

12V ELECTRIC ATV WINCH INSTRUCTIONS



12
MONTH
LIMITED
WARRANTY

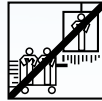
PLU: 341685 CODE: P3000-1AW
Manufactured and packaged for
SRGS PTY LTD
ABN 23 113 230 050
Gympie Road, Lawnton, Queensland 4501, Australia
MADE IN CHINA

RIDGE 4X4
ACCESSORIES
RYDER

RIDGE 4X4
ACCESSORIES
RYDER

APPLICATION INFORMATION

This winch is designed to move a load at ground level or up an incline. It is neither designed nor intended for hoisting. This winch is not to be used to lift or move people. This winch is for intermittent use due to heat build up characteristics of various components. **If the end of the motor becomes uncomfortably hot to touch**, stop winching and allow the motor to cool down.



SPECIFICATIONS

Working Load: 3000 lb (1360 kg)

Motor: 12V DC 1.34hp (1 kw)

Gear Ratio: 153:1

Dyneema Rope: 4.8mmx12m

Dimensions: 295x105x105mm

Drum Diameter: 30mm

Drum Length: 72mm

Weight: 7.38kgs

Switching Method: Handlebar Mounted Toggle

Line Pull and Cable Capacity

Layer of Cable	Rated Line Pull Per Layer		Cable Capacity Per Layer	
	lbs	kgs	ft	m
1	3000	1360	4.95	1.5
2	2250	1020	11.2	3.4
3	1800	816	18.8	5.7
4	1440	653	28	8.5
5	1150	521	38	11.5
6	950	430	44.5	13.5

Line Speed and Motor Current (First layer)

Load		Speed		Motor Current Amps
lb	kg	ft/min	m/min	
0	0	7.2	2.2	8
1000	454	5.9	1.8	40
2000	907	4.76	1.45	70
3000	1360	2.46	0.75	100

SAFETY PRECAUTIONS

Throughout this manual, you will find notations with the following headings:

Danger Indicates an imminently hazardous situation which, if not avoided, may result in death or serious injury.

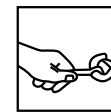
Warning Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

Caution Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. This notation is also used to alert against unsafe practices.

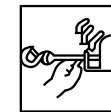
The following symbols on the product and in the Owner's Manual are used:



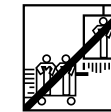
Read Owner's
Manual



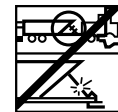
Always Use
Handsaver



Keep clear of winch,
wire rope and hook
while operating



Never use winch
to lift or move
people



Never use
winch to hold
loads in place

Note: Indicates additional information in the installation and operation procedures of your winch.

Please Note: Winch is designed primarily for intermittent applications. This winch is not designed to be used in industrial or hoisting applications.

GENERAL SAFETY INFORMATION

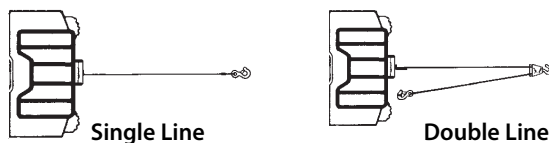
Your winch is a very powerful machine. If used unsafely or improperly, there is a possibility that property damage or personal injury could result.



⚠ Warning The responsibility for safe installation and operation of the winch and prevention of the winch and prevention of personal injury and property damage ultimately rests with you, the operator. There is no substitute for the use of good judgement and caution in operating a winch.

⚠ Warning The winch rope may break before the winch stalls. For heavy loads, use a pulley block to reduce the load on the winch rope.

1. Maximum working load capacity is on the winch rope layer closest to the drum. DO NOT OVERLOAD. DO NOT ATTEMPT PROLONGED PULLS AT HEAVY LOADS. Overloads can damage the winch and/or the winch rope and create unsafe operating conditions. **FOR LOADS OVER 1/2 RATED CAPACITY, WE RECOMMEND THE USE OF THE OPTIONAL PULLEY BLOCK TO DOUBLE LINE THE WINCH ROPE (Figure 2)** this reduces the load on the winch and the strain on the winch rope by approximately 50%. Attach hook to load bearing part. **The vehicle engine should be running during winch operation.** If considerable winching is performed with the engine off, the battery may be too weak to restart the engine.



2. AFTER READING AND UNDERSTANDING THIS MANUAL, LEARN TO USE YOUR WINCH. After installing the winch, practice using it so you will be familiar with it when the need arises.



3. DO NOT "move" your vehicle to assist the winch in pulling the load. The combination of the winch and vehicle pulling together could overload the winch rope and the winch.

4. ALWAYS STAND CLEAR OF WINCH ROPE, HOOK AND WINCH. IN THE UNLIKELY EVENT OF ANY COMPONENT FAILURE IT'S BEST TO BE OUT OF HARM'S WAY.

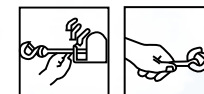
5. Inspect winch rope and equipment frequently. **A Frayed winch rope with broken strands should be replaced immediately.**

Periodically check the winch installation to ensure that all bolts are tight.

6. Use heavy leather gloves when handling winch rope. Do not let winch rope slide through your hands.

7. Never winch with less than 5 turns of winch rope around the winch drum since the winch rope end fastener may NOT withstand full load.

8. Never put your finger through the hook. If your finger should become trapped in the hook, you could lose your finger. ALWAYS USE THE HANDSAVER when guiding the winch rope in or out (See Figure 3).



9. NEVER HOOK THE WINCH ROPE BACK ONTO ITSELF because you could damage the winch rope. Use a nylon sling (Figure 4).

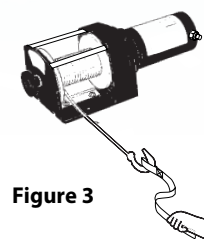


Figure 3

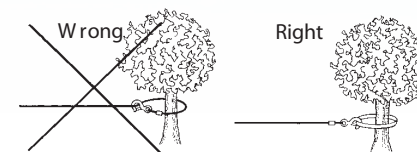


Figure 4

10. It is a good idea to lay a heavy blanket or damper over the winch rope near the hook end when pulling heavy loads (Figure 5). If a winch rope failure should occur, the damper will help prevent the rope from whipping.

11. AVOID CONTINUOUS PULLS FROM EXTREME ANGLES as this will cause the winch rope to pile up on one end of the drum (Figure 6). This can jam the winch rope in the winch, causing damage to the rope or the winch.

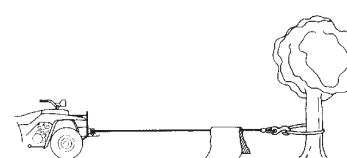


Figure 5

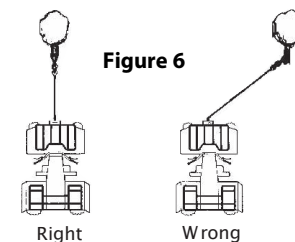


Figure 6

12. NEVER OBSCURE THE WARNING INSTRUCTION LABELS.

13. Always operate winch with an unobstructed view of the winching operation.

14. Equipment such as tackle, hooks, snatch blocks, straps, etc. should be sized to the winching task and should be periodically inspected for damage



that could reduce their strength.

15. NEVER RELEASE FREESPOOL CLUTCH WHEN THERE IS A LOAD ON THE WINCH.

16. NEVER WORK ON OR AROUND THE WINCH DRUM WHEN WINCH IS UNDER LOAD.

17. DO NOT OPERATE WINCH WHEN UNDER THE INFLUENCE OF DRUGS, ALCOHOL OR MEDICATION.

18. ALWAYS DISCONNECT WINCH POWER LEADS TO BATTERY BEFORE WORKING IN OR AROUND THE WINCH DRUM so that the winch cannot be turned on accidentally.

19. When moving a load, slowly take up the winch rope slack until it becomes taut. Stop, recheck all winching connections. Be sure the hook is properly seated. If a nylon sling is used, check the attachment to the load.

20. When using your winch to move a load, place the vehicle transmission in neutral, set vehicle brake, and chock all wheels.

21. DO NOT USE THE WINCH TO HOLD LOADS IN PLACE. Use other means of securing loads such as tie down straps.



22. USE ONLY FACTORY APPROVED SWITCHES, REMOTE CONTROLS AND ACCESSORIES. Use of nonfactory approved components may cause injury or property damage.

23. DO NOT MACHINE OR WELD ANY PART OF THE WINCH. Such alterations may weaken the structural integrity of the winch.

24. DO NOT CONNECT WINCH TO EITHER 110V AC HOUSE CURRENT OR 240V MAINS AS WINCH BURNOUT OR FATAL SHOCK MAY OCCUR.

25. Never allow shock loads to be applied to winch or winch rope.

26. Use caution when pulling or lowering a load up and down a ramp or incline. Keep people, pets and property clear of the path of the load.

27. The switch assembly must be kept free of dirt and moisture to ensure safe operation.

28. To prevent unauthorised use of the winch, remove pendant control and store in a clean dry area such as the glove box.

INSTALLATION



Caution No part of the vehicle (skidplates, wiring, auxiliary lights, tyres, etc.) should impede the operation of your winch. When mounting, check all vehicle and winch parts for free operation. Be sure that the winch mounting location does not significantly reduce ground clearance.

Step (1)

Mount the winch to a firm base. Be sure that your structural support is strong enough to support the rated pulling forces of the winch.

Step (2)

While mounting is at your discretion, always remember that your winch is to be operated with the winch rope in an underwound orientation on the winch rope drum. Your winch is designed to ROPE IN and ROPE OUT in one direction. DO NOT attempt to reverse the operation of winch.

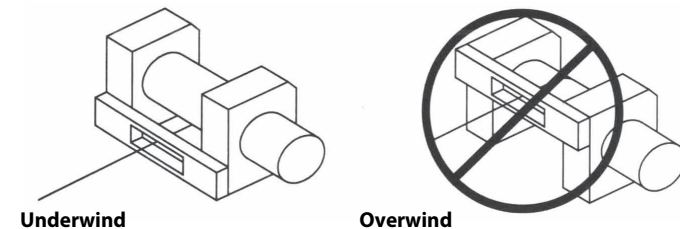


Figure 7

RIDGE 4X4
RYDER

RIDGE 4X4
RYDER

⚠ Warning Batteries contain gasses which are flammable and explosive. Wear eye protection during installation and remove all metal jewellery. Do not lean over battery while making connections.

Step (3)

Refer to Figure 8 for wiring diagram.

Route the short red and black colour coded wires from the control box to the motor. Route the long red and black colour coded wires from the control box to the battery. Attach the circuit breaker to battery end of the red wire. Wrap the circuit breaker with electrical tape to prevent accidental short circuits.

Apply several layers of electrical tape where wiring may come into contact with sharp metal parts of the vehicle to prevent insulation abrasion or cutting.

Attach the circuit breaker to the battery positive terminal. Connect the remaining black control box wire to the battery negative terminal. Open the cover on the control box, attach the remote control to the control box.

Step (4)

FREESPOOL OPERATION

Pull and turn the clutch knob to the "Free" position as shown in Figure 9.

If there is a load on the winch rope, the clutch knob may not pull out easily.

DO NOT FORCE THE CLUTCH KNOB. Release tension on the clutch by jogging out some of the winch rope. Release the clutch and pull out the winch rope and

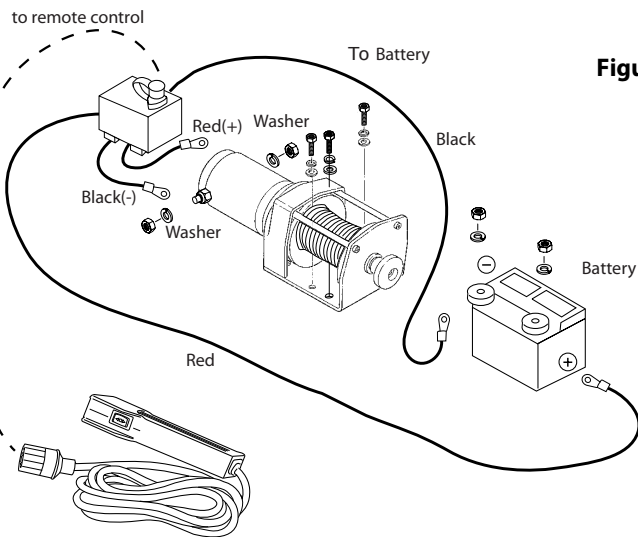


Figure 8

secure to anchor or load. Check that there are at least five (5) turns of winch rope left on the drum. Re-engage the drum by returning the clutch knob to the "Engaged" position. (See Figure 9). Activate the winch in Cable Out momentarily to check drum rotation direction. If the drum rotates in the wrong direction, recheck your wiring.

⚠ Caution Clutch must be fully engaged before winching. Never engage clutch knob while drum is turning.

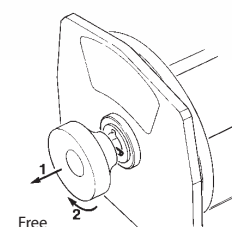
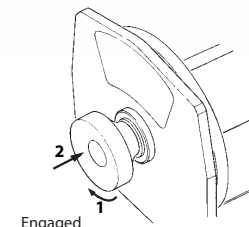


Figure 9

⚠ CAUTION
If the winch motor stalls, do not continue to apply power.



DYNEEMA ROPE

1. The life of the dyneema winch rope is directly related to the care it receives. The winch rope on a new winch, and any replacement ropes, should be respoiled under a minimum of 100 lb load before using the winch. Failure to do this will result in winch rope damage. Inspect winch rope before use. Mashed, pinched, frayed or kinked areas severely reduce the load-carrying capacity. Replace damaged winch rope.

2. Prevent kinks before they occur.

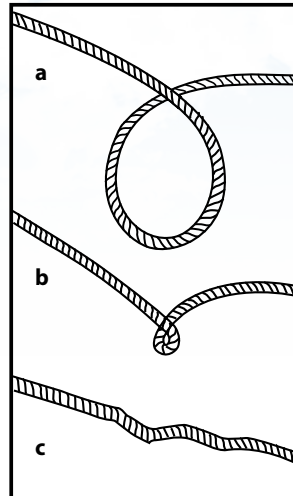
(a) This is the start of a kink. At this time, the winch rope should be straightened.

(b) The winch rope was pulled and the loop has tightened to a kink. The winch rope is now permanently damaged and should not be used.

(c) The result of kinking is that each strand pulls a different amount causing the strands under greatest tension to break and reduce load capacity of the winch rope.

3. When it is necessary to respool the winch rope under no load after use, hold the remote switch lead in one hand and the winch rope in the other. Start from as far from the vehicle as the remote switch will allow, activate the switch, walk in several feet of rope and release switch. Repeat the process. Always release the switch before your hand comes within four feet from the fairlead (if fitted).

4. Be sure the winch rope is distributed evenly and tightly on the drum. A loosely wound drum allows the winch rope to work its way down into the layers of winch rope on the drum and become wedged.



REPLACING THE DYNEEMA ROPE

1. If the winch rope has become worn or is beginning to show signs of strands breaking it must be replaced before being used again. To do this, remove the defective rope by free spooling. Remove the bolt on the drum and release the rope.
2. Insert the end of the new rope and secure bolt tightly.
3. Engage the clutch and re-spool the new rope on the drum keeping tension on the rope as it spools. Ensure that the rope is respooling in the under wind position.

Warning Only replace the winch rope with the identical replacement part recommended by the manufacturer.

PREPARING THE WINCH

Danger Wear heavy leather gloves when handling dyneema winch rope. When handling the hook, always use handsaver (see Fig.10). Never put your fingers into the hook. Placing finger(s) in hook could result in injury.

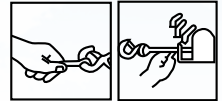
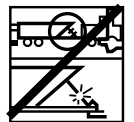


Figure 10



WRONG

1. When anchoring the pulling vehicle, set the parking brake and block or chock the wheels. Keep the vehicle's foot brake depressed and place automatic and manual transmissions in neutral.



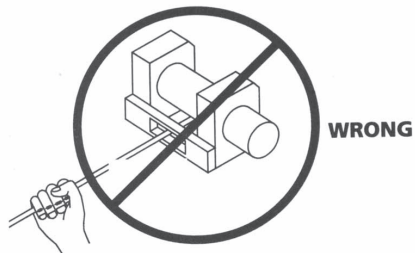
Warning Inspect switch and wiring for cracks, pinched spots, frayed wire, or loose connections. A damaged, shorted lead could cause the winch to run as soon as it is plugged in.



WINCHING

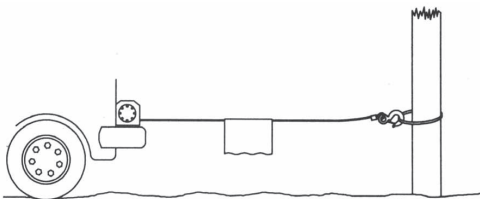
⚠ Danger Never touch the winch rope or hook while they are in tension or under load. Even at rest, the winch may have the winch rope in tension. Never guide a winch rope under tension onto the drum with your hands (see Fig.11).

Figure 11



1. Winch with at least five wraps of winch rope around the winch drum. With fewer wraps, the winch rope could pull loose from the drum under load.
2. When pulling a load, place a blanket, jacket or damper over the winch rope near the hook end (see Fig.12). This will slow the snap back of a broken winch rope and help to prevent serious injury.

Figure 12



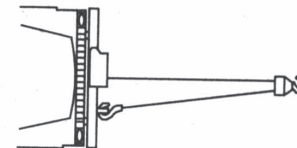
⚠ Warning Note the winch's rated capacity and do not exceed it.

⚠ Warning When the load exceeds the maximum rated pull of the winch, the external circuit breaker will automatically shut down the winch. To reset the circuit breaker release the switch button. Note the winch will not be able to restart normally until the motor heat built up from the excess strain cools down.

3. Double line with a pulley block (see Fig.13) to reduce the load on the winch, winch rope and battery. Double lining will also reduce winch line speed. Be sure all equipment used meets the winch's maximum line pull rating. When double-lining, pulley blocks should be rated to a minimum of two times the winch's line pull rating.

WINCHING

Figure 13



4. If you install a tow hook for double lining, it should be attached to the vehicle frame.
5. Pull as straight as possible to reduce the buildup of winch rope on one end of the drum.
6. The vehicle engine should be running during winch operation. If considerable winching is performed with the engine off, the battery may be too weak to restart the engine.

⚠ Caution Use a pulley block to avoid winching at sharp angles. Uneven layering will cause serious damage to the winch and winch rope. It can be corrected by securing load, spooling out the winch rope and repositioning it to the opposite end of the drum.

⚠ Danger Do not disengage clutch under load. If your winch is equipped with a freespool clutch, be certain that there is no tension on the winch rope when you disengage the clutch. Before winching a load, be sure the clutch is fully engaged.

⚠ Warning Use the winch to move the load. Do not attempt to assist the winch by moving the vehicle. The combination of the winch and vehicle pulling could overload the winch rope and the load could break the winch.

⚠ Danger Never rely on the winch to hold a load in place. None of our winches are designed for load-holding applications and may unwind or fail due to shock loading as the load is being transported. The load should be secured by other means, and the winch hook detached from the load.

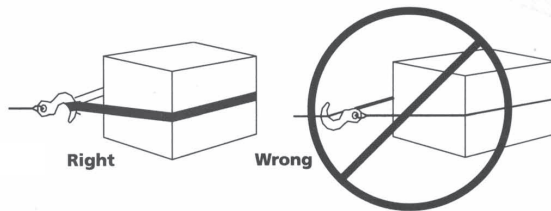
RIGGING

Warning Take your time when rigging and include a reasonable factor for safety. Improper rigging can result in damage to vehicle and equipment. It can also cause injury.

1. Never handle the winch rope or rigging while anyone else is at the control switch.

Caution Use a nylon sling when attaching the winch rope to an anchor point. Do not attach the hook back on to the winch rope. Doing so can cause the winch rope to break.

Figure 14



Warning Always use the handsaver (see Fig. 15). Do not hold the hook with your hand. This is important not only when reeling winch rope in but also when removing winch rope from the winch under power.

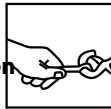
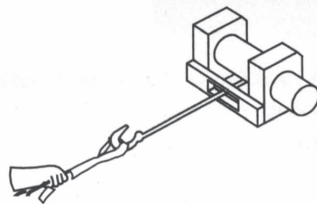


Figure 15



2. Run the winch intermittently to take up winch rope slack. When using a pulley block, be sure the winch rope is running properly in all pulleys before applying a load.

Warning Do not re-engage clutch while winch is running.

Warning Always operate winch with an unobstructed view of the winching operation. Never obscure warning and instruction labels.

RIGGING

3. Figure 16 illustrates the most commonly used rigging. A tree trunk protector is used to protect the tree when it is used as an anchor, and the winch rope is attached to use the tree trunk protector. The use of a chain or wire rope is not recommended due to the damage it could cause to the tree.



Figure 16

4. Figure 17 illustrates a method of rigging used to obtain a mechanical advantage. The use of a pulley block will almost double pulling line capacity.

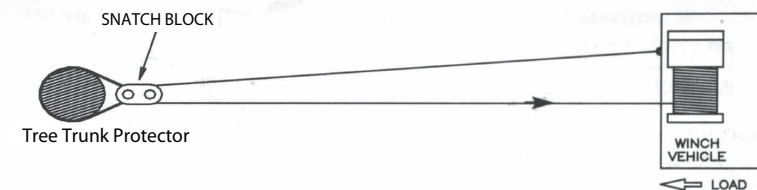


Figure 17

RIGGING

5. Figure 18 illustrate the use of a snatch block to change the direction of the pull. Mechanical advantage can be obtained by attaching a pulley block to the nylon sling with a shackle and running the winch rope to the anchor point.

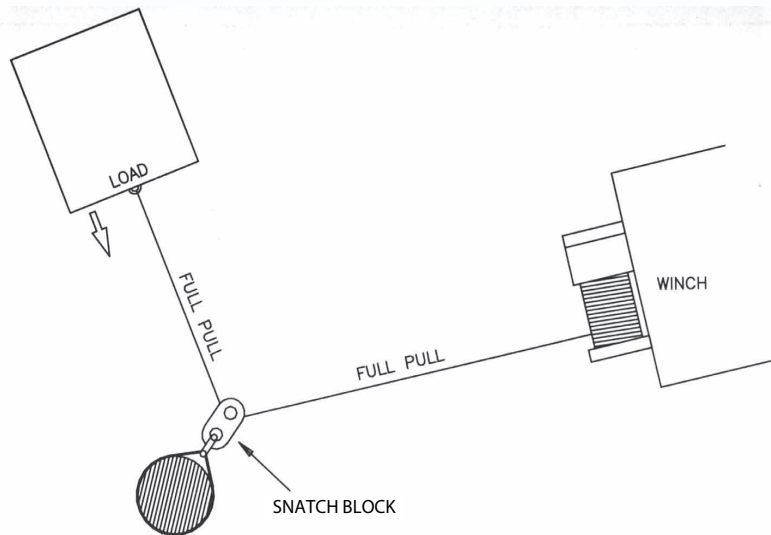


Figure 18

Caution Equipment such as shackles, hooks, snatch blocks, straps, etc. should be properly sized and rated and should be inspected periodically for damage that could reduce their strength.

MAINTAINNENCE

1. Periodically check the tightness of mounting bolts and electrical connections. Remove all dirt or corrosion and always keep clean.
2. Do not attempt to disassemble the gear box. Repairs should be done by the manufacturer or an authorized repair center.
3. The gear box has been lubricated using a high temperature lithium grease and is sealed at the factory. No internal lubrication is required.

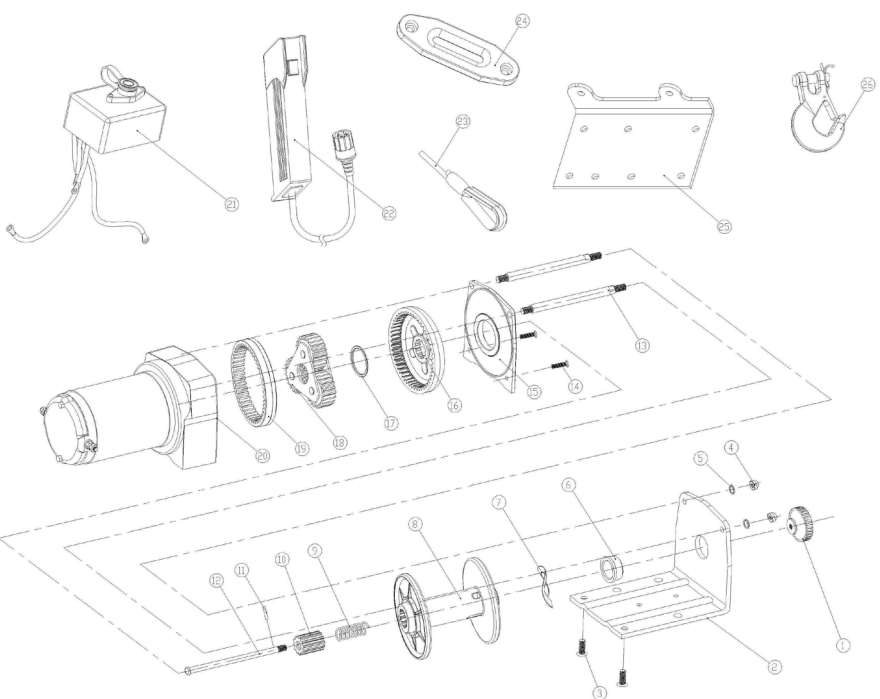
TROUBLE SHOOTING

Symptoms	Possible Causes	Corrective Action
Motor will not operate or only in one direction	<ol style="list-style-type: none"> 1. Switch inoperative 2. Broken wires or bad connection 3. Damaged motor 	<ol style="list-style-type: none"> 1. Replace switch 2. Check for poor connections 3. Replace or repair motor
Motor runs extremely hot	<ol style="list-style-type: none"> 1. Long period of operation 2. failed or removed overload 3. Damaged motor 	<ol style="list-style-type: none"> 1. Allow to cool 2. Replace or repair overload 3. Replace or repair motor
Motor runs, but with insufficient power or line speed	<ol style="list-style-type: none"> 1. Weak battery 2. Wire from battery to winch is too long 3. Poor battery connection 4. Poor ground 5. Damaged motor 	<ol style="list-style-type: none"> 1. Recharge or replace battery and check charging system 2. Keep winch within distance allowed by lead wires 3. Check battery terminals for corrosion and clean as required 4. Check and clean connections 5. Replace or repair motor
Motor runs but drum doesn't turn	<ol style="list-style-type: none"> 1. Clutch not engaged 	<ol style="list-style-type: none"> 1. Engage clutch
Winch runs backwards	<ol style="list-style-type: none"> 1. Motor wires reversed 2. Switch wires reversed 3. Battery switch installed incorrectly 	<ol style="list-style-type: none"> 1. Recheck wiring 2. Recheck wiring 3. Check battery connections
Winch coasts	<ol style="list-style-type: none"> 1. Excessive load 	<ol style="list-style-type: none"> 1. Reduce load or double line
Motor operates but stops	<ol style="list-style-type: none"> 1. Excessive load/overload 	<ol style="list-style-type: none"> 1. Allow to cool

PARTS LISTING

Item No.	Description	Qty
1	Clutch Knob	1
2	Junction Plate	1
3	Hexagon Nut	2
4	Acorn Nut M6	2
5	washer M6	2
6	Bushing	1
7	Corrugated Washer Φ 25	1
8	Drum	1
9	Spring for the clutch	1
10	Splined clutch shaft	1
11	Columnar Pin Φ 2.5	1
12	Pull Rod	1
13	Brace Rod	2
14	Crosshead Nut (Color Zinc) M5 x 12	2
15	Gear box cover	1
16	Out-put gear	1
17	washer	1
18	Planetary gear	1
19	48 Teeth gear	1
20	Motor assembly	1
21	Control box assembly	1
22	Wired control assembly	1
23	Rope 4.8mm x 12M	1
24	Aluminum Fairlead	1
25	Mounting Plate	1
26	1/4" Hook	1

PARTS DIAGRAM



LIMITED PRODUCT WARRANTY

This product is guaranteed against defects for a period of 1 year from date of purchase. This warranty is provided by Super Cheap Auto Pty Ltd ACN 085 395 124 (Supercheap Auto) of 751 Gympie Rd Lawnton QLD 4501 Ph (07) 3482 7500. Supercheap Auto warrant that subject to the exclusions and limitations below, the product will be free from defects in materials and workmanship. The warranty is not transferable to a subsequent customer if the product is sold by original customer during the warranty period. If a defect appears in the manufacture or assembly of the product before the end of the warranty period and Supercheap Auto find the product to be defective in materials or workmanship then Supercheap Auto will, in its sole discretion, either;

- a) Replace or repair the product or the defective part of the product free of charge; or
 - b) Have the product or the defective part of the product to be replaced or repaired by qualified repairer free of charge.
- Supercheap Auto reserves the right to replace defective parts of the Product with parts and components of similar quality, grade and composition where an identical part is not available. Refurbished parts may be used to repair the product.

WARRANTY CLAIMS

1. To claim under this warranty, take the product to the Front Service Desk of your nearest Supercheap Auto store. For store locations, visit www.supercheapauto.com.au (AUS) or www.supercheapauto.con.nz (NZ).
2. Any warranty claim must be accompanied by proof of purchase, additional information may be requested to process your claim. Should you not be able to provide proof of purchase with a receipt or a bank statement, identification showing your name, address and signature may be required to process your claim.
3. The product may need to be sent for testing to assess the defect before determining any claim. Faults or defects caused by product modification, misuse and abuse, normal wear and tear or failure to follow user instructions are not covered under this warranty.

EXCLUSIONS

THIS WARRANTY WILL NOT APPLY WHERE:

- a) The product has been repaired, altered or modified by someone who is not authorised to repair;

- b) Supercheap Auto cannot establish any fault in the product after test or inspection;
- c) The product has been used other than for the purpose for which it was designed;
- d) The defect in the product has arisen due to the customer's failure to properly install, use or maintain the product;
- e) The product has been subject to abnormal conditions, including environment, temperature, water, fire, humidity, pressure, stress or similar; or
- f) The defect has arisen due to abuse, misuse, neglect or accident.

THE WARRANTY DOES NOT EXTEND TO:

- a) Damage or defects caused by normal wear and tear;
- b) Wire cables or synthetic ropes; or
- c) Commercial/Industrial or hoisting applications.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Any expenses incurred relating to the return of this product to store will normally have to be paid by you. For more information contact your nearest Supercheap Auto store.

The benefits to the consumer given by this warranty are in addition to other rights and remedies of the Australian Consumer Law in relation to the goods and services to which this warranty relates.

