

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 characteristic 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: 1500 lbs (680 kgs)

Motor: 12V DC 0.52kw/0.69hp

Gear reduction ratio: 153:1

Cable: 4mm X 7.6m

Drum size: 31.5mm X 73mm

Overall dimensions: 285mm X 105mm X 105mm

Mounting bolt pattern: 80mm

Net Weight: 6.8KGS

LINE SPEED AND AMP DRAW (FIRST LAYER) 12V

Line Pull	Lb	NO	800	1250	1500
	Kg	LOAD	363	567	680
Line	ft/min	5.28	4.6	3.3	2.62
Speed	m/min	1.6	1.4	1.0	0.8
Motor	Amps	6	20	32	40

LINE PULL AND CABLE CAPACITY

Layers of cable		1	2	3
Rated line Pull	Lb	1500	1197	1045
per layer	Kg	680	542	474
Cumulative cable	ft	7.26	15.8	24.9
capacity	m	2.2	4.8	7.6

SAFETY PRECAUTIONS

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

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

Warning: Indicates an potentially hazardous situation which, if not avoided, will result in death or serious injury.

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

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

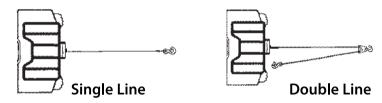
Your winch is a very powerful machine. If used unsafely or improperly, there is a possibility that property damage or personal injury could result.

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

1. Maximum working load capacity is on the wire 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 wire 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 WIRE ROPE. This reduces the load on the winch and the strain on the wire 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 wire rope and the winch.
- 4. ALWAYS STAND CLEAR OF WIRE ROPE, HOOK AND WINCH. IN UNLIKELY EVENT OF ANY COMPONENT FAILURE IT'S BEST TO BE OUT OF HARM'S WAY.
- 5. Inspect wire rope and equipment frequently. A Frayed wire 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 wire rope. Do not let wire rope slide through your hands
- 7. Never winch with less than 5 turns of wire rope around the winch drum since the wire 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 wire rope in or out. (Figure 1)

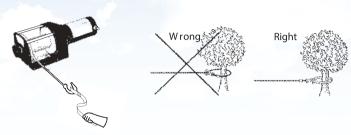


Figure 1

Figure 2

- 9. NEVER HOOK THE WIRE ROPE BACK ONTO ITSELF because you could damage the wire rope. Use a nylon sling. (Figure 2)
- 10. It is a good idea to lay a heavy blanket or jacket over the wire rope near the hook end when pulling heavy loads. If a wire rope failure should occur, the cloth will act as a damper and help prevent the rope from whipping. (Figure 3)
- 11. AVOID CONTINUOUS PULLS FROM EXTREME ANGLES as this will cause the wire rope to pile up on one end of the drum. This can jam the wire rope in the winch, causing damage to the rope or the winch. (Figure 4)

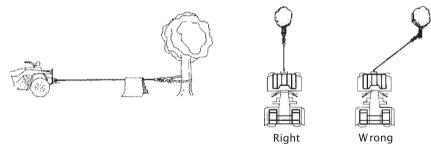


Figure 3 Figure 4

- 12. NEVER OBSCURE THE WARNING INSTRUCTION.
- 13. Always operate winch with an unobstructed view of the winching
- 14. Equipment such as tackle, hooks, pulley 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.

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- 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 wire 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 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 220V MAINS AS WINCH BURNOUT OR FATAL SHOCK MAY OCCUR.
- 25. Never allow shock loads to be applied to winch or wire 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 unauthorized use of the winch, remove pendant control and store in a clean dry area such as the glove box.

INSTALLATION

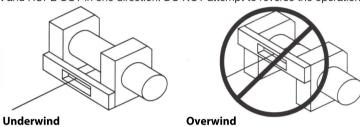
Caution: No part of the vehicle (skidplates, wiring, auxiliary lights, Tires, etc.) should impede the operation of your winch. When mouting, check all vehicle and winch parts for free operation. Be sure that the winch mounting location does not significantly reduce ground clearance.

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



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

Step (3)

Refer to Figure 5 for wiring diagram.

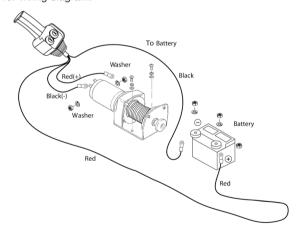


Figure 5

Route the short red and black colour coded wires to the motor. Route the long red and black colour coded wires to the battery.

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.

Step (4)

FREESPOOL OPERATION

Pull and turn the clutch knob to the "Free" position as shown in Figure 6. If there is a load on the wire 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 wire rope. Release the clutch and pull out the wire rope and secure to anchor or load. Check that there are at least five 5 turns of wire rope left on the drum. Re-engage the drum by returning the clutch knob to the "Engaged" position. 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.





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

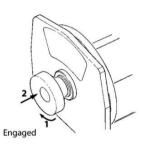
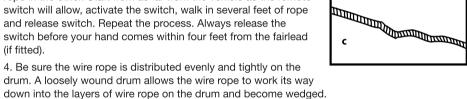


Figure 6

WIRE ROPE

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

- 2. Prevent kinks before they occur.
- (a) This is the start of a kink. At this time, the wire rope should be straightened.
- (b) The wire rope was pulled and the loop has tightened to a kink. The wire rope is now permanently damaged and should not be
- (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 wire rope.
- 3. When it is necessary to respool the wire rope under no load after use, hold the remote switch lead in one hand and the wire 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).



5. It is not advisable to grease or oil the wire rope due to dirt contamination that will reduce the wire rope life.

REPLACING THE WIRE ROPE

- 1. If the wire 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 wire rope with the identical replacement part recommended by the manufacturer.

PREPARING THE WINCH

Danger: Wear heavy leather gloves when handling wire rope, even with gloves on. When handling the hook, always use handsaver. Never put your fingers into the hook. Placing







finger(s) in hook could result in injury.



WRONG

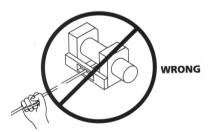
1. When anchoring the pulling vehicle, set the parking brake and block or chock the wheels. Keep the vehicle's foot brake depressed and place automatic and manual transmissions in neutral.

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.

2. When using the remote switch inside a vehicle, always pass it through a window to avoid pinching the wire in the door.

WINCHING

Danger: Never touch the wire rope or hook while they are in tension or under load. Even at rest, the winch may have the wire rope in tension. Never guide a wire rope under tension onto the drum with your hands.



1. Winch with at least five wraps of wire rope around the winch drum. With fewer wraps, the wire

rope could pull loose from the drum under load.

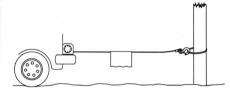


Figure 7

2. When pulling a load, place a blanket, jacket or tarpaulin over the wire rope near the hook end(see Figure 7). This will slow the snap back of a broken wire rope and help to prevent serious injury. Raise hood to protect windshield.

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 Figure 8) to reduce the load on the winch, wire 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.

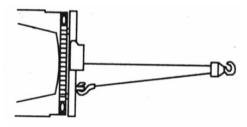


Figure 8

- 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 wire 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 wire rope. It can be corrected by securing load, spooling out the wire 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 wire 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 wire rope and the load could break the winch.

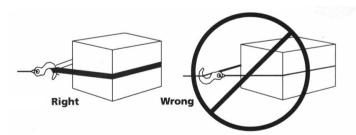
Danger: Never rely on the winch to hold a load in place. None of Our winches are designed for load-holding applications and may unwind or fail due to shock loading as the load is being transported. The load should be secured by other means, and the winch hook detached from the load.

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 wire rope or rigging while anyone else is at the control switch.

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



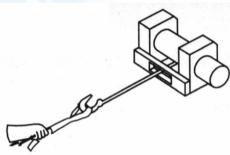


Figure 9

Warning: Always use the handsaver(Figure 9). Do not hold the hook with your hand. This is important not only when reeling wire rope in but also when removing wire rope from the winch under power

2. Run the winch intermittently to take up wire rope slack. When using a pulley block, be sure the wire 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.

3. Figure 10 illustrate the most commonly used rigging. A nylon sling is used to protect the tree when it is used as an anchor, and the wire rope is attached to use the sling. The use of a chain or wire rope is not recommended due to the damage it could cause to the tree.



Figure 10

4. Figure 11 illustrate a method of rigging used to obtain a mechanical advantage. The use of a pulley block will almost double pulling line capacity.

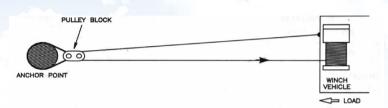


Figure 11

5. Figure 12 illustrate the use of a pulley 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 wire rope to the anchor point

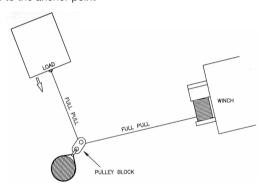


Figure 12

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

MAINTENANCE

- 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 he manufacturer or an authorized repair centre.
- 3. The gear box has been lubricated using a high temperature lithium grease and is sealed at the factory. No internal lubrication is required.

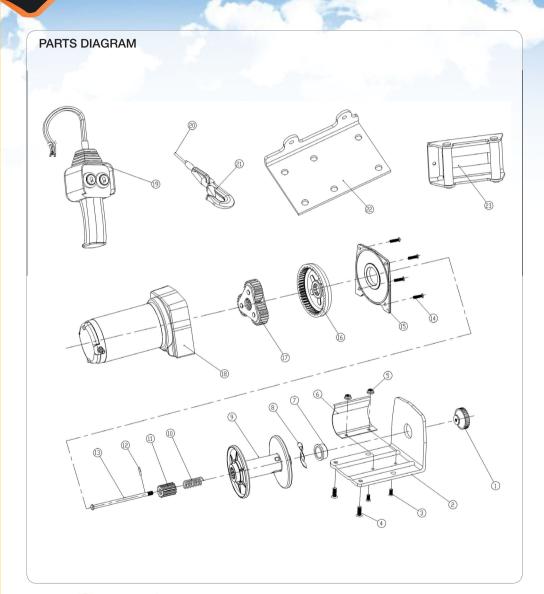
TROUBLE SHOOTING

Symptoms	Possible Causes	Corrective Action
Motor will not operate or only in one direction	Switch inoperative Broken wires or bad connection Damaged motor	Replace switch Check for poor connections Replace or repair motor
Motor runs extremely hot	Long period of operation Failed or removed overload Damaged motor	Allow to cool Replace or repair overload Replace or repair motor
Motor runs, but with insufficient power or line speed	1. Weak battery 2. Battery to winch wire too long 3. Poor battery connection 4. Poor ground 5. Damaged motor	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	1. Clutch not engaged	1. Engage clutch
Winch runs backwards	Motor wires reversed Switch wires reversed Battery switch installed incorrectly	Recheck wiring Recheck wiring Check battery connections
Winch coasts	1. Excessive load	Reduce load or double line
Motor operations but stops	Excessive load/overload	1. Allow to cool



RIDGE ACESSORIES RYDER

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WINCH PARTS LIST

Item	Description	Qty
1	Clutch handle	1
2	Junction plate	1
3	Screw M5X8	2
4	Screw M6X12	2
5	Nut M5	2
6	Cable spring	1
7	Bearing bush	1
8	Wave spring washer Ø25	1
9	Drum	1
10	Clutch spring	1
11	Clutch shaft	1
12	Columnar pin Ø2.5	1
13	Pull rod	1
14	Screw M5X12	4
15	Gearbox cover	1
16	Output gear wheel	1
17	Planetary gear assembly	1
18	Motor assembly	1
19	Switch assembly	1
20	Cable Ø4.0mmX7.6 m	1
21	1/4"hook	1
22	Mounting Plate	1
23	Fairlead	1





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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.

