windlass main shaft.

Never use the windlass as a mooring bollard!

Retrieving Chain: Place the handle in the Bi-square and rotate clockwise to tighten the clutch. If the anchor is buried hard, motor forward to pull it free after hardening up on the windlass, to ease the load on the windlass and operator.

Rope hauling on Capstan: The capstan can be operated independently of the gypsy. Release the clutch and place the handle into the off-centre Bi-square and wind or engage power.

Electric /Hydraulic operation: Releasing and retrieving rope & chain is identical to operating the windlass manually. Always keep well clear of the windlass when releasing or retrieving chain and anchor. Keep fingers, hair and clothing well clear when the windlass is in operation.

Two direction windlasses are now very popular. If the anchor can be positioned on the bow roller, so that it falls as soon as the windlass is reversed, the whole operation can be carried out from aft or fly bridge. Remote switch controls are self centering which stops the windlass when the finger is removed. Mark the chain at 6 metres (20') and 2 metres (6'6") which will enable you to judge when the anchor is almost up. Go gently with the last few metres of retrieving by letting go of the switch, rather than waiting for the anchor to fly up over the roller, and banging tight, putting excessive load onto the bow roller, windlass and fore deck.

IMPORTANT

Always ensure clutch is tight to prevent anchor releasing when travelling.

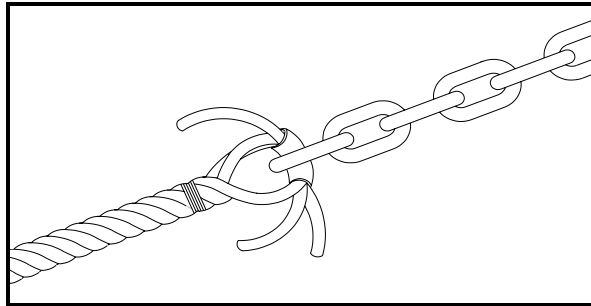
Use a Chain lock or Devils claw to retain the anchor when not in use, and prevent excessive loads on the gearbox.

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ATLANTIC SERIES

VR/VRC OPERATION



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.

SERVICING

A fresh rinse of water on all your deck gear after every excursion ensures all salt deposits and corrosion are kept to a minimum. Three times a year it is recommended the windlass is stripped and all moving parts lubricated with a teflon based grease. The use of a close fitting cover when the winch is not in use is also recommended

MAINTENANCE

Electric or Hydraulic motors

Although these motors are water resistant some protection from the sea air and spray in the chain locker should be provided by spraying the outside with water repellent spray every 6-8 weeks or covering the motor with a protective coating. Any damage to the external paintwork should be repaired immediately.

Gearbox

The gearbox assembly is also water resistant but should, however be protected in the same way as the motor.

It is recommended that lubrication is performed on a regular basis, as least 4-6 times a year, and increased if the usage is higher than normal.

IMPORTANT NOTES

- To avoid damage to the gearbox, windlass or vessel by bringing the anchor up hard against the vessel it is practical to mark the chain in several positions, at approximately 5 meter intervals from the anchor, to alert the operator to the anchor position.
- Under no circumstances should the winch be operated if it is stalled or overloaded.
- Whenever the windlass is not in use engage the gypsy pawl, chainlock or devils claw as vessel movement and vibration may cause the anchor to release
- If easy anchor retrieval is impaired by high wind, heavy seas or the anchor is snagged, ease the load by either motoring or sailing slowly into the wind. Never use the windlass as a mooring bollard.

SAFETY

- Ensure hands, feet, hair and clothing are kept clear of the windlass when in operation.
- Ensure there are no swimmers nearby when lowering the windlass.
- Do not use the windlass for lifting people aloft or any load carrying purposes for which the windlass was not design.

LUBRICATION

Recommended Lubricants	
IP	Mellana oil 460
ESSO	Spartan EP 460
AGIP	Blasia 460
MOBIL	Mobilgear 632
SHELL	Tivela SC320 / WB
synthetic	
BP	Energol GR-XP 460

An extreme Lithium based grease with anti-corrosion properties and suitable for marine applications is recommended. (eg BP Energrease MM-EP2)

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**

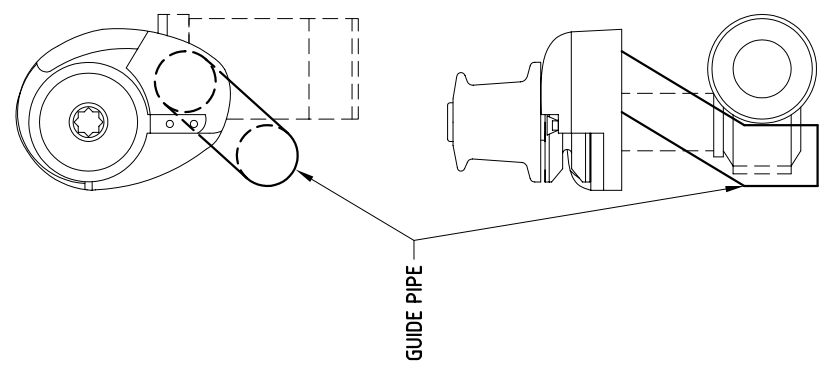
Customer Name :	Address / Contact :
Winch Model :	Serial No :
Date of Purchase :	
Supplier Name :	Address :

IF IT IS NECESSARY TO INSTALL THE MOTOR BENEATH THE CHAIN ACCESS HOLE. THEN A GUIDE PIPE IS REQUIRED TO PREVENT CHAIN FROM PILING ON THE MOTOR

RAISED BASE AND DRAINAGE HOLE PREVENTS EXCESS WATER FROM LYING AROUND THE SHAFT.

WATER GETS INTO THE GEARBOX THROUGH THE ADAPTOR, THIS OCCURS WHEN WATER FOLLOWS IN WITH THE CHAIN, AND THE CHAIN IN TURN MOVES AROUND WITH VESSEL MOTION.

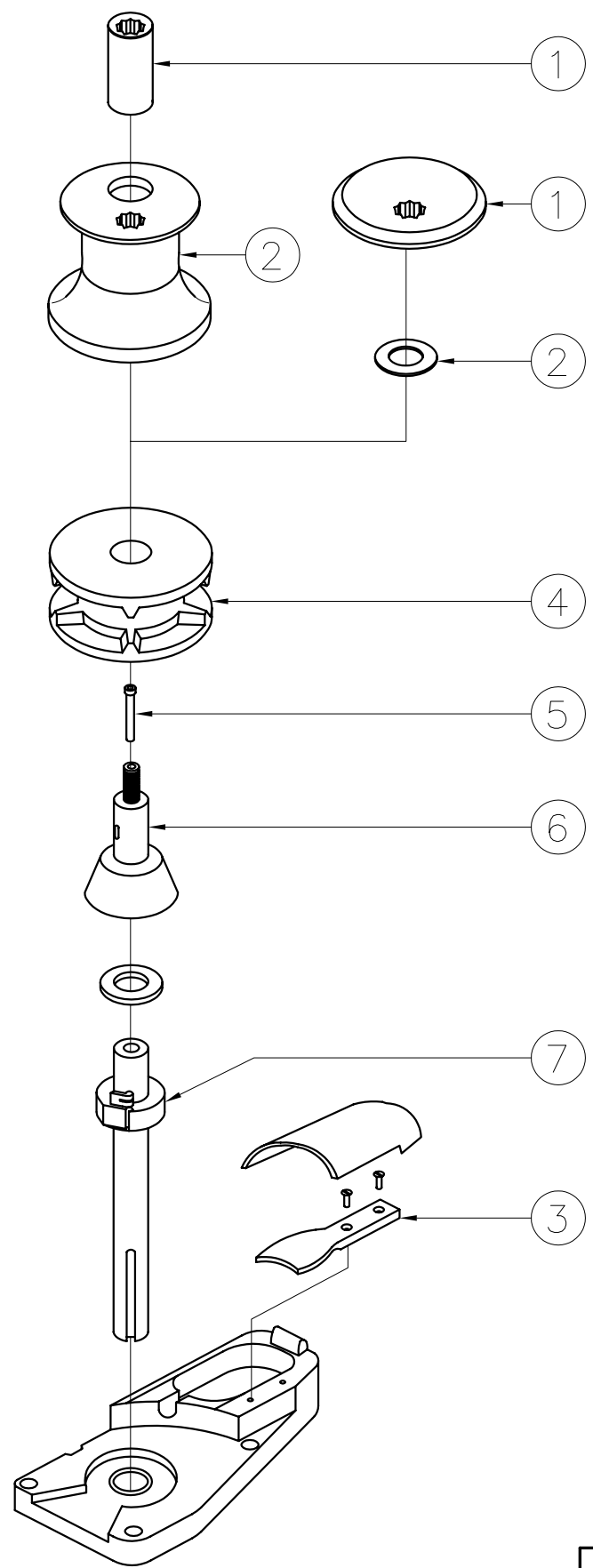
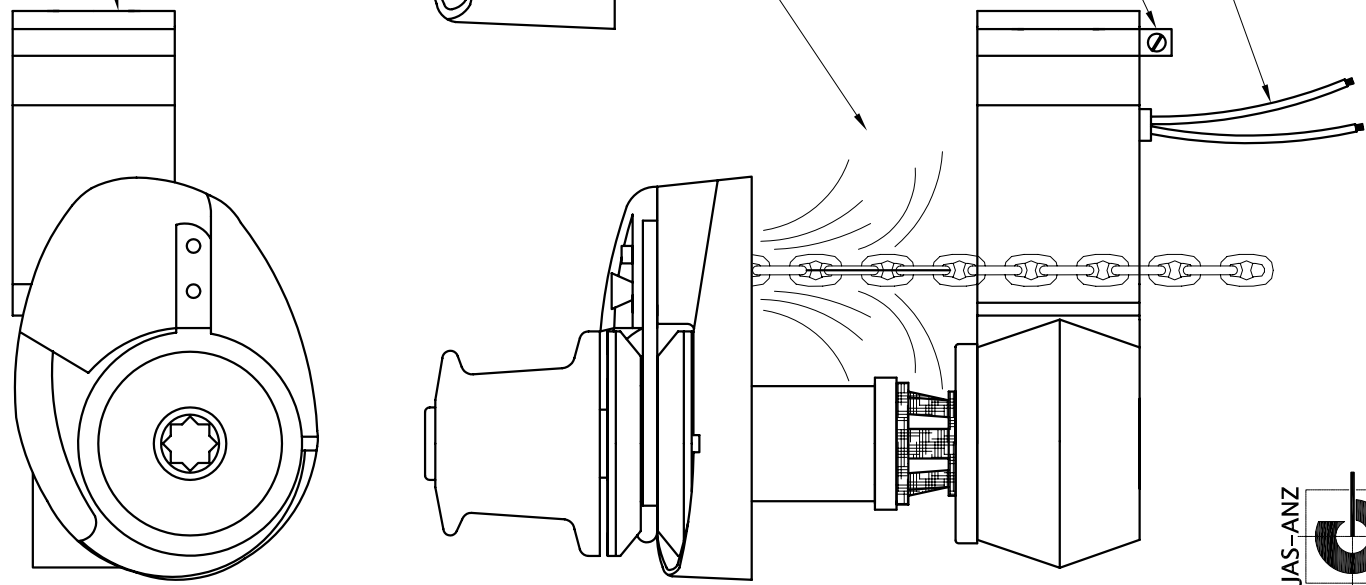
MOTOR END CAP CLAMP TO BOTTOM WIRES TO THE BOTTOM WHERE POSSIBLE



IMPORTANT
IT IS IMPORTANT TO THOROUGHLY LUBRICATE ALL MATING SURFACES WITH A GREASE SUITABLE FOR MARINE APPLICATIONS. AS THE WINDLASS WILL BE OPERATING IN AN EXTREMELY CORROSIVE ENVIRONMENT IT IS ALSO HIGHLY RECOMMENDED THAT CORROSION PROTECTION BE USED ON THE EXTERNAL SURFACES OF THE MOTOR, GEARBOX AND ADAPTER, AND ALSO IN ANY AREAS WHERE WATER MAY LIE (E.G. TOP OF GEARBOX OUTPUT SHAFT) TO PROTECT AGAINST MOISTURE IN THE CHAIN LOCKER. PRODUCTS SUCH AS TECHTYL UNDER BODY ANTI-CORROSION FILM AND DENSO GREASE TAPE ARE IDEAL FOR THIS APPLICATION.

muir WINDLASSES AUSTRALIA	
TITLE VERTICAL WINDLASS INSTALLATION WATER PROTECTION	
PART No.	
DRN A/JN	DRG No NCR253
SCALE NTS	APP1 APP2
SIZE A4	
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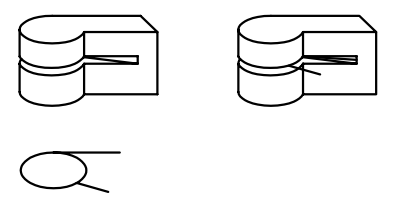
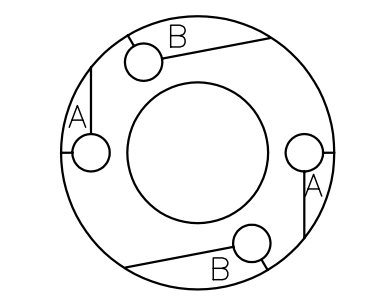
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X.	±
X.X	±
X.XX	±
UNLESS OTHERWISE SPECIFIED	
MATERIAL	
FINISH	



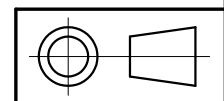
- ① REMOVE CLUTCH NUT (VRC)
REMOVE CLUTCH CAP (VR)
- ② REMOVE CAPSTAN ASSEMBLY (VRC)
REMOVE SPACER WASHER (VR)
- ③ REMOVE CHAIN PEELER
- ④ REMOVE GYPSY
- ⑤ REMOVE SHOULDER BOLT
(USE 1/8" ALLEN KEY)
- ⑥ LIFT OFF DRIVE SHAFT
- ⑦ EXCHANGE PAWLS AS SHOWN BELOW

FOR FIXED DRIVE
PLACE PAWLS IN SLOTS "A."

FOR RATCHET DRIVE
PLACE PAWLS IN SLOTS "B"
WITH SPRINGS.



PLACE STRAIGHT LEG OF SPRING AGAINST SLIT OF PAWL.



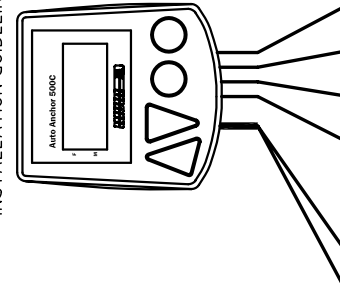
TOLERANCES (mm)	
X.	±
X.X	±
X.XX	±
UNLESS OTHERWISE SPECIFIED	
MATERIAL	
FINISH	

muir WINDLASSES AUSTRALIA	
TITLE ATLANTIC RATCHET PAWL MODELS FIXED TO RATCHET CHANGEOVER DIAGRAM	
PART No.	
DRN SA	DRG No DIAG0004
DATE 01/05/95	APP1 APP2
SCALE NTS	SIZE A4
© COPYRIGHT MUIR ENGINEERING PTY. LTD.	

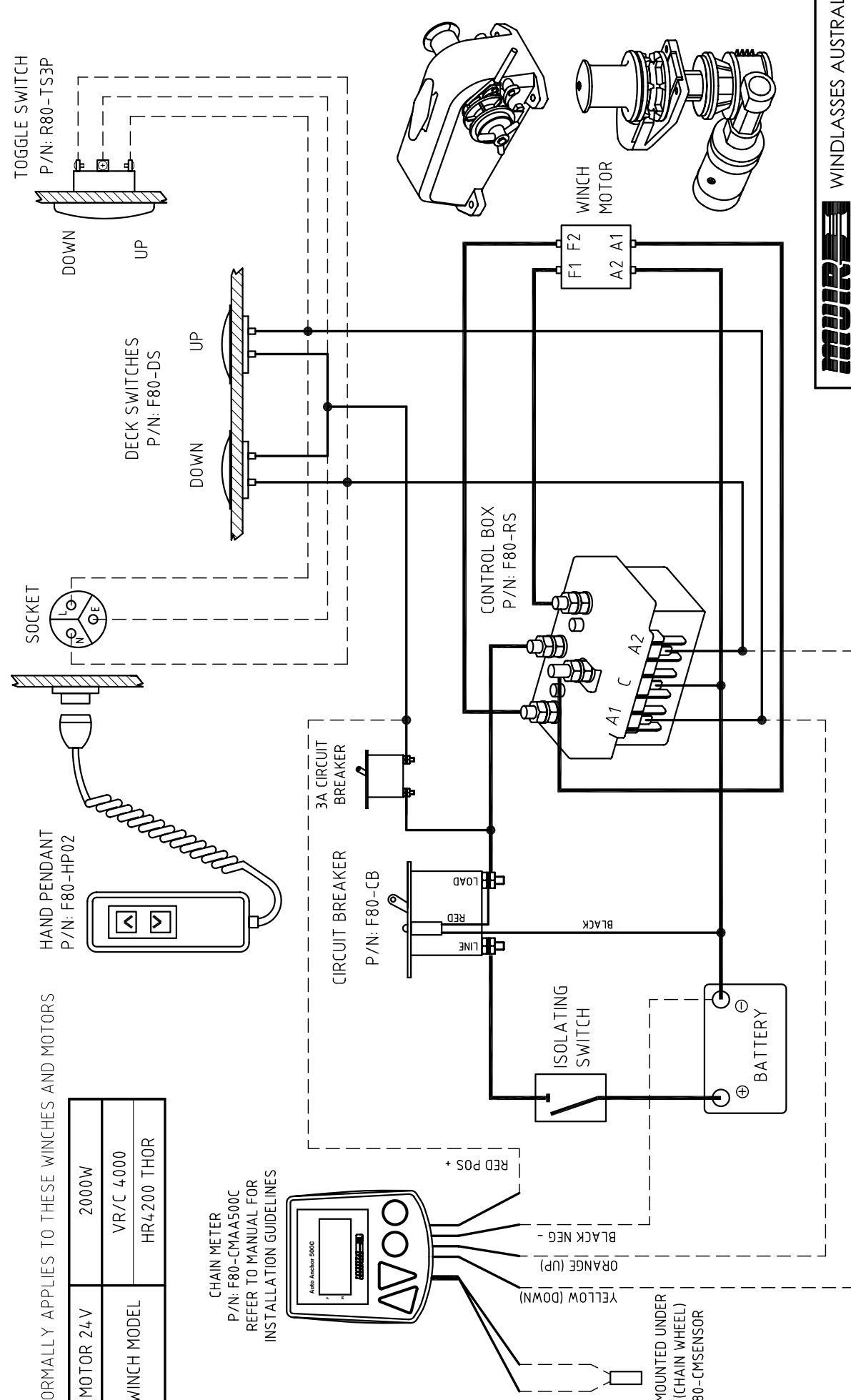
NORMALLY APPLIES TO THESE WINCHES AND MOTORS

MOTOR 24V	2000W
WINCH MODEL	VR/C 4,000 HR4,200 THOR

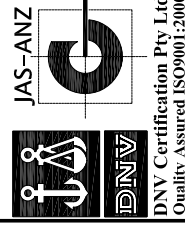
CHAIN METER
P/N: F80-CMAA500C
REFER TO MANUAL FOR
INSTALLATION GUIDELINES



SENSOR MOUNTED UNDER
GYPSY (CHAIN WHEEL)
P/N: F80-CMSSENSOR



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



MURR WINDLASSES AUSTRALIA

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

MATERIAL FINISH

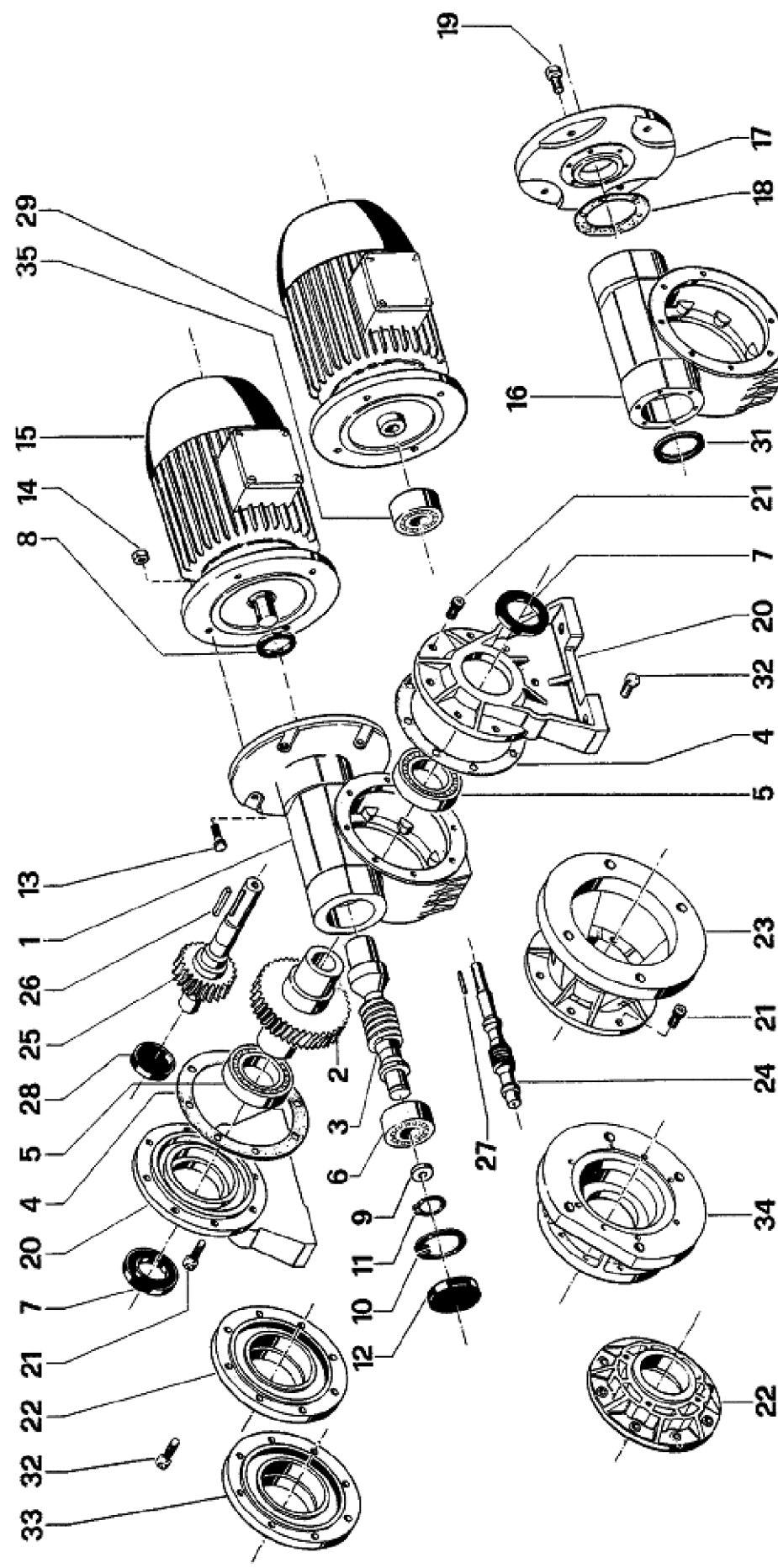
TITLE: FOUR TERMINAL MOTOR (REVERSING)
 WIRING DIAGRAM (POSITIVE ACTING SOLENOID)

PART No.

DRN: JK DATE: 11/10/00 DRG No: WIRE1077
 SCALE: NTS APP1: APP2 SIZE: A4

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GEARBOX PARTS REFERENCE



Item	Description	Gearbox	Winch
1	Housing—integrated Flange	44-49	VR/C500-850-1000-1200-1250
2	Wormwheel	44-49-63	VR/C500-850-1000-1200-1250
3	Wormshaft	44-49-63	VR/C500-850-1000-1200-1250
4	Gasket	44-49-63	VR/C500-850-1000-1200-1250
5	Bearing	44-49-63	VR/C500-850-1000-1200-1250
6	Bearing	44-49-63	VR/C500-850-1000-1200-1250
7	Oil Seal	44-49-63	VR/C500-850-1000-1200-1250
8	Oil Seal	44-49-63	VR/C500-850-1000-1200-1250
9	Spacer Ring	44-49-63	VR/C500-850-1000-1200-1250
10	Circlip	44-49-63	VR/C500-850-1000-1200-1250
11	Circlip	44-49-63	VR/C500-850-1000-1200-1250
12	Rubber Cap	44-49-63	VR/C500-850-1000-1200-1250
13	Hex Head Screw	44-49-63	VR/C500-850-1000-1200-1250
14	NUT	44-49-63	VR/C500-850-1000-1200-1250
15	Electric Motor	44-49-63	VR/C500-850-1000-1200-1250

Item	Description	Gearbox	Winch
16	Housing	63	VR/C2500-3500
17	Motor Flange	63	VR/C2500-3500
18	Gasket	63	VR/C2500-3500
19	Hex Head Screw	63	VR/C2500-3500
21	Socket Head Screw	63	VR/C2500-3500
31	Spacer Ring	63	VR/C2500-3500
32	Hex Head Screw	63	VR/C2500-3500
33	Plain cover	63	VR/C2500-3500
34	F.C. Cover	63	VR/C2500-3500

Note: Gaskets, Seals and Bearings are supplied in kit form.

ITEM	PART NUMBER	DESCRIPTION	QTY
1	P07-CLNBRZVRC02500A	CLUTCH NUT BRONZE VRC2500A	1
2	K06-CAPVRC02500A	CAPSTAN ASSEMBLY VRC2500A	1
3	K06-SFTVRC02500MOR	SHAFT ASSEMBLY VRC2500A MORS	1
4	R41-ORG0380351.8	O RING SEAL 38.5X35X1.75	1
5	R42-SEA052035.007.0	SEAL 35 X 52 X 7.0 (TC12522)	1
6	P19-STR3042500A	STRIPPER SS304 VRC2500A	1
7	P22-BSBRZ02500A	BASE BRONZE VRC2500A	1
8	S13-30409.52038	BOLT HEX HD SS304 0-3/8 X 1-1/2 INCH	4
9	S45-30407.94044	SCREW SHCS SS304 5/16 X 1-3/4 INCH	5
10	R43-NIP3036.35UNFST	GREASE NIPPLE SS303 1/4"UNF STRAIGHT	1
11	S33-30406.35013	SCREW CSK SL MT 304 0-1/4 X 1/2 INCH	2
12	R41-ORG04503803.5	O RING SEAL 45 X 38 X 3.5 (BS222)	1
13	S76-30409.52	WASHER SPRING SS304 3/8 INCH	4
14	S20-30409.52	NUT HEX SS304 0-3/8 INCH	4
15	P21-NOV50.8035.203	WASHER NOVASTEEN 2" X 1 3/8" X 3	1
16	S76-30412.70	WASHER SPRING SS304 1/2 INCH	4
17	S75-30412.70025	WASHER FLAT SS304 1/2 INCH X 1 INCH	4
18	S20-30412.70UNC	NUT HEX SS304 0-1/2 INCH UNC	4
19	P24-STD3042500A	STUD SS304 VRC2500A	4
20	P05-PLRBRZ2500A	PEELER BRONZE VRC2500A	1
21	S45-30407.94019	SCREW SHCS SS304 5/16 X 0-3/4 INCH	1
22	P05-CCVBRZ2500A	CHAIN COVER BRONZE VRC2500A	1
23	P15-PIN30412.7X32	PIN - CHAIN COVER ATL 1/2X5/16/1-1/4"	1
24	R40-FGRPVC0850A	FINGER PVC VRC850A	1
25	S36-SPR304FGRATL	SPRING FINGER ATLANTICS	1
26	S35-30406.38BSW006	SCREW GRUB 304 0-1/4 BSW X 0-1/4 INCH	2
27	P15-PIN30419.05X27	PIN - FINGER ATLANTICS	1
28	F90-HANHDPE200	HANDLE HDPE 8" (200mm)	1
29	P01-DADPO63FC02500A	ADAPTOR ALLOY VF63FC - VRC2500 ATLANTIC	1
30	S46-3047.9425.4	SCREW THUMB SS304 5/16 X 1"	1
31	R41-ORG01100701.8	O RING SEAL 11 X ID7.5 X 1.75 (BS011)	1
32	P08-CNEBRZVRC2500	CONE RATCHET BRONZE VRC2500	1
33	S47-30406.4019.1005	SCREW SHOULDER SS304 1/4 X 3/4 X 3/16"	1
34	S75-30408.0016	WASHER FLAT SS304 5/16 X 5/8"	5
35	S76-30407.94	WASHER SPRING SS304 5/16 INCH	5
36	P21-BRS050.0010.503	WASHER BRASS 50 X 10.5 X 3MM	1
37	S76-30410.00	WASHER SPRING SS304 10MM	1
38	S36-30410.00025	SCREW HEX HD SS304 10MM X 25MM	1

A GYPSY
B MOTOR / GEARBOX ASSEMBLY

WINDLASSES AUSTRALIA

ATLANTIC VRC2500/3500 (MORS)
EXPLODED VIEW

PART No. **K08-ATLVR2500MORS**

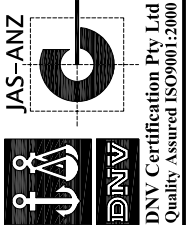
DRN **A/JN** DATE **04/04/00** DRG No. **K08-ATLVR2500MORS** SIZE **A4**

SCALE **NTS** APP1 APP2

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

MATERIAL FINISH

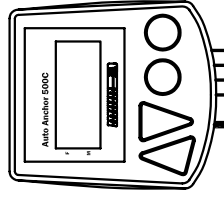
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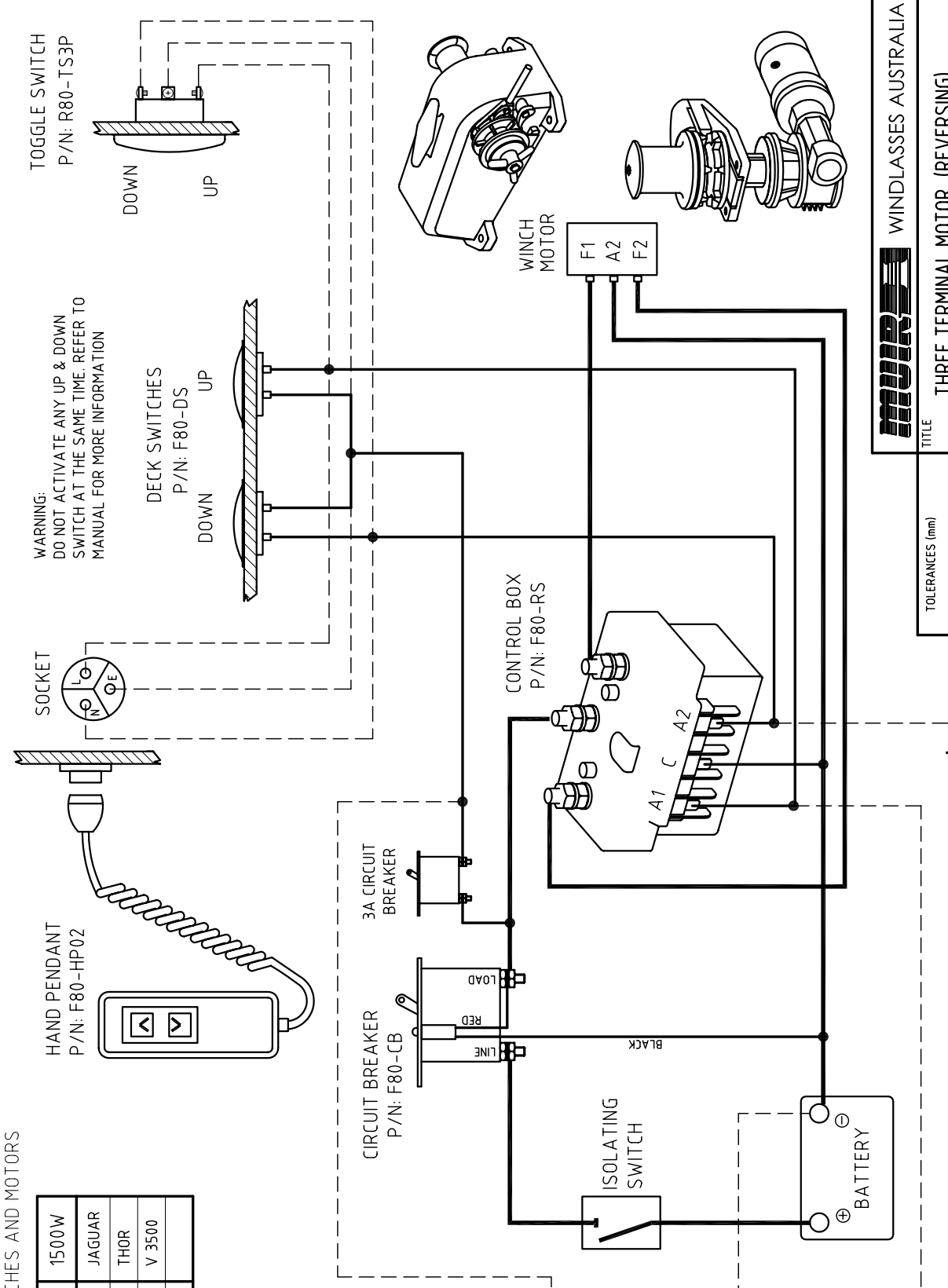
NORMALLY APPLIES TO THESE WINCHES AND MOTORS

MOTOR 12/24V	1000W	1200W	1500W
WINCH MODEL	COUGAR	CHEETAH	JAGUAR
	V 1000	V 1200	THOR
	V 1050	V 2200	V 3500
	V 1250	V 2500	

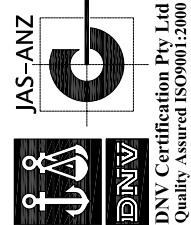
CHAIN METER
P/N: F80-CMAA500C
REFER TO MANUAL FOR
INSTALLATION GUIDELINES



SENSOR MOUNTED UNDER
GYPSY (CHAIN WHEEL)
P/N: F80-CMSENSOR



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



WINDLASSES AUSTRALIA

THREE TERMINAL MOTOR (REVERSING)
WIRING DIAGRAM (POSITIVE ACTING SOLENOID)

PART No.

DRN **JK** DATE **25/11/02** DRG No. **WIRE1075** SIZE **A4**

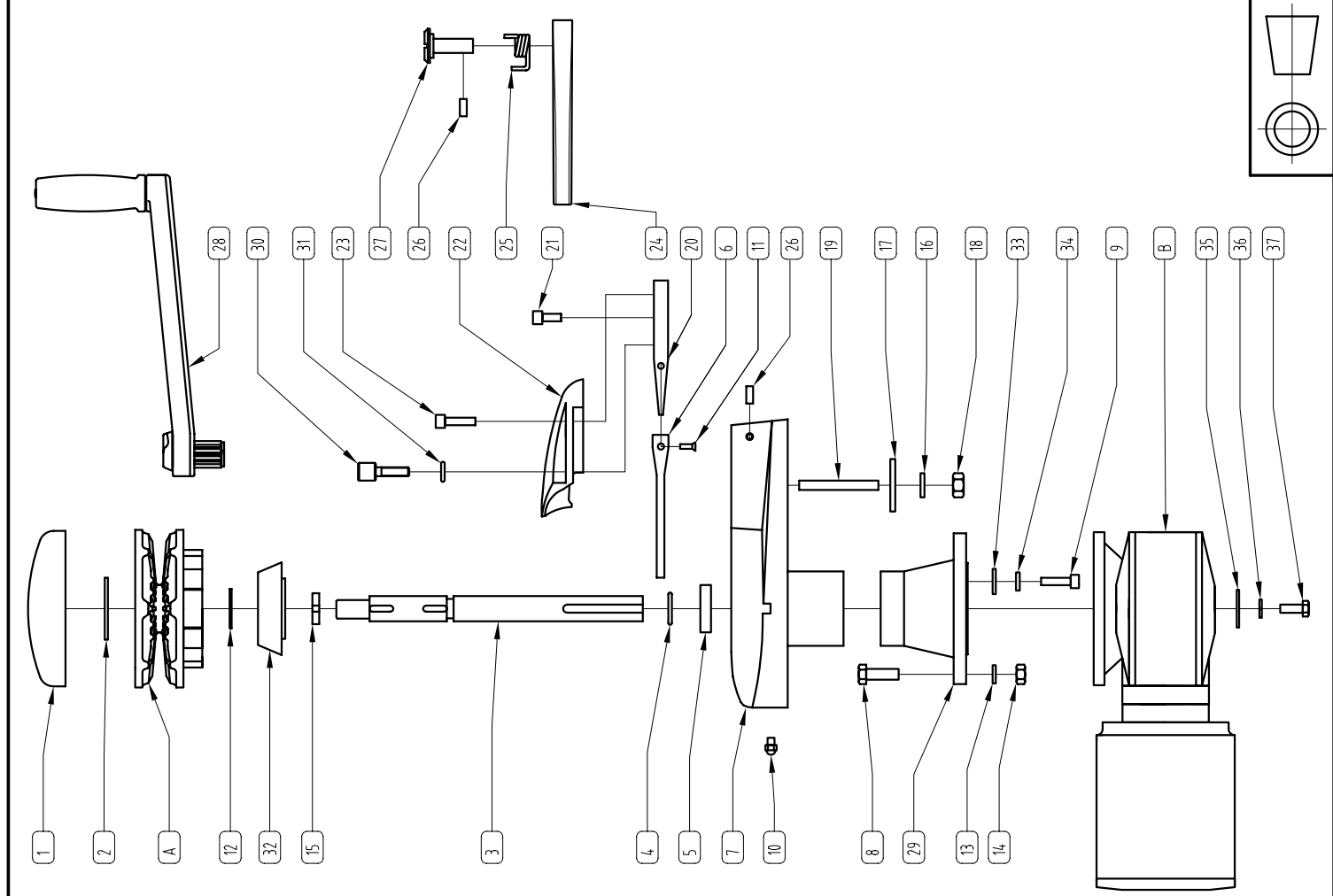
SCALE **NTS** APP1 APP2

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

MATERIAL FINISH

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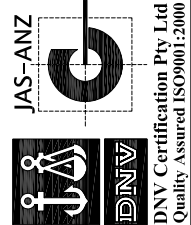
ITEM	PART NUMBER	DESCRIPTION	QTY
1	P07-CLNBRZVR02500A	CLUTCH NUT BRONZE VR2500A	1
2	P23-316063.5025.406	D' WASHER SS316 2 1/2" x 1" x 6MM	1
3	K06-SFTVR02500A	SHAFT ASSEMBLY VR2500A	1
4	R41-ORG0380351.8	O' RING SEAL 38.5X35X1.75	1
5	R42-SE A 052035.007.0	SEAL 35 X 52 X 7.0 (TC12522)	1
6	P19-STR3042500A	STRIPPER SS304 VR/C2500A	1
7	P22-BSEBRZ02500A	BASE BRONZE VR/C2500A	1
8	S13-30409.52038	BOLT HEX HD SS304 0-3/8 X 1-1/2 INCH	4
9	S45-30407.94044	SCREW SHCS SS304 5/16 X 1-3/4 INCH	5
10	R43-NIP3036.35UNFST	GREASE NIPPLE SS303 1/4" UNF STRAIGHT	1
11	S33-30406.35013	SCREW_CSK SL MT 304 0-1/4 X 1/2 INCH	2
12	S94-CIR30434.93	CIRCLIP 304SS	1
13	S76-30409.52	WASHER SPRING SS304 3/8 INCH	4
14	S20-30409.52	NUT HEX SS304 0-3/8 INCH	4
15	P16-RNG303VRC2500A	SPLIT RING 303 VRC2500A	1
16	S76-30412.70025	WASHER SPRING SS304 1/2 INCH	4
17	S75-30412.70025	WASHER FLAT SS304 1/2 INCH X 1 INCH	4
18	S20-30412.70UNC	NUT HEX SS304 0-1/2 INCH UNC	4
19	P24-STD3042500A	STUD SS304 VR/C2500A	4
20	P05-PLRBRZ2500A	PEELER BRONZE VR/C2500A	1
21	S45-30407.94019	SCREW SHCS SS304 5/16 X 0-3/4 INCH	1
22	P05-CCVBRZ2500A	CHAIN COVER BRONZE VR/C2500A	1
23	P15-PIN30412.7X32	PIN - CHAIN COVER ATL 1/2X5/16/1-1/4"	1
24	R40-FGRPVC0850A	FINGER PVC VR/C850A	1
25	S36-SPR304FGRATL	SPRING FINGER ATLANTICS	1
26	S35-30406.35BSW006	SCREW GRUB 304 0-1/4 BSW X 0-1/4 INCH	2
27	P15-PIN30419.05X27	PIN - FINGER ATLANTICS	1
28	F90-HANHDPE 200	HANDLE HDPE 8" (200mm)	1
29	P01-DADP063FC02500A	ADAPTOR ALLOY VF63FC - VR/C2500 ATLANTIC	1
30	S46-3047.9425.4	SCREW THUMB SS304 5/16" X 1"	1
31	R41-ORG01100701.8	O' RING SEAL 11 X ID7.5 X 1.75 (BS011)	1
32	P08-CNEBRZ2500A	CONE BRONZE VR/C2500A	1
33	S75-30408.0016	WASHER FLAT SS304 5/16 x 5/8"	5
34	S76-30407.94	WASHER SPRING SS304 5/16 INCH	5
35	P21-BRS050.0010.503	WASHER BRASS 50 X 10.5 X 3MM	1
36	S76-30410.00	WASHER SPRING SS304 10MM	1
37	S36-30410.00025	SCREW HEX HD SS304 10MM X 25MM	1



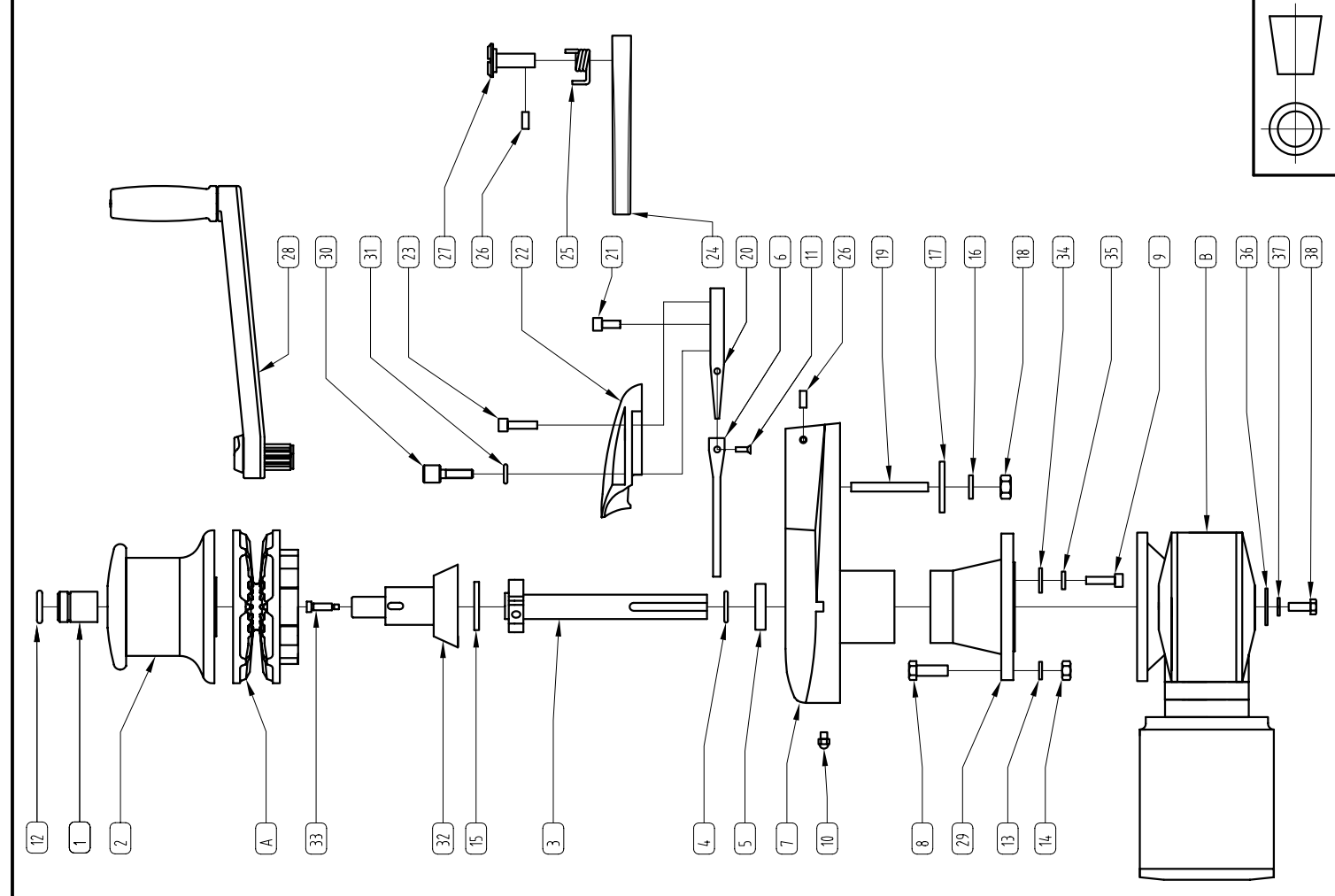
A GYPSY
B MOTOR / GEARBOX ASSEMBLY

WINDLASSES AUSTRALIA	
TITLE ATLANTIC VR2500/3500 EXPLODED VIEW	
PART No. K08-ATLVR2500	
DRN AJN	DATE 04/04/00
SCALE NTS	APP1
	APP2
	SIZE A4
© COPYRIGHT MUJER ENGINEERING PTY. LTD. 2	

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



ITEM	PART NUMBER	DESCRIPTION	QTY
1	P07-CLNBRZVR02500A	CLUTCH NUT BRONZE VRC2500A	1
2	K06-CAPVRC02500A	CAPSTAN ASSEMBLY VRC2500A	1
3	K06-SFTVR02500MORL	SHAFT ASSEMBLY VRC2500A MORS LEFT HAND	1
4	R41-ORG0380351.8	O' RING SEAL 38.5X35X1.75	1
5	R42-SE A 052035.007.0	SEAL 35 X 52 X 7.0 (TC12522)	1
6	P19-STR3042500A	STRIPPER SS304 VR/C2500A	1
7	P22-BSEBRZ02500AM	BASE BRONZE VR/C2500A MIRROR	1
8	S13-30409.52038	BOLT HEX HD SS304 0-3/8 X 1-1/2 INCH	4
9	S45-30407.94044	SCREW SHCS SS304 5/16 X 1-3/4 INCH	5
10	R43-NIP3036.35UNFST	GREASE NIPPLE SS303 1/4" UNF S STRAIGHT	1
11	S33-30406.35013	SCREW_CSK SL MT 304 0-1/4 X 1/2 INCH	2
12	R41-ORG045038003.5	O' RING SEAL 45 X 38 X 3.5 (BS222)	1
13	S76-30409.52	WASHER SPRING SS304 3/8 INCH	4
14	S20-30412.70UNC	NUT HEX SS304 0-1/2 INCH UNC	4
15	P21-NOV50.8035.203	WASHER NOVASTEEN 2" X 1 3/8" X 3	1
16	S76-30412.70	WASHER SPRING SS304 1/2 INCH	4
17	S75-30412.70025	WASHER FLAT SS304 1/2 INCH X 1 INCH	4
18	S20-30412.70UNC	NUT HEX SS304 0-1/2 INCH UNC	4
19	P24-STD3042500A	STUD SS304 VR/C2500A	4
20	P05-PLRBRZ2500AM	PEELER BRONZE VR/C2500A MIRROR	1
21	S45-30407.94019	SCREW SHCS SS304 5/16 X 0-3/4 INCH	1
22	P05-CCVBRZ2500AM	CHAIN COVER BRONZE VR/C2500A MIRROR	1
23	P15-PIN30412.7X32	PIN - CHAIN COVER ATL 1/2X5/16/1-1/4"	1
24	R40-FGRPVC0850A	FINGER PVC VR/C850A	1
25	S36-SPR304FGRATL	SPRING FINGER ATLANTICS	1
26	S35-30406.35BSW006	SCREW GRUB 304 0-1/4 BSW X 0-1/4 INCH	2
27	P15-PIN30419.05X27	PIN - FINGER ATLANTICS	1
28	F90-HANHDPE 200	HANDLE HDPE 8" (200mm)	1
29	P01-DADP063FC02500A	ADAPTOR ALLOY VF63FC - VR/C2500 ATLANTIC	1
30	S46-3047.9425.4	SCREW THUMB SS304 5/16" X 1"	1
31	R41-ORG01100701.8	O' RING SEAL 11 X ID7.5 X 1.75 (BS011)	1
32	P08-CNEBRZVR02500L	CONE RATCHET BRONZE VRC2500 LEFT HAND	1
33	S47-30406.4019.1005	SCREW SHOULDER SS304 1/4 X 3/4 X 3/16"	1
34	S75-30408.0016	WASHER FLAT SS304 5/16 x 5/8"	5
35	S76-30407.94	WASHER SPRING SS304 5/16 INCH	5
36	P21-BRS050.0010.503	WASHER BRASS 50 X 10.5 X 3MM	1
37	S76-30410.00	WASHER SPRING SS304 10MM	1
38	S36-30410.00025	SCREW HEX HD SS304 10MM X 25MM	1

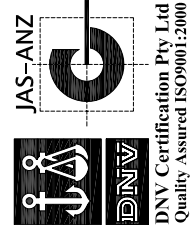


NOTE: WHEN REFERENCING MOTOR/GEARBOX ASSEMBLY PLEASE SPECIFY "LEFT HAND UNIT"

A GYPSY
B MOTOR / GEARBOX ASSEMBLY (LEFT HAND UNIT)


WINDLASSES AUSTRALIA	
TITLE ATLANTIC VRC2500/3500 MORS L/HAND EXPLODED VIEW	
PART No. K08-ATLVR2500MORSL	
DRN AJN	DATE 01/03/02
SCALE NTS	APP1
	APP2
	SIZE A4
© COPYRIGHT MUJER ENGINEERING PTY. LTD. 1	

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

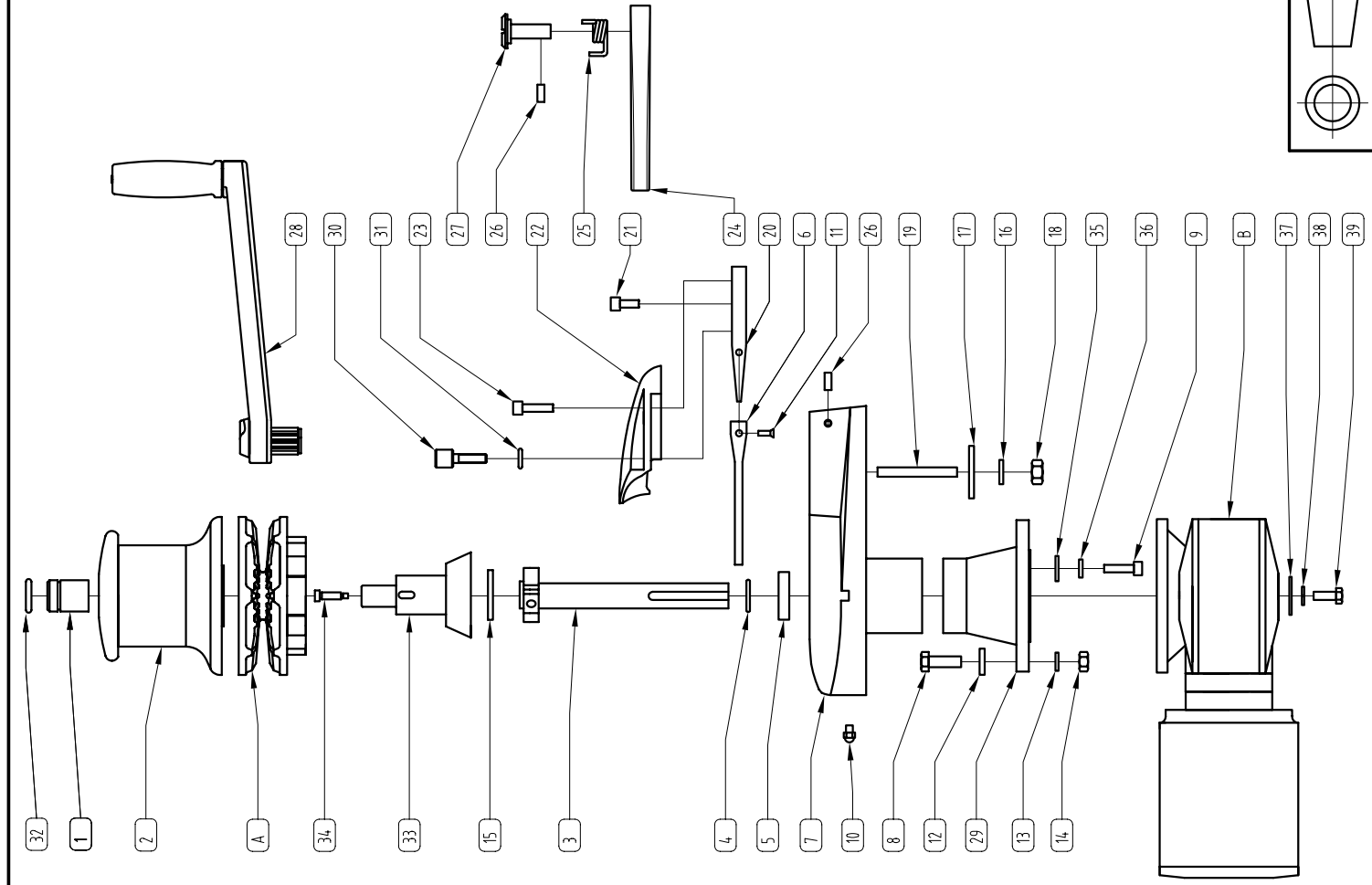


ITEM	PART NUMBER	DESCRIPTION	QTY
1	P07-CLNBRZVRC04000A	CLUTCH NUT BRONZE VRC4000A	1
2	K06-CAPVRC04000A	CAPSTAN ASSEMBLY VRC4000A	1
3	K06-SFTVRC04000A	SHAFT ASSEMBLY VRC4000A	1
4	R41-ORG0380351.8	O RING SEAL 38.5X35X1.75	1
5	R42-SE A 052035.007.0	SEAL 35 X 52 X 7.0 (TC12522)	1
6	P19-STR3042500A	STRIPPER SS304 VRC2500A	1
7	P22-BS EBRZ02500A	BASE BRONZE VRC2500A	1
8	S13-31612.00050	BOLT HEX HD SS316 12MM X 50MM	4
9	S45-30407.94038	SCREW SHCS SS304 5/16 X 1-1/2 INCH	5
10	R43-NIP3036.35UNFST	GREASE NIPPLE SS303 1/4" UNF STRAIGHT	1
11	S33-30406.35013	SCREW CSK SL MT 304 0-1/4 X 1/2 INCH	2
12	S75-31612.00	WASHER FLAT SS316 12MM	4
13	S76-31612.00	WASHER SPRING SS316 12MM	4
14	S20-31612.00	NUT HEX SS316 12MM	4
15	P21-NOV50.8035.203	WASHER NOVASTEEN 2" X 1 3/8" X 3	1
16	S76-30412.70025	WASHER SPRING SS304 1/2 INCH	4
17	S75-30412.70025	WASHER FLAT SS304 1/2 INCH X 1 INCH	4
18	S20-30412.70UNC	NUT HEX SS304 0-1/2 INCH UNC	4
19	P24-STD3042500A	STUD SS304 VRC2500A	4
20	P05-PLRBRZ2500A	PEELER BRONZE VRC2500A	1
21	S45-30407.94019	SCREW SHCS SS304 5/16 X 0-3/4 INCH	1
22	P05-CCVBRZ2500A	CHAIN COVER BRONZE VRC2500A	1
23	P15-PIN30412.7X32	PIN - CHAIN COVER ATL 1/2X5/16/1-1/4"	1
24	R40-FGRPVC0850A	FINGER PVC VRC850A	1
25	S36-SPR304FGRATL	SPRING FINGER ATLANTICS	1
26	S35-30406.35BSW006	SCREW GRUB 304 0-1/4 BSW X 0-1/4 INCH	2
27	F90-HANHDPE200	PIN - FINGER ATLANTICS	1
28	P01-DADP086FC02500A	ADAPTOR ALLOY VF86FC - VRC2500 ATLANTIC	1
29	S46-3047.9425.4	SCREW THUMB SS304 5/16 "X 1"	1
30	R41-ORG01100701.8	O RING SEAL 11 X ID7.5 X 1.75 (BS011)	1
31	R41-ORG04503803.5	O RING SEAL 45 X 38 X 3.5 (BS222)	1
32	P08-CNEBRZVRC2500	CONE RATCHET BRONZE VRC2500	1
33	S47-30406.4019.1005	SCREW SHOULDER SS304 1/4 X 3/4 X 3/16"	1
34	S75-30408.0016	WASHER FLAT SS304 5/16 x 5/8"	5
35	S76-30407.94	WASHER SPRING SS304 5/16 INCH	5
36	P21-BRS050.0010.503	WASHER BRASS 50 X 10.5 X 3MM	1
37	S76-30410.00	WASHER SPRING SS304 10MM	1
38	S76-30410.00	WASHER SPRING SS304 10MM	1
39	S36-30410.00025	SCREW HEX HD SS304 10MM X 25MM	1

A GYPSY
B MOTOR / GEARBOX ASSEMBLY


 WINDLASSES AUSTRALIA	
TITLE ATLANTIC VRC4000 (MORS) EXPLODED VIEW	
PART No. K08-ATLVR4000	
DRN AJN	DATE 04/04/00
SCALE NTS	APP1 APP2
DRG No. K08-ATLVR4000	
SIZE A4	
FINISH © COPYRIGHT MUIR ENGINEERING PTY. LTD.	

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

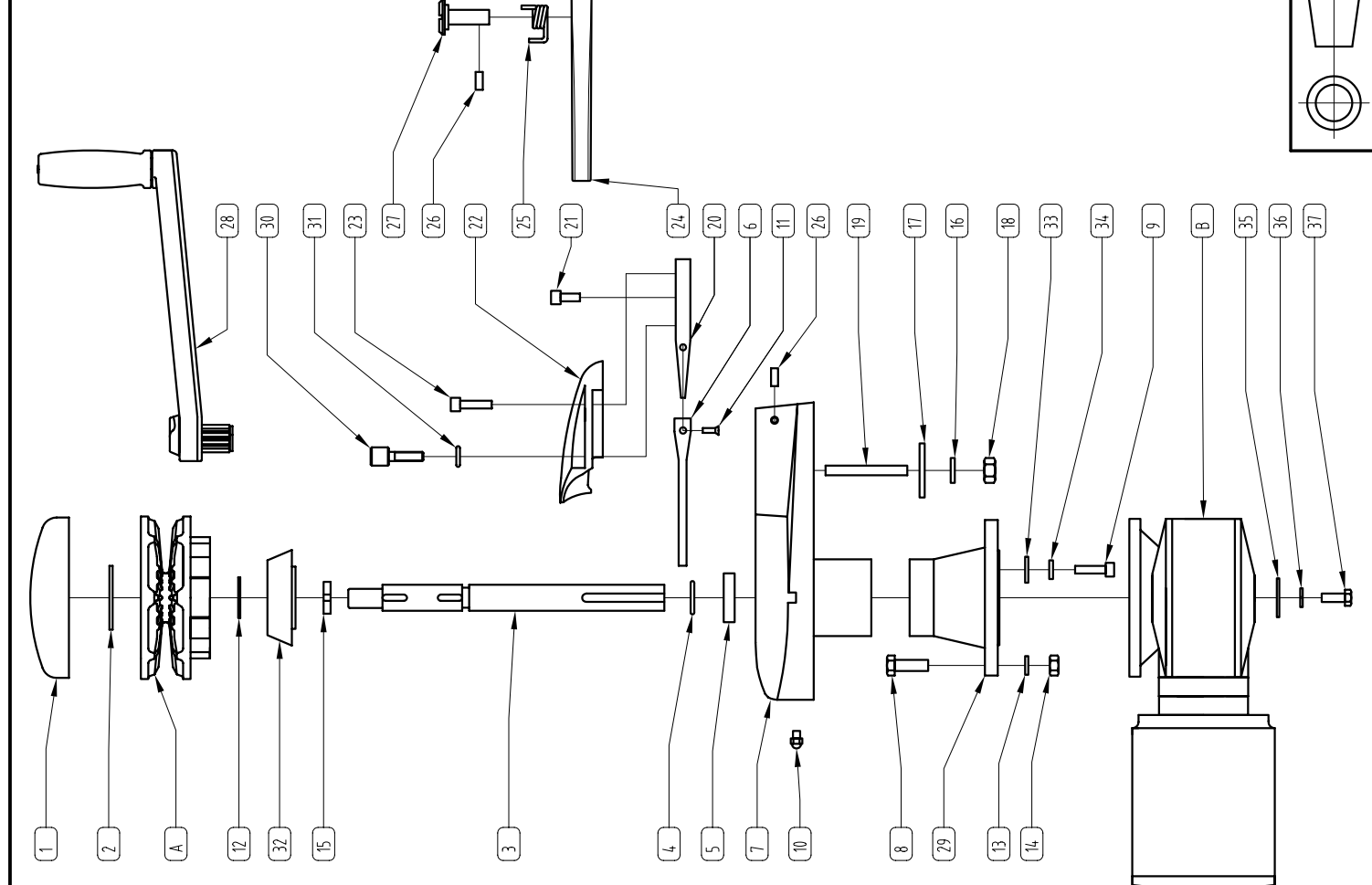


ITEM	PART NUMBER	DESCRIPTION	QTY
1	P07-CLNBRZVRC02500A	CLUTCH NUT BRONZE VRC2500A	1
2	P23-316063.5025.406	D WASHER SS316 2 1/2" x 1" x 6MM	1
3	K06-SFTVRC02500A	SHAFT ASSEMBLY VRC2500A	1
4	R41-ORG0380351.8	O RING SEAL 38.5X35X1.75	1
5	R42-SE A 052035.007.0	SEAL 35 X 52 X 7.0 (TC12522)	1
6	P19-STR3042500A	STRIPPER SS304 VRC2500A	1
7	P22-BS EBRZ02500AM	BASE BRONZE VRC2500A MIRROR	1
8	S13-30409.52038	BOLT HEX HD SS304 0-3/8 X 1-1/2 INCH	4
9	S45-30407.94044	SCREW SHCS SS304 5/16 X 1-3/4 INCH	5
10	R43-NIP3036.35UNFST	GREASE NIPPLE SS303 1/4" UNF STRAIGHT	1
11	S33-30406.35013	SCREW CSK SL MT 304 0-1/4 X 1/2 INCH	2
12	S94-CIR30434.93	CIRCLIP 304SS	1
13	S76-30409.52	WASHER SPRING SS304 3/8 INCH	4
14	S20-30409.52	NUT HEX SS304 0-3/8 INCH	4
15	P16-RNG303VRC2500A	SPLIT RING 303 VRC2500A	1
16	S76-30412.70	WASHER SPRING SS304 1/2 INCH	4
17	S75-30412.70025	WASHER FLAT SS304 1/2 INCH X 1 INCH	4
18	S20-30412.70UNC	NUT HEX SS304 0-1/2 INCH UNC	4
19	P24-STD3042500A	STUD SS304 VRC2500A	4
20	P05-PLRBRZ2500AM	PEELER BRONZE VRC2500A MIRROR	1
21	S45-30407.94019	SCREW SHCS SS304 5/16 X 0-3/4 INCH	1
22	P05-CCVBRZ2500AM	CHAIN COVER BRONZE VRC2500A MIRROR	1
23	P15-PIN30412.7X32	PIN - CHAIN COVER ATL 1/2X5/16/1-1/4"	1
24	R40-FGRPVC0850A	FINGER PVC VRC850A	1
25	S36-SPR304FGRATL	SPRING FINGER ATLANTICS	1
26	S35-30406.35BSW006	SCREW GRUB 304 0-1/4 BSW X 0-1/4 INCH	2
27	P15-PIN30419.05X27	PIN - FINGER ATLANTICS	1
28	F90-HANHDPE200	HANDLE HDPE 8" (200mm)	1
29	P01-DADP063FC02500A	ADAPTOR ALLOY VF63FC - VRC2500 ATLANTIC	1
30	S46-3047.9425.4	SCREW THUMB SS304 5/16 "X 1"	1
31	R41-ORG01100701.8	O RING SEAL 11 X ID7.5 X 1.75 (BS011)	1
32	P08-CNEBRZ2500A	CONE BRONZE VRC2500A	1
33	S75-30408.0016	WASHER FLAT SS304 5/16 x 5/8"	5
34	S76-30407.94	WASHER SPRING SS304 5/16 INCH	5
35	P21-BRS050.0010.503	WASHER BRASS 50 X 10.5 X 3MM	1
36	S76-30410.00	WASHER SPRING SS304 10MM	1
37	S36-30410.00025	SCREW HEX HD SS304 10MM X 25MM	1

A GYPSY
B MOTOR / GEARBOX ASSEMBLY

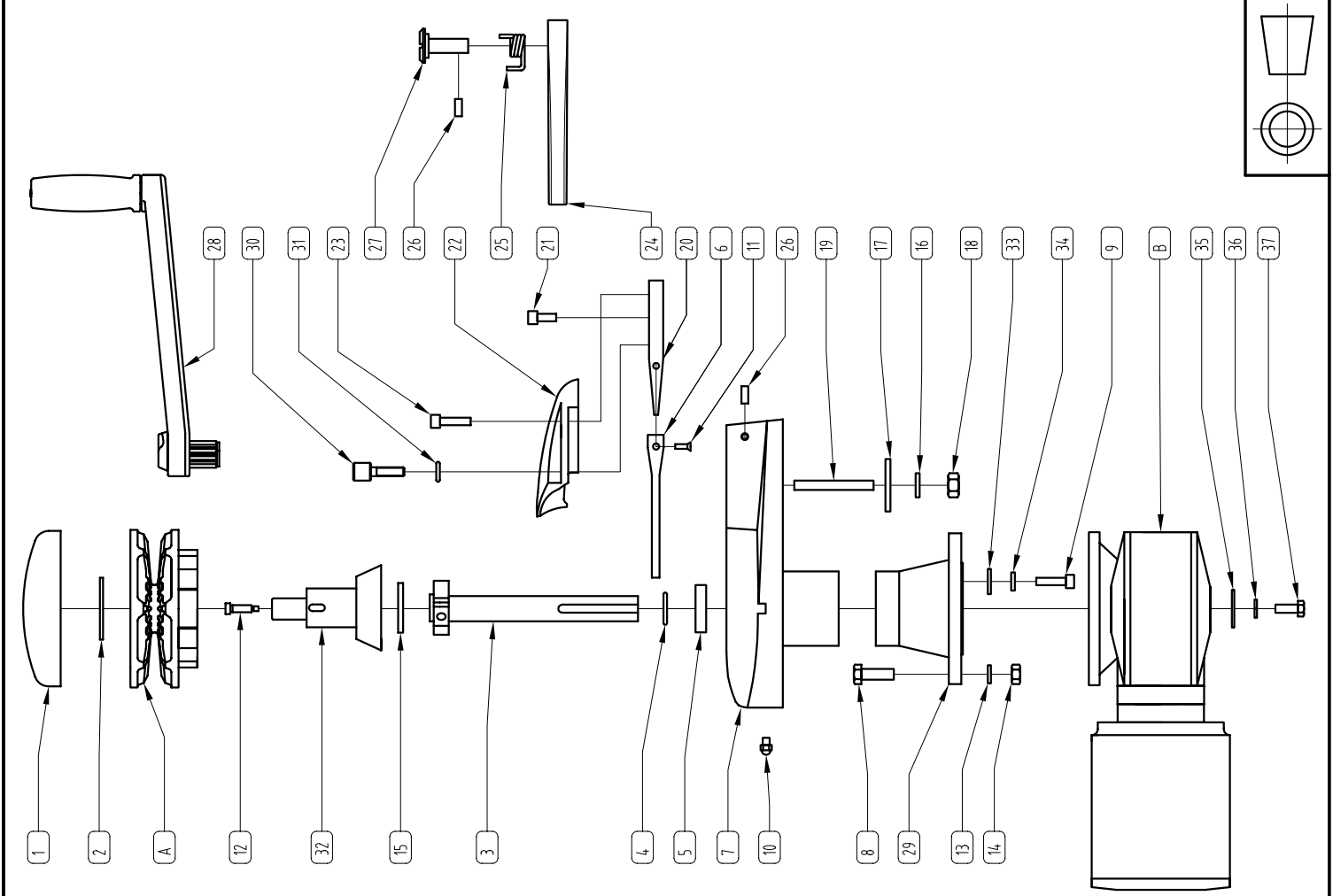
 WINDLASSES AUSTRALIA	
TITLE ATLANTIC VR2500/3500 LEFT HAND EXPLODED VIEW	
PART No. K08-ATLVR2500M	
DRN AC	DATE 21/09/04
SCALE NTS	APP1 APP2
DRG No. K08-ATLVR2500M	
SIZE A4	
FINISH © COPYRIGHT MUIR ENGINEERING PTY. LTD.	

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



NOTE: WHEN REFERENCING MOTOR/GEARBOX ASSEMBLY PLEASE SPECIFY "LEFT HAND UNIT"

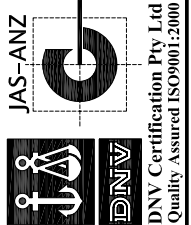
ITEM	PART NUMBER	DESCRIPTION	QTY
1	P07-CLNBRZVR02500A	CLUTCH NUT BRONZE VR2500A	1
2	P23-316063.5025.406	D'WASHER SS316 2 1/2" x 1" x 6MM	1
3	K06-SFTVVR02500MOR	SHAFT ASSEMBLY VR2500A MORS	1
4	R41-ORG0380351.8	O'RING SEAL 38.5X35X1.75	1
5	R42-SEA052035.007.0	SEAL 35 X 52 X 7.0 (TC12522)	1
6	P19-STR3042500A	STRIPPER SS304 VR/C2500A	1
7	P22-BSEBR202500A	BASE BRONZE VR/C2500A	1
8	S13-30409.52038	BOLT HEX HD SS304 0-3/8 X 1-1/2 INCH	4
9	S45-30407.94044	SCREW SHCS SS304 5/16 X 1-3/4 INCH	5
10	R43-NIP3036.35UNFST	GREASE NIPPLE SS303 1/4 UNF STRAIGHT	1
11	S33-30406.35013	SCREW GSK SL MT 304 0-1/4 X 1/2 INCH	2
12	S47-30406.4057.2005	SCREW SHOULDER SS304 1/4 X 1 1/4 X 3/16"	1
13	S76-30409.52	WASHER SPRING SS304 3/8 INCH	4
14	S20-30409.52	NUT HEX SS304 0-3/8 INCH	4
15	P21-NOV50.8035.203	WASHER NOVASTEEN 2" X 1 3/8" X 3	1
16	S76-30412.70	WASHER SPRING SS304 1/2 INCH	4
17	S76-30412.70025	WASHER FLAT SS304 1/2 INCH X 1 INCH	4
18	S20-30412.70UNC	NUT HEX SS304 0-1/2 INCH UNC	4
19	P24-STD3042500A	STUD SS304 VR/C2500A	4
20	P05-PLRBRZ2500A	PEELER BRONZE VR/C2500A	1
21	S45-30407.94019	SCREW SHCS SS304 5/16 X 0-3/4 INCH	1
22	P05-CCVBRZ2500A	CHAIN COVER BRONZE VR/C2500A	1
23	P15-PIN30412.7X32	PIN - CHAIN COVER ATL 1/2X5/16/1-1/4"	1
24	R40-FGRPVC0850A	FINGER PVC VR/C850A	1
25	S36-SPR304FGRATL	SPRING FINGER ATLANTICS	1
26	S35-30406.35BSW006	SCREW GRUB 304 0-1/4 BSW X 0-1/4 INCH	2
27	P15-PIN30419.05X27	PIN - FINGER ATLANTICS	1
28	F90-HANHDPE 200	HANDLE HDPE 8" (200mm)	1
29	P01-DADP063FC02500A	ADAPTOR ALLOY VF63FC - VR/C2500 ATLANTIC	1
30	S46-3047.9425.4	SCREW THUMB SS304 5/16 X 1"	1
31	R41-ORG01100701.8	O'RING SEAL 11 X ID7.5 X 1.75 (BS011)	1
32	P08-CNEBRZVR2500	CONE RATCHET BRONZE VR2500	1
33	S75-30408.0016	WASHER FLAT SS304 5/16 x 5/8"	5
34	S76-30407.94	WASHER SPRING SS304 5/16 INCH	5
35	P21-BRS050.0010.503	WASHER BRASS 50 X 10.5 X 3MM	1
36	S76-30410.00	WASHER SPRING SS304 10MM	1
37	S36-30410.00025	SCREW HEX HD SS304 10MM X 25MM	1



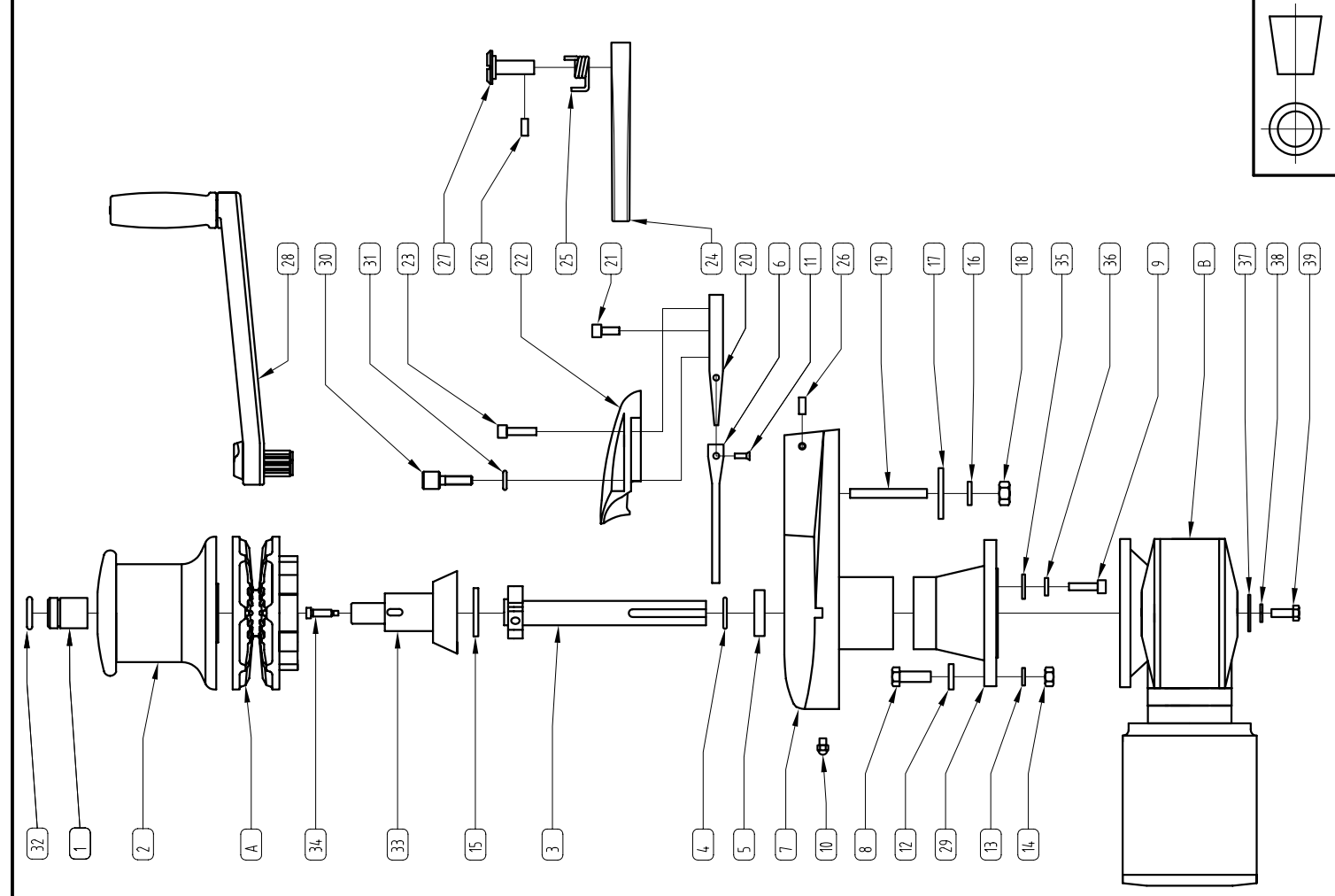
A GYPSY
B MOTOR / GEARBOX ASSEMBLY



TOLERANCES (mm)	
X.	±
X.X	±
X.XX	±
UNLESS OTHERWISE SPECIFIED	
MATERIAL	FINISH
TITLE ATLANTIC VR2500/3500 MORS EXPLODED VIEW	
PART No. K08-ATLVR2500MORS	
DRN AJN	DATE 01/03/02
SCALE NTS	APP1
	APP2
	SIZE A4
© COPYRIGHT MUIR ENGINEERING PTY. LTD. 2	



ITEM	PART NUMBER	DESCRIPTION	QTY
1	P07-CLNBRZVRC04000A	CLUTCH NUT BRONZE VRC4000A	1
2	K06-CAPVRC04000A	CAPSTAN ASSEMBLY VRC4000A	1
3	K06-SFTVRC04000AL	SHAFT ASSEMBLY VRC4000A LEFT HAND	1
4	R41-ORG0380351.8	O'RING SEAL 38.5X35X1.75	1
5	R42-SEA052035.007.0	SEAL 35 X 52 X 7.0 (TC12522)	1
6	P19-STR3042500A	STRIPPER SS304 VR/C2500A	1
7	P22-BSEBRZ02500AM	BASE BRONZE VR/C2500A MIRROR	1
8	S13-31612.00050	BOLT HEX HD SS316 12MM X 50MM	4
9	S45-30407.94038	SCREW SHCS SS304 5/16 X 1-1/2 INCH	5
10	R43-NIP3036.35UNFST	GREASE NIPPLE SS303 1/4 UNF S STRAIGHT	1
11	S33-30406.35013	SCREW GSK SL MT 304 0-1/4 X 1/2 INCH	2
12	S75-31612.00	WASHER FLAT SS316 12MM	4
13	S76-31612.00	WASHER SPRING SS316 12MM	4
14	S20-31612.00	NUT HEX SS316 12MM	4
15	P21-NOV50.8035.203	WASHER NOVASTEEN 2" X 1 3/8" X 3	1
16	S76-30412.70	WASHER SPRING SS304 1/2 INCH	4
17	S75-30412.70025	WASHER FLAT SS304 1/2 INCH X 1 INCH	4
18	S20-30412.70UNC	NUT HEX SS304 0-1/2 INCH UNC	4
19	P24-STD3042500A	STUD SS304 VR/C2500A	4
20	P05-PLRBRZ2500AM	PEELER BRONZE VR/C2500A MIRROR	1
21	S45-30407.94019	SCREW SHCS SS304 5/16 X 0-3/4 INCH	1
22	P05-CCVBRZ2500AM	CHAIN COVER BRONZE VR/C2500A MIRROR	1
23	P15-PIN30412.7X32	PIN - CHAIN COVER ATL 1/2X5/16/1-1/4"	1
24	R40-FGRPVC0850A	FINGER PVC VR/C850A	1
25	S36-SPR304FGRATL	SPRING FINGER ATLANTICS	1
26	S35-30406.35BSW006	SCREW GRUB 304 0-1/4 BSW X 0-1/4 INCH	2
27	P15-PIN30419.05X27	PIN - FINGER ATLANTICS	1
28	F90-HANHDPE 200	HANDLE HDPE 8" (200mm)	1
29	P01-DADP066FC02500A	ADAPTOR ALLOY VF66FC - VR/C2500 ATLANTIC	1
30	S46-3047.9425.4	SCREW THUMB SS304 5/16 X 1"	1
31	R41-ORG01100701.8	O'RING SEAL 11 X ID7.5 X 1.75 (BS011)	1
32	R41-ORG04503803.5	O'RING SEAL 45 X 38 X 3.5 (BS222)	1
33	P08-CNEBRZVRC2500L	CONE RATCHET BRONZE VRC2500 LEFT HAND	1
34	S47-30406.4019.1005	SCREW SHOULDER SS304 1/4 X 3/4 X 3/16"	1
35	S75-30408.0016	WASHER FLAT SS304 5/16 x 5/8"	5
36	S76-30407.94	WASHER SPRING SS304 5/16 INCH	5
37	P21-BRS050.0010.503	WASHER BRASS 50 X 10.5 X 3MM	1
38	S76-30410.00	WASHER SPRING SS304 10MM	1
39	S36-30410.00025	SCREW HEX HD SS304 10MM X 25MM	1

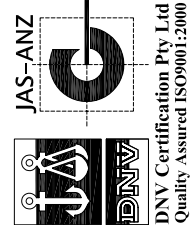


NOTE: WHEN REFERENCING MOTOR/GEARBOX ASSEMBLY PLEASE SPECIFY "LEFT HAND UNIT"

A GYPSY
B MOTOR / GEARBOX ASSEMBLY (LEFT HAND UNIT)




TOLERANCES (mm)	
X.	±
X.X	±
X.XX	±
UNLESS OTHERWISE SPECIFIED	
MATERIAL	FINISH
TITLE ATLANTIC VRC4000 LEFT HAND EXPLODED VIEW	
PART No. K08-ATLVR4000L	
DRN AJN	DATE 04/04/00
SCALE NTS	APP1
	APP2
	SIZE A4
© COPYRIGHT MUIR ENGINEERING PTY. LTD. 1	

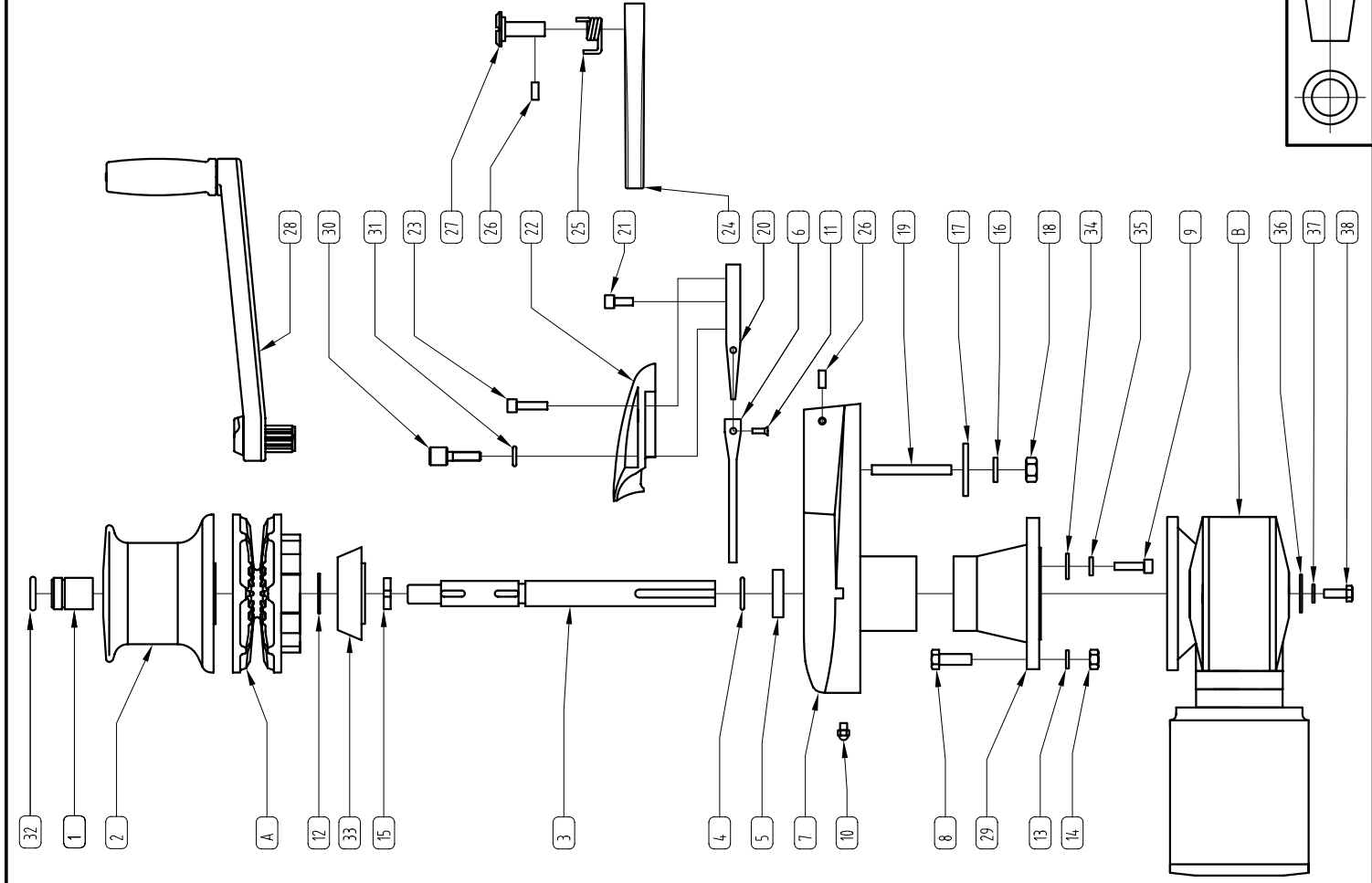


ITEM	PART NUMBER	DESCRIPTION	QTY
1	P07-CLNBRZVR02500A	CLUTCH NUT BRONZE VRC2500A	1
2	P04-CAPBRZ2500A1	CAPSTAN BRONZE VRC2500A (1 PIECE)	1
3	K06-SFTVRC02500A	SHAFT ASSEMBLY VRC2500A	1
4	R41-ORG0380351.8	O' RING SEAL 38.5X35X1.75	1
5	R42-SE A052035.007.0	SEAL 35 X 52 X 7.0 (TC12522)	1
6	P19-STR3042500A	STRIPPER SS304 VRC2500A	1
7	P22-BS EBRZ02500A	BASE BRONZE VRC2500A	1
8	S13-30409.52038	BOLT HEX HD SS304 0-3/8 X 1-1/2 INCH	4
9	S45-30407.94044	SCREW SHCS SS304 5/16 X 1-3/4 INCH	5
10	R43-NIP3036.35UNFST	GREASE NIPPLE SS303 1/4" UNF STRAIGHT	1
11	S33-30406.35013	SCREW CSK SL MT 304 0-1/4 X 1/2 INCH	2
12	S94-CIR30434.93	CIRCLIP 1400-35 S/S	1
13	S76-30409.52	WASHER SPRING SS304 3/8 INCH	4
14	S20-30409.52	NUT HEX SS304 0-3/8 INCH	4
15	P16-RNG303VRC2500A	SPLIT RING 303 VRC2500A	1
16	S76-30412.70	WASHER SPRING SS304 1/2 INCH	4
17	S75-30412.70025	WASHER FLAT SS304 1/2 INCH X 1 INCH	4
18	S20-30412.70UNC	NUT HEX SS304 0-1/2 INCH UNC	4
19	P24-STD3042500A	STUD SS304 VRC2500A	4
20	P05-PLRBRZ2500A	PEELER BRONZE VRC2500A	1
21	S45-30407.94019	SCREW SHCS SS304 5/16 X 0-3/4 INCH	1
22	P05-CCVBRZ2500A	CHAIN COVER BRONZE VRC2500A	1
23	P15-PIN30412.7X32	PIN - CHAIN COVER ATL 1/2X5/16/1-1/4"	1
24	R40-FGRPVC0850A	FINGER PVC VRC850A	1
25	S36-SPR304FGRA TL	SPRING FINGER ATLANTICS	1
26	S35-30406.35BSW006	SCREW GRUB 304 0-1/4 BSW X 0-1/4 INCH	2
27	P15-PIN30419.05X27	PIN - FINGER ATLANTICS	1
28	F90-HANHDPE 200	HANDLE HDPE 8" (200mm)	1
29	P01-DADP063FC02500A	ADAPTOR ALLOY VF63FC - VRC2500 ATLANTIC	1
30	S46-3047.9425.4	SCREW THUMB SS304 5/16 "X 1"	1
31	R41-ORG01100701.8	O' RING SEAL 11 X ID7.5 X 1.75 (BS011)	1
32	R41-ORG04503803.5	O' RING SEAL 45 X 38 X 3.5 (BS222)	1
33	P08-CNEBRZ2500A	CONE BRONZE VRC2500A	1
34	S75-30408.0016	WASHER FLAT SS304 5/16 x 5/8"	5
35	S76-30407.94	WASHER SPRING SS304 5/16 INCH	5
36	P21-BRS050.0010.503	WASHER BRASS 50 X 10.5 X 3MM	1
37	S76-30410.00	WASHER SPRING SS304 10MM	1
38	S36-30410.00025	SCREW HEX HD SS304 10MM X 25MM	1

A GYPSY
B MOTOR / GEARBOX ASSEMBLY


 WINDLASSES AUSTRALIA	
TITLE ATLANTIC VRC2500/3500 EXPLODED VIEW	
PART No. K08-ATLVR2500	
DRN A/JN	DATE 04/04/00
SCALE NTS	APP1 APP2
DRG No. K08-ATLVR2500	
SIZE A4	
FINISH © COPYRIGHT MUJR ENGINEERING PTY. LTD.	

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

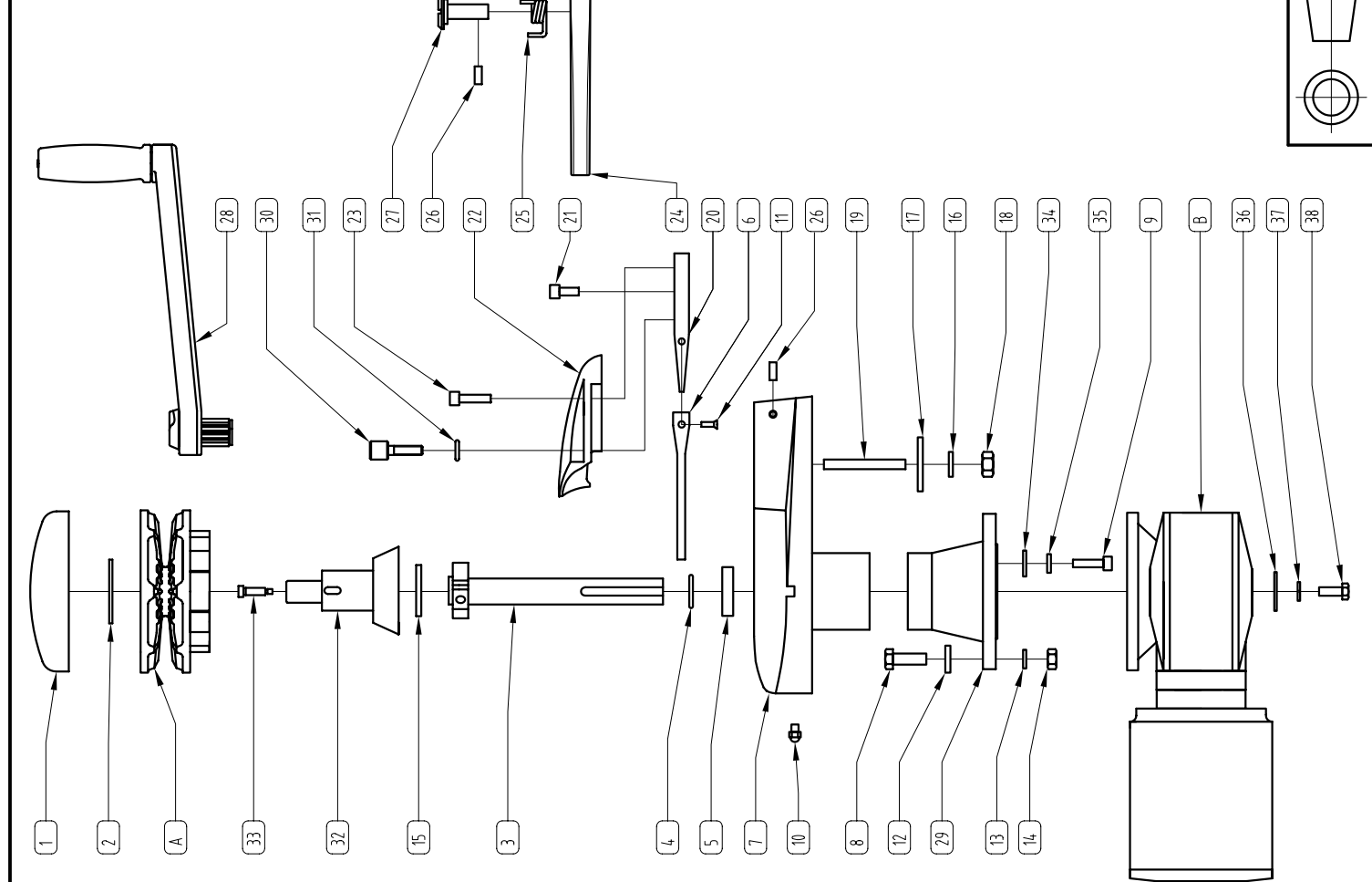


ITEM	PART NUMBER	DESCRIPTION	QTY
1	P07-CLNBRZVR02500A	CLUTCH NUT BRONZE VRC2500A	1
2	P23-316063.5025.406	D' WASHER SS316 2 1/2" x 1" x 6MM	1
3	K06-SFTVRC04000A	SHAFT ASSEMBLY VR4000A	1
4	R41-ORG0380351.8	O' RING SEAL 38.5X35X1.75	1
5	R42-SE A052035.007.0	SEAL 35 X 52 X 7.0 (TC12522)	1
6	P19-STR3042500A	STRIPPER SS304 VRC2500A	1
7	P22-BS EBRZ02500A	BASE BRONZE VRC2500A	1
8	S13-31612.00050	BOLT HEX HD SS316 12MM X 50MM	4
9	S45-30407.94038	SCREW SHCS SS304 5/16 X 1-1/2 INCH	5
10	R43-NIP3036.35UNFST	GREASE NIPPLE SS303 1/4" UNF STRAIGHT	1
11	S33-30406.35013	SCREW CSK SL MT 304 0-1/4 X 1/2 INCH	2
12	S75-31612.00	WASHER FLAT SS316 12MM	4
13	S76-31612.00	WASHER SPRING SS316 12MM	4
14	S20-31612.00	NUT HEX SS316 12MM	4
15	P21-NOV50.8035.203	WASHER NOVASTEEN 2" X 1 3/8" X 3	1
16	S76-30412.70	WASHER SPRING SS304 1/2 INCH	4
17	S75-30412.70025	WASHER FLAT SS304 1/2 INCH X 1 INCH	4
18	S20-30412.70UNC	NUT HEX SS304 0-1/2 INCH UNC	4
19	P24-STD3042500A	STUD SS304 VRC2500A	4
20	P05-PLRBRZ2500A	PEELER BRONZE VRC2500A	1
21	S45-30407.94019	SCREW SHCS SS304 5/16 X 0-3/4 INCH	1
22	P05-CCVBRZ2500A	CHAIN COVER BRONZE VRC2500A	1
23	P15-PIN30412.7X32	PIN - CHAIN COVER ATL 1/2X5/16/1-1/4"	1
24	R40-FGRPVC0850A	FINGER PVC VRC850A	1
25	S36-SPR304FGRA TL	SPRING FINGER ATLANTICS	1
26	S35-30406.35BSW006	SCREW GRUB 304 0-1/4 BSW X 0-1/4 INCH	2
27	P15-PIN30419.05X27	PIN - FINGER ATLANTICS	1
28	F90-HANHDPE 200	HANDLE HDPE 8" (200mm)	1
29	P01-DADP063FC02500A	ADAPTOR ALLOY VF63FC - VRC2500 ATLANTIC	1
30	S46-3047.9425.4	SCREW THUMB SS304 5/16 "X 1"	1
31	R41-ORG01100701.8	O' RING SEAL 11 X ID7.5 X 1.75 (BS011)	1
32	P08-CNEBRZVR2500	CONE RATCHET BRONZE VRC2500	1
33	S47-30406.4057.2005	SCREW SHOULDER SS304 1/4 X 1 1/4 X 3/16"	1
34	S75-30408.0016	WASHER FLAT SS304 5/16 x 5/8"	5
35	S76-30407.94	WASHER SPRING SS304 5/16 INCH	5
36	P21-BRS050.0010.503	WASHER BRASS 50 X 10.5 X 3MM	1
37	S76-30410.00	WASHER SPRING SS304 10MM	1
38	S36-30410.00025	SCREW HEX HD SS304 10MM X 25MM	1

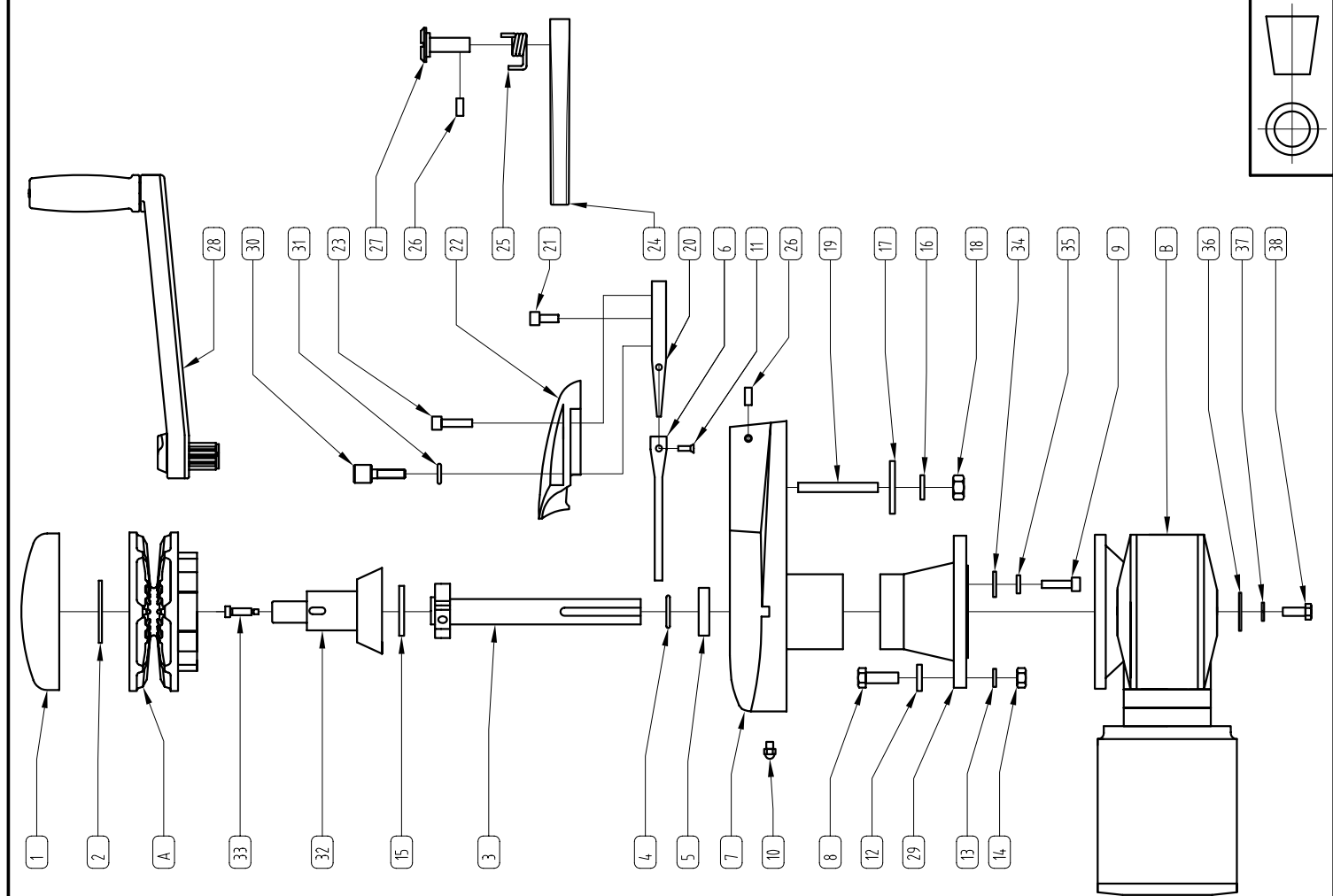
A GYPSY
B MOTOR / GEARBOX ASSEMBLY

 WINDLASSES AUSTRALIA	
TITLE ATLANTIC VR4000 MORS EXPLODED VIEW	
PART No. K08-ATLVR4000	
DRN A/JN	DATE 01/03/02
SCALE NTS	APP1 APP2
DRG No. K08-ATLVR4000	
SIZE A4	
FINISH © COPYRIGHT MUJR ENGINEERING PTY. LTD.	

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



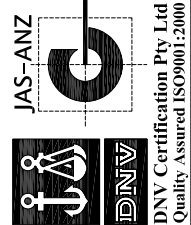
ITEM	PART NUMBER	DESCRIPTION	QTY
1	P07-CLNBRZVR02500A	CLUTCH NUT BRONZE VR2500A	1
2	P23-316063.5025.406	D' WASHER SS316 2 1/2" x 1" x 6MM	1
3	K06-SFTVTR04000AL	SHAFT ASSEMBLY VR4000A MORS LEFT HAND	1
4	R41-ORG0380351.8	O' RING SEAL 38.5X35X1.75	1
5	R42-SE A 052035.007.0	SEAL 35 X 52 X 7.0 (TC12522)	1
6	P19-STR3042500A	STRIPPER SS304 VRC2500A	1
7	P22-BS EBRZ02500AM	BASE BRONZE VRC2500A MIRROR	1
8	S13-31612.00050	BOLT HEX HD SS316 12MM X 50MM	4
9	S45-30407.94038	SCREW SHCS SS304 5/16 X 1-1/2 INCH	5
10	R43-NIP3036.35UNFST	GREASE NIPPLE SS303 1/4" UNF STRAIGHT	1
11	S33-30406.35013	SCREW CSK SL MT 304 0-1/4 X 1/2 INCH	2
12	S75-31612.00	WASHER FLAT SS316 12MM	4
13	S76-31612.00	WASHER SPRING SS316 12MM	4
14	S20-31612.00	NUT HEX SS316 12MM	4
15	P21-NOV50.8035.203	WASHER NOVASTEEN 2" X 1 3/8" X 3	1
16	S76-30412.70025	WASHER SPRING SS304 1/2 INCH	4
17	S75-30412.70025	WASHER FLAT SS304 1/2 INCH X 1 INCH	4
18	S20-30412.70UNC	NUT HEX SS304 0-1/2 INCH UNC	4
19	P24-STD3042500A	STUD SS304 VRC2500A	4
20	P05-PLRBRZ2500AM	PEELER BRONZE VRC2500A MIRROR	1
21	S45-30407.94019	SCREW SHCS SS304 5/16 X 0-3/4 INCH	1
22	P05-CCVBRZ2500AM	CHAIN COVER BRONZE VRC2500A MIRROR	1
23	P15-PIN30412.7X32	PIN - CHAIN COVER ATL 1/2X5/16/1-1/4"	1
24	R40-FGRPVC0850A	FINGER PVC VRC850A	1
25	S36-SPR304FGRATL	SPRING FINGER ATLANTICS	1
26	S35-30406.35B SW006	SCREW GRUB 304 0-1/4 BSW X 0-1/4 INCH	2
27	F90-HANHDPE 200	PIN - FINGER ATLANTICS	1
28	P01-DA DP086FC02500A	ADAPTOR ALLOY VF86FC - VRC2500 ATLANTIC	1
29	S45-30407.9425.4	SCREW THUMB SS304 5/16 "X 1"	1
30	R41-ORG01100701.8	O' RING SEAL 11 X ID7.5 X 1.75 (BS011)	1
31	P08-CNEBRZVR2500L	CONE RATCHET BRONZE VR2500 LEFT HAND	1
32	S47-30406.4057.2005	SCREW SHOULDER SS304 1/4 X 1 1/4 X 3/16"	1
33	S75-30408.0016	WASHER FLAT SS304 5/16 x 5/8"	5
34	S76-30407.94	WASHER SPRING SS304 5/16 INCH	5
35	P21-BRS050.0010.503	WASHER BRASS 50 X 10.5 X 3MM	1
36	S76-30410.00	WASHER SPRING SS304 10MM	1
37	S76-30410.00025	SCREW HEX HD SS304 10MM X 25MM	1
38	S36-30410.00025	SCREW HEX HD SS304 10MM X 25MM	1



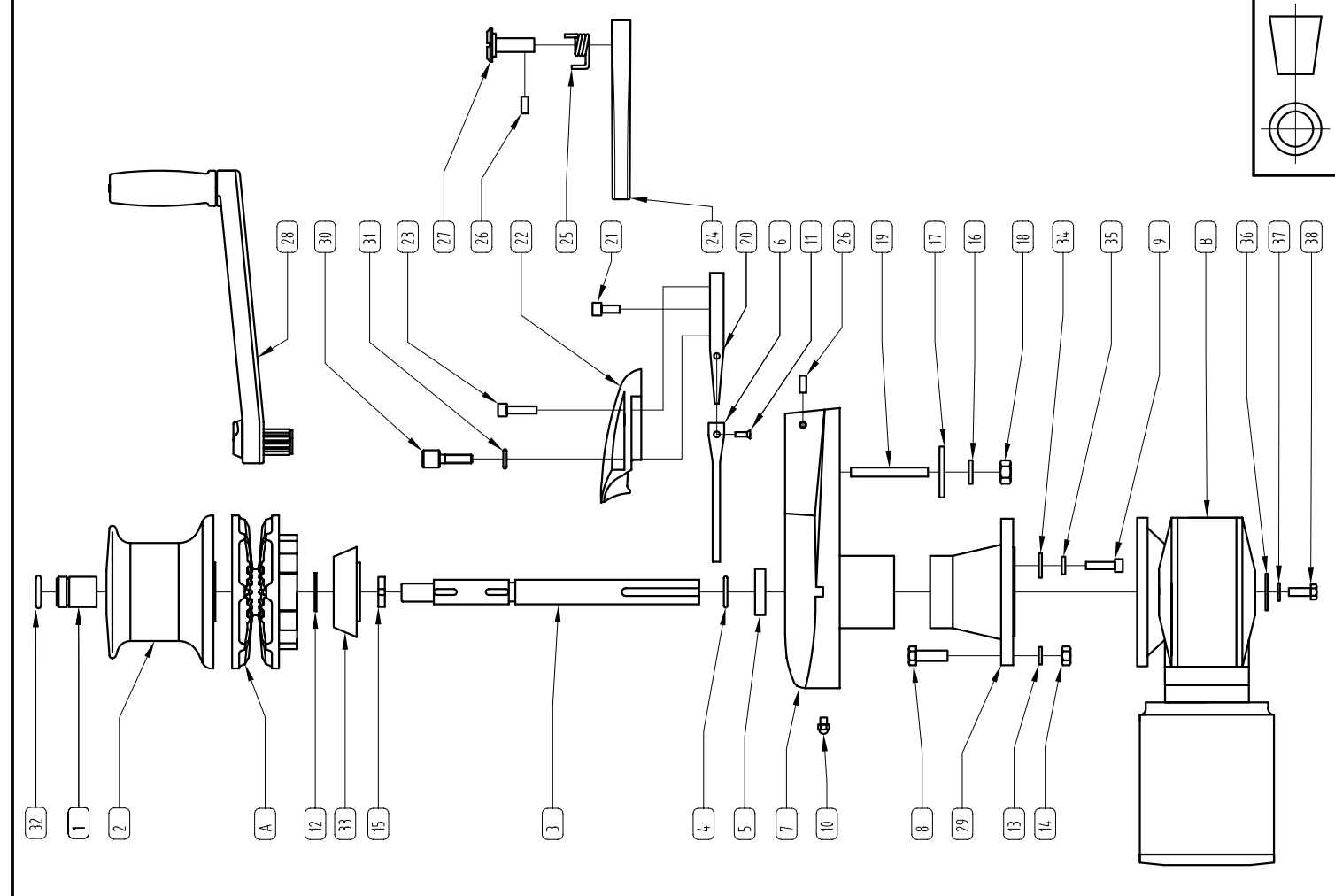
NOTE: WHEN REFERENCING MOTOR/GEARBOX ASSEMBLY PLEASE SPECIFY "LEFT HAND UNIT"

A GYPSY
B MOTOR / GEARBOX ASSEMBLY (LEFT HAND UNIT)

WINDLASSES AUSTRALIA	
TITLE ATLANTIC VR4000 LEFT HAND EXPLODED VIEW	
PART No. K08-ATLVR4000L	
DRN AJN	DATE 01/03/02
SCALE NTS	APP1
SCALE NTS	APP2
SIZE A4	
FINISH 	
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ITEM	PART NUMBER	DESCRIPTION	QTY
1	P07-CLNBRZVR02500A	CLUTCH NUT BRONZE VRC2500A	1
2	P04-CAPBRZ2500A1	CAPSTAN BRONZE VRC2500A (1 PIECE)	1
3	K06-SFTVTRC02500A	SHAFT ASSEMBLY VRC2500A	1
4	R41-ORG0380351.8	O' RING SEAL 38.5X35X1.75	1
5	R42-SE A 052035.007.0	SEAL 35 X 52 X 7.0 (TC12522)	1
6	P19-STR3042500A	STRIPPER SS304 VRC2500A	1
7	P22-BS EBRZ02500AM	BASE BRONZE VRC2500A MIRROR	1
8	S13-30409.52038	BOLT HEX HD SS304 0-3/8 X 1-1/2 INCH	4
9	S45-30407.94044	SCREW SHCS SS304 5/16 X 1-3/4 INCH	5
10	R43-NIP3036.35UNFST	GREASE NIPPLE SS303 1/4" UNF S TRAIGHT	1
11	S33-30406.35013	SCREW CSK SL MT 304 0-1/4 X 1/2 INCH	2
12	S94-CIR30434.93	CIRCLIP 1400-35 S/S	1
13	S76-30409.52	WASHER SPRING SS304 3/8 INCH	4
14	S20-30409.52	NUT HEX SS304 0-3/8 INCH	4
15	P16-RNG303VRC2500A	SPLIT RING 303 VRC2500A	1
16	S76-30412.70	WASHER SPRING SS304 1/2 INCH	4
17	S75-30412.70025	WASHER FLAT SS304 1/2 INCH X 1 INCH	4
18	S20-30412.70UNC	NUT HEX SS304 0-1/2 INCH UNC	4
19	P24-STD3042500A	STUD SS304 VRC2500A	4
20	P05-PLRBRZ2500AM	PEELER BRONZE VRC2500A MIRROR	1
21	S45-30407.94019	SCREW SHCS SS304 5/16 X 0-3/4 INCH	1
22	P05-CCVBRZ2500AM	CHAIN COVER BRONZE VRC2500A MIRROR	1
23	P15-PIN30412.7X32	PIN - CHAIN COVER ATL 1/2X5/16/1-1/4"	1
24	R40-FGRPVC0850A	FINGER PVC VRC850A	1
25	S36-SPR304FGRATL	SPRING FINGER ATLANTICS	1
26	S35-30406.35B SW006	SCREW GRUB 304 0-1/4 BSW X 0-1/4 INCH	2
27	P15-PIN30419.05X27	PIN - FINGER ATLANTICS	1
28	F90-HANHDPE 200	HANDLE HDPE 8" (200mm)	1
29	P01-DA DP063FC02500A	ADAPTOR ALLOY VF63FC - VRC2500 ATLANTIC	1
30	S46-3047.9425.4	SCREW THUMB SS303 5/16 "X 1"	1
31	R41-ORG01100701.8	O' RING SEAL 11 X ID7.5 X 1.75 (BS011)	1
32	R41-ORG04503803.5	O' RING SEAL 45 X 38 X 3.5 (BS222)	1
33	P08-CNEBRZ2500A	CONE BRONZE VRC2500A	1
34	S75-30408.0016	WASHER FLAT SS304 5/16 x 5/8"	5
35	S76-30407.94	WASHER SPRING SS304 5/16 INCH	5
36	P21-BRS050.0010.503	WASHER BRASS 50 X 10.5 X 3MM	1
37	S76-30410.00	WASHER SPRING SS304 10MM	1
38	S36-30410.00025	SCREW HEX HD SS304 10MM X 25MM	1



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A GYPSY
B MOTOR / GEARBOX ASSEMBLY (LEFT HAND UNIT)

WINDLASSES AUSTRALIA	
TITLE ATLANTIC VRC2500/3500 LEFT HAND EXPLODED VIEW	
PART No. K08-ATLVR2500M	
DRN AC	DATE 28/11/02
SCALE NTS	APP1
SCALE NTS	APP2
SIZE A4	
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