

BLUE SERIES
WINCHES



TECHNICAL MANUAL

www.
GEARSANDWINCHES
com.au

MODEL -

SERIAL NO.

EARTH CONTINUITY TEST

OPERATIONAL TEST

NOT FOR MOVEMENT OF HUMANS

PROUDLY



THINK SAFETY FIRST AND LAST

WARNING!!

**FAILURE TO HEED THE FOLLOWING WARNINGS
MAY RESULT IN SERIOUS INJURY OR DEATH.**

**ANY AND ALL MODIFICATIONS MUST BE APPROVED
BY GEARS AND WINCHES IN WRITING AND SHALL
BE CARRIED OUT BY A QUALIFIED PERSON**

- ❖ Standard pendant controls are double insulated but under no circumstances should they be rained upon or submerged. They are water resistant not water proof.
- ❖ We can supply optional 24V low voltage kits if necessary.
- ❖ Cable anchors on our winches are not designed to hold the rated load, you must ensure at least 5 wraps of cable are on the drum at all times.
- ❖ It is imperative that the winch rope is kept taut at all times. If for some reason it has unravelled on the winch drum you must ensure that it is wound back on correctly before you start winching. It is possible under rare circumstances for the rope to be caught between the gears or the sprocket and chain. If damage occurs under these circumstances it is not covered under warranty.
- ❖ Our winches may be supplied full of lubrication, but this is not guarantee. It is your responsibility to make sure your winch is lubricated appropriately.
- ❖ Avoid shock loads. This type of load imposes a strain on a winch many times the actual load rating of the winch and can cause severe damage to the winch and or the cable.
- ❖ If your winch is supplied/fitted with a dog clutch it is possible to use it for lifting subject to the following – the winch is rated for lifting and a dog clutch locking device is fitted.
- ❖ A full copy of our risk management assessment can be found on our website: www.gearsandwinch.com.au

GENERAL INFORMATION

Welcome to our huge family of happy winch owners, we would like to thank you for purchasing from our Blue Series Winch range. We trust you will be very happy with the performance and reliability of this product. However, we do ask that you take a few minutes to read and thoroughly understand this booklet. Also, if you have new operators assigned to the winch, make sure that they read and understand it also.

These winches are specially designed for a fast and economical load recovery. They are built strong, lightweight and compact to ensure for an extended use life. The motors fitted to these winches are specifically designed and built for electric winching operation and should not be restricted from reasonable ventilation. The Blue series winches also fitted with a fail-safe electro-magnetic brake. This ensures strong and safe operation. In the event of power outages, the brake is automatically engaged.

We are so confident in our product all our winches have a full “2 year warranty”.

AM1026B

INDICATIVE AMPS DRAW @ FULL LOAD @ START UP	20 AMPS
INDICATIVE AMPS DRAW @ FULL LOAD ONCE RUNNING	6 AMPS

AM2026B

INDICATIVE AMPS DRAW @ FULL LOAD @ START UP	32 AMPS
INDICATIVE AMPS DRAW @ FULL LOAD ONCE RUNNING	10 AMPS

IF YOU HAVE ANY QUERIES ON FITTING, OPERATING OR INFORMATION IN GENERAL, PLEASE DON'T HESITATE TO CONTACT US WE ARE HAPPY TO ANSWER ANY AND ALL OF YOU QUERIES.

Please visit us one our website: www.gearsandwinch.com.au.
for any further information

INSTALLATION INSTRUCTIONS

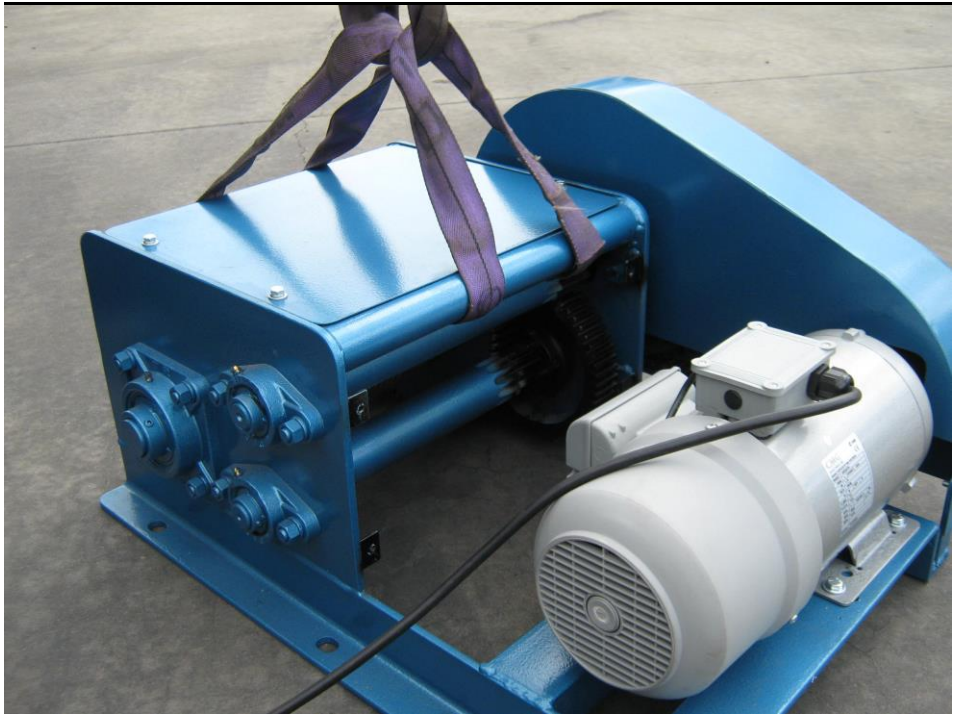
The initial installation or mounting of this Winch is critically important for proper operation and performance. If the winch is mounted unevenly the centre line of the unit can be distorted to a point where the winch will not operate in either direction. It is therefore very important that the following instructions are observed when this Winch is installed. Please spend a bit of quality time on this – it will pay off in the long run.

1. Make certain that the mounting platform is sufficiently strong (at least twice the rated load of the winch) in order to avoid deflection when the load is hauled or lifted.
 2. These units are very versatile they may be mounted on the wall, on a removable post mounted in the floor or any flat surface as long as the structure is strong enough. It is imperative that whatever these winches are bolted to is robust, safe and strong.
 3. Set the winch in/on mounting platform and make sure good surface contact is made on all mounting pads of the winch. We suggest that a bitumen or tar based coating be placed on the base of the winch to minimise rusting and deterioration of the frame. We also suggest the winch be mounted on galvanised or stainless steel washers this will minimise twisting of the frame on uneven surfaces.
 4. Install mounting bolts and tighten firmly.
 5. We advise the entire winch should be sprayed with a film of de-watering fluid i.e. WD40, Inox etc., and the winch rope should be sprayed with de-watering fluid regularly to avoid oxidization.
-

To familiarize yourself with the winch, run it for a few minutes to understand the controls and “feel” of the winch. Pay particular attention to the controls and how they operate.

Winches, like any other kind of machinery, require a “break in” to perform well and to maximize their life. Do not exceed one half-rated load for the first thirty minutes of operation. This will ensure that the drive system will have an opportunity to wear properly.

REMEMBER THINK SAFETY AT ALL TIMES



WINCH OPERATING INSTRUCTIONS

Our Blue Series winches are designed and manufactured for ease of use; hence The operational use of this winch is very easy and straight forward.

- Make sure of current output i.e. 10 amps.
- Ensure Earth Leakage Circuit Breaker (ELCB) has been fitted to the Power circuit.
- Plug control pendant into control enclosure.
- Plug into power outlet and switch on.
- Make sure the area around the winch is safe i.e. no authorised people and material.

SPECIAL NOTE:

Please identify whether or not your winch is fitted with an “Emergency Stop” Button. Your winch will not work if it is depressed. Check and Re-check this, if your winch does not work. This is the most common cause of in-operation.

STANDARD PENDANT AND LOW VOLTAGE PENDANT CONTROL MODELS

- Press the “Down” button to unwind rope, (make sure the rope is under Tension). The load will travel backwards/lower.
- Press the “Up” button on the pendant control for retrieval/Raising of the Load.
- E Stop button is for emergency stop function if applicable.

Note: When using the pendant control – buttons must be fully depressed.

REMOTE CONTROL MODELS

- Press the button marked “B” on the remote controller to unwind the rope making sure the rope has tension all the time. This will allow the load to travel backwards.
- Press the button marked “A” on the remote controller for retrieval of the load.
- In case of a remote controller fault - forward and reverse switch is fitted to the main control box along with an emergency shut off switch.
- At the end of each winching operation or If there is a problem and all else fails, immediately turn off the power at the mains.
- Last but not least, ensure the load is secure.

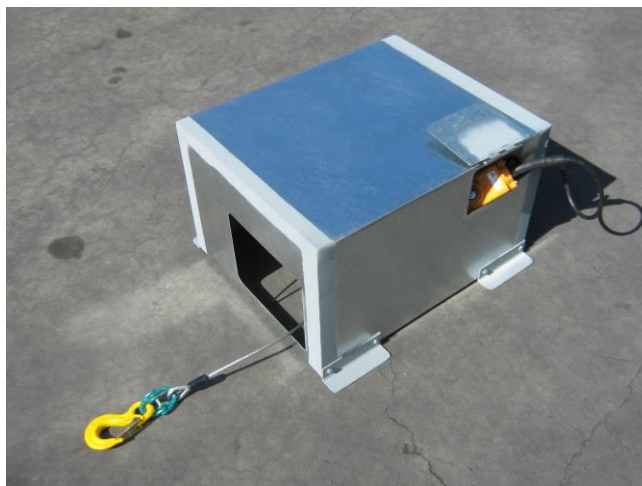
SAFETY RULES

Before operating the winch, read and follow the instructions.

- This winch is designed for lifting/hauling only. Under no circumstances, should it be used for the movement of humans.
- The winch should be mounted on a flat, solid surface as level as possible. This will ensure that the steel rope will arrange neatly on the drum. This will avoid any irregular damage to the steel rope and will eliminate distortion of frame.
- Do not exceed the rating lifting capacity of the winch. Allowable weight is indicated on the attached plate.
- The winch should be operated by a skilled operator.
- Before operating the winch check again to ensure all screws are tightened securely without loosening.
- Before operating the winch check to see if the steel rope drum runs to the correction direction and the brake works normally.
- Prior to initiating winching operations be sure any element which can interfere with the safe winching operations is removed.
- Stand clear of wire and load during operation. Never touch wire rope or hook while in tension.
- Keep hands clear of wire rope, hook and fairlead opening during operation and when spooling.
- Never touch wire rope or hook while in tension.

**For a full Risk Management, please go to our website:
www.winch.com.au**

**PLEASE NOTE FOR OUTSIDE USE WINCH MUST HAVE
APPROPRIATE OUTDOOR COVER**



THESE COVERS CAN BE PURCHASED FROM GEARS AND WINCHES

TROUBLE SHOOTING

BRAKE FAILED	
<u>PROBABLE CAUSE</u>	<u>CORRECTION</u>
Incorrect wiring	Check wiring
Brake coil broken or burnt out	Replace - see manufacturer
Rectifier damaged	Replace - see manufacturer
POOR BRAKE PERFORMANCE - BRAKING TIME TOO LONG	
Oil or dust on brake lining	Clean brake lining
Too much gap between brake linings	Adjust gap properly
Brake lining worn out	Replace - see manufacturer
ABNORMAL NOISE	
Continuous loud noise - Bearing damaged/gear worn out.	Send to manufacturer for repair
Occasional loud noise - Bearing damaged or dirty	Send to manufacturer for repair

TROUBLE SHOOTING

WINCH WILL NOT RUN	
<u>PROBABLE CAUSE</u>	<u>CORRECTION</u>
Power failure No power at the winch	NOTE: If your winch is fitted with an E stop Button is it pressed in – this is the most common problem with electrical supply. 1. Check power supply 2. Check ELCB 3. Check overload switch on winch 4. Check power point by plugging in another electrical appliance
Brake system failed	Brake coil or rectifier damaged. May need to replace it - see manufacturer.
Poor contact on switch	May need to repair or replace - see manufacturer
Voltage too low	Check if power wires are too long or their diameter is too small
Overloaded	Reduce load
Capacitor damaged	Replace capacitor - see manufacturer
Damage to gears, bearings, motor shaft or motor coil	Return to manufacturer for repair.
MOTOR RUNS BUT STEEL ROPE DRUM DOES NOT	
Coupling between motor and the first shaft may not be properly mounted	You may need a replacement or it may not be fitted properly.
Motor shaft broken	Replace - see manufacturer
Gear damaged	Return to manufacturer for repair
POOR START	
Starting capacitor damaged	Replace - see manufacturer
CAPACITOR DAMAGED	
Eccentric switch connection point damaged	See manufacturer

INSPECTION AND MAINTENANCE

Check wire rope periodically:-

- Replace when signs of excessive wear, serious deformation and corrosion exist.
- Lubricate wire rope regularly.

Check daily:-

- External visual inspection of winch including brake, gear reduction, wire rope and electrical connections.
- Test winch hoisting/lowering functions for smooth operation via push button control.
- Test E Stop
- Ensure wire rope is wound in the correct manner

Check monthly:

- Inspect entire wire rope assembly.
- View control/motor wiring for damage.
- Check mounting bolts.
- Keep motor and controls from water
- Should the motor be shielded, care should be taken not to choke motor heat dissipation vents.

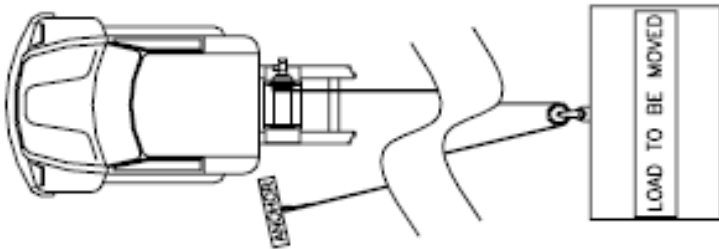
Lubrication:

Please Note: The Blue Series winch are of open gear cut design therefore requires more human intervention when it comes to lubrication. The gears must be lubricated with “open gears spray” available at a quality hardware store such as Blackwood’s etc. The winch must be run once every 3 months, the gears and chains should be lubricated at that time. If the winch is used more frequently they should be lubricated every 2-3 hours of use.

The plumber block bears and or every other grease nipples should be greased at the same interval.

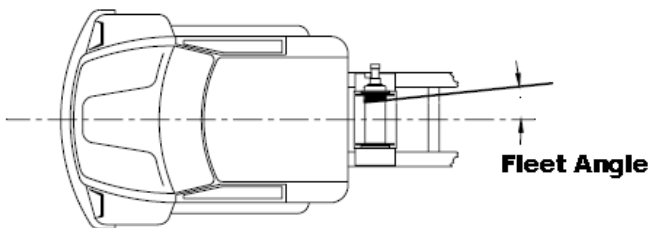
USING A SNATCH BLOCK

By using a snatch block you have effectively cut the load on the winch in half. A snatch block should be used any time you have a concern about the ability of the winch or cable to move a load. The following illustration shows one way to rig such a block.



THE IMPORTANCE OF A PROPER FLEET ANGLE

Maintaining the proper fleet angle is important to the success of your winching operation, the life of your winch and the life of the cable you are using. The fleet angle can best be described by the following illustration.



The fleet angle should be kept as small as possible to insure proper spooling and to maximise cable and winch life. To promote even cable spooling, keep the fleet angle below three degrees. Never pull directly against the flange of the winch cable drum as this may cause the cable or the winch to break.

BOAT RAMP WINCH APPLICATIONS QUICK GUIDE

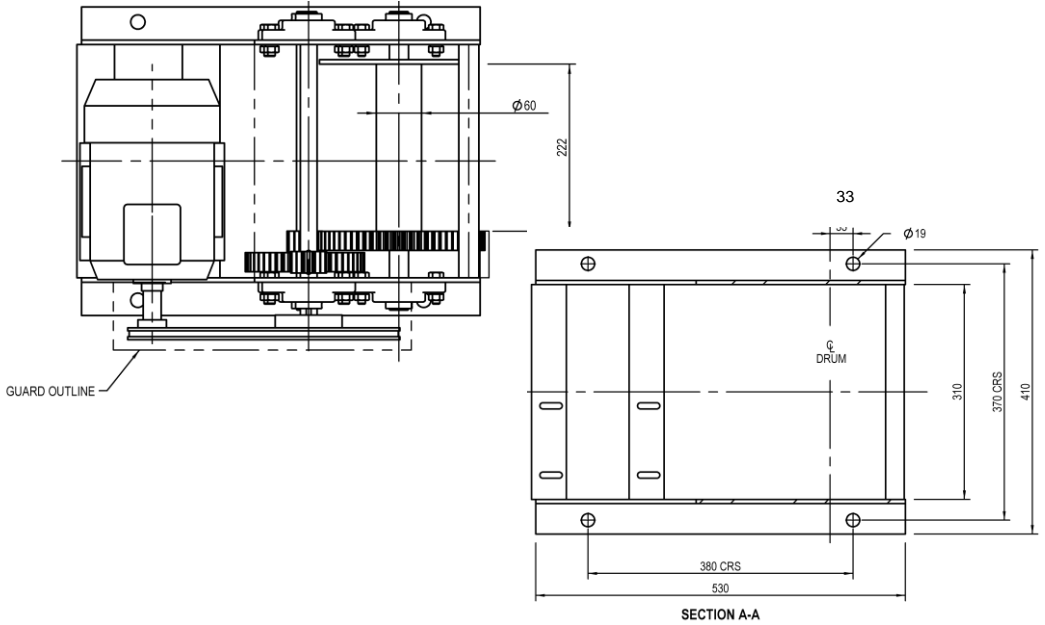
MAXIMUM BOAT MASS*

	SLOPE RAMP GRADIENT			
	5° 1 M FALL OVER 12 M DISTANCE	12.5° STANDARD BOAT RAMP 1 M FALL OVER 4.5 DISTANCE	15° 1 M FALL OVER 3.75 DISTANCE	27° 1 M FALL OVER 2 MDISTANCE
TIGER WINCH MODELS				
JV-1020-13D03	2200KG	900KG	750KG	400KG
JV-1025-13D03	2750KG	1100KG	950KG	500KG
JC-1025-17D12	2750KG	1100KG	950KG	500KG
JV-1030-13D03	3250KG	1300KG	1100KG	650KG
JC-1050-21F05	5000KG	2100KG	1800KG	1100KG
PU-107-10G07	7000KG	3000KG	2500KG	1500KG
PU-1100-05H06	10,000KG	4200KG	3600KG	2200KG
PU-1120-10I105	12,000KG	5000KG	4300KG	2650KG
PU-1200-07J07	20,000KG	8400KG	7200KG	4400KG
BLUE WINCH MODELS				
AM1026B	8000KG	3600KG	3000KG	1800KG
AM2026B	15,000KG	6750KG	5750KG	3600KG

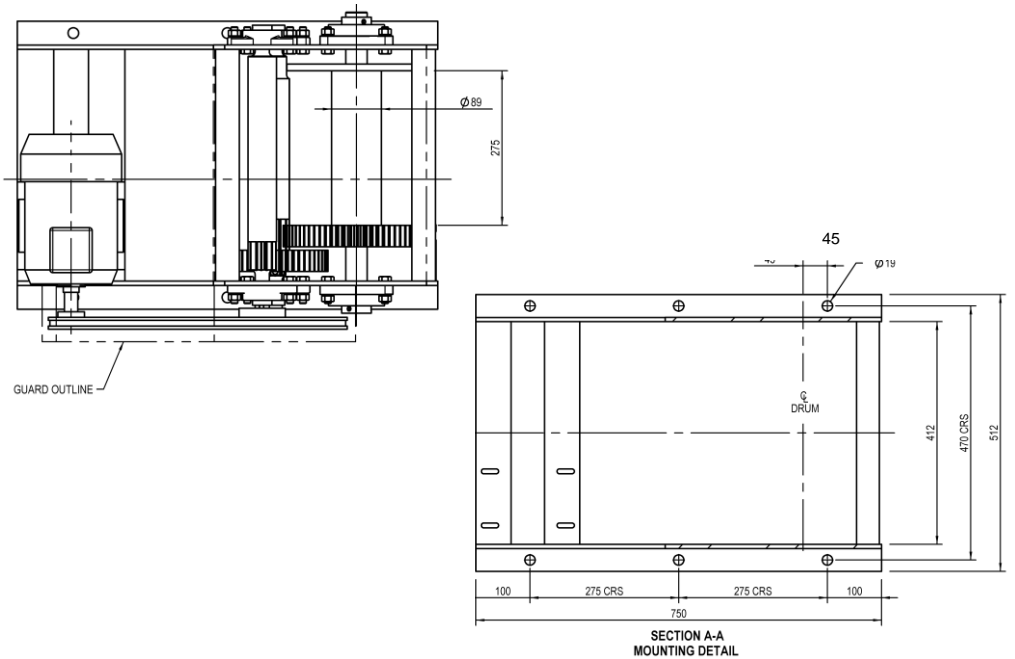
“SPECIAL NOTE”

This is a general guide only based on boat ramp being of even gradient and good surface, boat trailer wheels, tyres and bearings being in good condition. The above line pull ratings can be increased by utilizing a snatch block. This will effectively double the line pull but will halve the line speed.

AM1026B



AM2026B



WINCH INDUSTRIES PTY LTD

GENERAL WARRANTY

Winch Industries Pty. Ltd. warrants parts and labour, directly to the first purchaser of each winch against defects in material and workmanship appearing under normal use and service only for a period of two (2) years from the date of purchase. If you discover a covered defect, Winch Industries will, at its option, repair, replace or refund the purchase price of this winch or winch parts at no charge to you, provided you return it during the applicable warranty period, transportation charges prepaid, to Winch Industries Service Department or Factory Authorized Servicing Distributor. (You can obtain additional information from Winch Industries directly at the address printed below). Please attach your name, address, telephone number, a description of the problem and a copy of a bill of sale bearing the appropriate proof of original retail purchase, to each product returned for warranty service. To obtain any warranty coverage, it is absolutely necessary that you present proof of purchase acceptable to Winch Industries, such as a copy of the purchase receipt.

This warranty applies only to winches sold and/or manufactured by Winch Industries, which can be identified by the "Winch Industries" trademark, trade name or logo affixed to them. This warranty does not apply if the product has been damaged by accident, abuse, misuse, collision, overloading, exhaust, or misapplication, or has been improperly installed, has been improperly used, has been improperly serviced, or has been modified without the written permission of Winch Industries. This warranty does not apply if any Winch Industries serial number has been removed or defaced. The finish and wire rope on the product are excluded from this warranty.

EXCEPT AS EXPRESSLY STATED HEREIN, THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WHICH BY LAW MAY NOT BE EXCLUDED IS LIMITED IN DURATION TO TWO (2) YEARS FROM THE DATE OF ORIGINAL RETAIL PURCHASE OF THIS PRODUCT.

THE WARRANTY AND THE REMEDIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHERS, ORAL OR WRITTEN, EXPRESS OR IMPLIED. No Winch Industries dealer, agent or employee is authorised to make any modification, extension or addition to this warranty.

IN NO EVENT IS WINCH INDUSTRIES RESPONSIBLE FOR SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY BREACH OF WARRANTY, OR UNDER ANY OTHER LEGAL THEORY, INCLUDING, BUT NOT LIMITED TO LOST PROFITS, DOWN TIME, GOODWILL, DAMAGE TO OR REPLACEMENT OF EQUIPMENT AND PROPERTY, LOSS OF USE OF THE PRODUCT OR OF ANY ASSOCIATED EQUIPMENT, OR COST OF SUBSTITUTED PRODUCTS.

WARRANTY ENQUIRIES SHOULD BE DIRECTED TO:

GEARS AND WINCHES
2 COIN STREET, MOOROOKA, QLD, 4105
PHONE 07 3875 1568 FAX 07 3277 4316
EMAIL - admin@winch.com.au