

3500lb Electric Winch

INSTRUCTION MANUAL

Please keep your invoice with this manual in a safe, dry place for future reference.

You will need this manual for the safety warnings and cautions, assembly instructions, operating and maintenance procedures, troubleshooting and parts list.



WATCH VIDEO BEFORE USE



INCLUDED ACCESSORIES

- Power lead fitted with water-sealed plug and circuit breaker
- 2. Remote switch with water-sealed plug for safe operation
- 3. 10.5m x 5.5m cable with snap hook
- 4. Mounting bracket for trailer hitch
- 5. Emergency crank handle and adjustable clutch

PRODUCT FEATURES

- Convenient, portable power for pulling boats, stuck vehicles and other heavy items
- 2. Powerful (3500lb) pulling power
- 3. 12-volt powered for convenient use without extension cords or small gas engines
- 4. Portable with built-in carrying handle and quick-attach mounting plate.



READ ALL INSTRUCTIONS BEFORE USING THE WINCH

- 1. KEEP WORK AREA CLEAN: Cluttered areas invite injuries.
- 2. OBSERVE WORK AREA CONDITIONS: Do not use the winch in damp, wet, or poorly lit locations. Don't expose to rain. Keep work area well lit. Do not use electrically powered equipment in the presence of flammable gases or liquids.
- 3. KEEP CHILDREN AWAY: Children must never be allowed in the work area. Do not let them handle machines, tools, or equipment.
- 4. STORE IDLE EQUIPMENT: When not in use, the winch must be locked up in a dry location to inhibit rust. Always lock up tools and keep out of reach of children.
- **5. DO NOT FORCE THE WINCH:** It will do the job better and more safely at the rate for which it was intended. Do not use inappropriate attachments in an attempt to exceed the tool's capacities.
- **6. USE THE RIGHT TOOL FOR THE JOB:** Do not use a tool for a purpose for which it was not intended.
- 7. DRESS PROPERLY: Do not wear loose clothing or jewellery, as they can be caught in moving parts. Non-skid footwear is recommended. Wear restrictive hair covering to contain long hair. Always wear appropriate work clothing.
- **8. DO NOT ABUSE THE POWER CORD:** Protect the power cord from damage, either from impacts, pulling or corrosive materials. Do not yank machine's cord to disconnect it from the receptacle.
- **9. DO NOT OVER-REACH:** Keep proper footing and balance at times. Do not reach over or across running machines.

10. MAINTAIN WINCH WITH CARE: Keep tools sharp and clean for better and safety performance. Follow instructions for lubricating and changing accessories. Inspect power cord periodically and, if damaged, have it repaired by an authorized technician. Inspect all moving parts and mounting bolts prior to use. Control handle and power switch must be kept clean, dry and free from oil and grease at all times.

11. REMOVE ADJUSTING KEYS AND

WRENCHES: Be sure that keys and adjusting wrenches are removed from the winch or machine work surface before operation.

- 12. AVOID UNINTENTIONAL STARTING: Be sure that you are prepared to begin work before turning the start switch on.
- 13. STAY ALERT: Watch what you are doing. Do not operate this winch when you are tired.
- 14. DO NOT OPERATE THIS WINCH WHILE UNDER THE INFLUENCE OF ALCOHOL, DRUGS, OR PRESCRIPTION MEDICINES.
- 15. CHECK FOR DAMAGED PARTS: Before using any winch, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment and binding of moving parts, any broken parts or mounting fixtures, and any other condition that may affect proper operation. Any part that is damaged should be properly repaired or replaced by a qualified technician. Do not use the winch if any switch does not turn on and off properly.

16. REPLACEMENT PARTS AND ACCESSORIES:

When servicing, make sure service personnel use only identical replacement parts. Use of any other parts will void the warranty. Only use parts and accessories intended for use with this winch.



SPECIAL WARNINGS WHEN USING THIS ELECTRIC WINCH

Using this electric winch may create special hazards. Take particular care to safeguard yourself and those around you.

THE CABLE:

- Be sure the cable is in good condition, and is attached properly.
- 2. Do not use the winch if the cable is frayed.
- 3. Do not replace the cable with a cable of lesser strength.

THE BATTERY:

- Be sure the battery is in good condition. Avoid contact with battery acid or other contaminants.
- Always wear ANSI approved eye protection when working around a battery.
- 3. To avoid running the battery down, have the engine running when using the winch.

STAND BACK:

- Stay out of the direct line that the cable is pulling. If the cable slips or breaks, it will "whiplash" along this line.
- 2. Keep hands, clothing, hair and jewellery clear of the winch while in use.
- Use a spotter to assist you in assuring that it is safe to operate the winch. Make sure this person is out of the way of the vehicle and the cable before activating the winch.

POWER LIMITS:

- Do not attempt to exceed the pulling limits of this winch.
- Never use the hand crank to "assist" the winch. This will damage the winch and may cause personal injury.

NOTICE:

The warnings, cautions and instructions discussed in this manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

SAFETY WARNING & CAUTIONS:

When using powered equipment, basic safety precautions should be always followed to reduce the risk of personal injury and hazards.



WIRING OF THIS ELECTRIC WINCH

TEMPORARY WIRING

- Lift the rubber seal, and plug of the power cable into the socket on the right side of the winch body. Route the power cable from the winch to your battery, being careful to avoid tangling it in moving equipment, or causing a tripping hazard.
- Connect the black clamp handle of the power cable to the frame of your vehicle, establishing a ground connection. Connect the red clamp handle to the positive (+/red) terminal of your battery. Note: Be sure you are using a 12V automotive battery or equivalent, in good condition.
- 3. Lift the rubber seal on the left side of winch body. Taking the remote control unit, insert the socket at the end of the cord into the plug on the right side of the winch body labelled "Remote Control".
- 4. Set the remote control aside in a safe place until ready for use.

PERMANENT WIRING

- Attach the over-current protector to the positive (+/red) terminal of your battery, using the battery terminal clamp bolt.
- 2. Plan a route for the wiring from the point of the vehicle where the winch will be mounted or used to the battery. This route must be secure, out of the way of moving parts, road debris, or any possibility of being damaged by operation or maintenance of the vehicle. For example, you may wish to route the wires under the vehicle, attaching it to the frame using suitable fasteners. Do not attach the wires to the exhaust system, drive shaft, emergency brake cable, fuel line, or any other components which may create damage to the wiring through heat or motion, or create a fire hazard.

- If you drill through the bumper or any part of the body to route the wires, be sure to install a rubber grommet in the hole to prevent fraying of the wires at that point.
- Route the power cable from the point the winch will be used to the battery. Following the precautions discussed above.
- Remove the red clamp handle, and attach the red wire to the over-current protector which is mounted onto the positive (+/ red) terminal of your battery.
- Remove the black clamp handle, and attach the black wire to the frame of your vehicle, creating a secure electrical ground.

WARNINGS:

- Always connect red to red (positive to positive) and black to the vehicle's frame, making a ground connection, when using battery power from your vehicle.
- Never continue use of your winch or other accessory until the battery is completely run down. This can permanently damage your battery!
- You may wish to keep your engine running while using this winch, to continually recharge the battery. However, exercise extreme caution when working around a running vehicle.
- 4. Do not use a dirty, corroded or leaking battery. You may suffer injury from acid burns.



MOUNTING OF THIS ELECTRIC WINCH

Your winch is designed to be mounted temporarily, using the Trailer Hitch Mounting Bracket. However, you may also mount your winch permanently.

PERMANENT MOUNTING

- Select a mounting site on the bumper of your vehicle, truck bed, boat trailer, or other suitable location
- Align the winch with the desired location, and mark for drilling the locations of the 4 holes on the base of the winch.
- 3. Drill these locations on your vehicle.
- 4. Using hardened steel bolts at least %" in diameter, install your winch to the location.

TEMPORARY MOUNTING

- Attach the three plate stud bolts to the adapter plate, as shown, using the supplied nuts. Tighten securely.
- Index the heads of the plate studs into the keyhole slots on the back of the winch.
- Attach the winch/adapter plate assembly to your trailer hitch, by inserting the trailer hitch ball through the shaped hole in the adapter plate.

NOTE:

This winch can generate 3500lb of pulling force. Be sure the location you select can withstand this much force. You may need to use steel reinforcement plates, or weld on additional bracing, depending on the desired mounting location.

MAINTENANCE OF THIS ELECTRIC WINCH

Lubricate the cable occasionally with light oil.

Grease the gears every 6 months. To do this, remove the clutch knob and separate the left and right housing. Use any good quality waterproof grease.



USING THIS ELECTRIC WINCH

- Put your vehicle in neutral. (Never winch with your vehicle in gear or in park, since this could damage your vehicle's transmission.) Put your emergency brake on. Block the wheels from rolling, using suitable chocks. Failure to follow these instructions can cause your vehicle to roll while winching, creating an extremely dangerous situation!!
- 2. To pull out the cable, turn the clutch knob counter-clockwise to loosen it, and then pull out the cable you need. Or turn the clutch knob clockwise to tighten it, then use the remote control or wireless remote control to let out the cable you need. Always leave at least three turns of cable on the spool to prevent pulling the cable out of the winch!
- Hook onto the object using a pulling point, tow strap or chain. Never wrap the cable around the object and hook onto the cable itself. This can cause damage to the object being pulled, and kink or fray the cable.

- 4. Re-tighten the clutch knob.
- Stand clear, and when it is safe to do so, use the power switch in the remote control to retract the cable, and winch the item as desired.

WARNINGS:

- Keep hands, clothing, hair, and jewellery clear of the drum area and cable when winching.
- 2. Never use the winch if the cable is frayed, kinked or damaged.
- 3. Never allow anyone to stand near the cable or in line with the cable behind the winch while it is under power. If the cable should slip or break, it can suddenly whip back toward the winch, causing a hazard for anyone in the area. Always stand well to the side while winching.

USING THE EMERGENCY HAND CRANK

- Turn the clutch knob clockwise until hand tight.
 Do not force it or over tighten.
- Place the end of the hand crank over the flattened end of threaded shaft on the left side of the winch
- Rotate the hand crank clockwise to tighten the cable. Continue to turn until the cable has been completely retracted.

WARNING:

Do not use the crank to assist an operating winch. This will damage the winch and may cause personal injury.

TROUBLESHOOTING TIPS Resolving potential faults of an electric winch

- 1. THE CLUTCH WHEEL LOCATED ON THE RIGHT SIDE IS USED TO ENGAGE/ DISENGAGE THE ELECTRIC MOTOR DURING ITS APPLICATION OF LOADING AND UNLOADING A BOAT FROM ITS TRAILER.
- The clutch can be in two states engaged and disengaged.
- To engage the clutch, turn the clutch wheel clockwise until a small amount of friction is felt. A mistake made by the user is they tighten the clutch as tight as possible, when only a small amount of tension is needed, potentially damaging the clutches ability to engage with the gears driven by the electric motor and rendering the winches electric assistance useless.
- To disengage the clutch, turn the clutch wheel anti-clockwise until it spins freely with no connection between the clutch and the gears being felt. The purpose of allowing the clutch to be loose or disengaged is to allow the winch to free spool when releasing the boat, speeding up the unloading phase. During free spool, an attempt to engage the clutch should never be made and will almost always lead to damaging of the devices internal gears and clutch mechanism.
- This winch is not not a load holding device. A safety chain should always be used to hold the boat on the trailer and that the winch clutch must not be over-tightened during use.

WARNING: YOU MUST ONLY APPLY LIGHT TENSION ON THE CLUTCH WHEN TIGHTENING. IF YOU OVER TIGHTEN THE CLUTCH, YOU WILL DAMAGE THE CLUTCH AND IT WILL FAIL TO OPERATE AND GAUGE. THIS WILL NOT BE COVERED BY WARRANTY.



- THERE ARE VARIOUS FACTORS WHICH CAN CONTRIBUTE TO POOR PERFORMANCE OF YOUR ELECTRIC WINCH. SOME OF WHICH INCLUDE:
- The state of your boat trailer rollers and spindle.
 The spindles should be oiled and lubricated regularly. The amount of friction while loading your boat will be less, requiring far less effort and making it easier for the winch during electrical operation.
- Not all boat ramps are the same. Depending on the location, some can have a far steeper angle. In the event where the ramp your utilising is steep, do no expect the winch to perform as well as if a more shallow angle were being used. This is due to the fact that far more of a load is being placed on the winch and it's motor, potentially requiring the need for manual intervention.
- During the summer months in Australia, its not unlikely to see temperatures reach 40 degrees +. If you coincide that with bitumen and temperatures at the boat ramp, it is typical to see heat in excess of 50 degrees with limited air flow around your winch. Utilisation of the winch during these conditions will inhibit its performance. As a result of the increased heat, the motor is far more likely to overheat, causing the sensor on the winch to turn the motor off to prevent burnout. The only time the winch will

TROUBLESHOOTING TIPS Resolving potential faults of an electric winch

shut down is when it is over-heating, or if the power / remote lead is damaged. It is typical for a winch to overheat during use, especially on a warm day - this is where you will use your spare emergency handle to winch the winch. Once the winch cools down, you can then resume powering your winch utilising the electric motor. The winch motor sensor will activate and you will be able to resume use of the when the winch mote is back to normal temperature. This is an automatic function so patience is required. The use of the manual winch handle is always an option should you require emergency use.

- Overloading the winch is not only detrimental to performance due to applying excess load, but can damage the winch motor and is highly unsafe to the user
- USERS MAY MISTAKE THE WINCH CUTTING OUT FOR MOTOR BURNOUT OR THE WINCH FAILING.
- Contained in the winch body is a sensor. It's purpose is to constantly survey the temperature of the motor and prevent it from getting to the stage of burning out. When a certain temperature is recognised, the sensor will cause the motor to shut off, as outlined in point 2 above. There are a number of factors which can lead to poor performance of the winch, however the consumer must remember, this is a smaller economy winch so it has its performance limitations.
- IN ORDER TO UTILISE THE WINCH TO ITS MAXIMUM POTENTIAL, THE ELECTRIC MOTOR REQUIRES A POWER SUPPLY OF 12V.
- Having less will cause the winch to operate slower than usual and pull less than originally intended. However, having a higher voltage does not mean your winch will perform better either. In fact, it may actually damage the unit, potentially causing an electrical fire.

- FOR MAXIMUM BENEFIT, THE BOAT TRAILER SHOULD BE BACKED INTO THE WATER AS FAR AS POSSIBLE TO ALLOWS EASE OF RETRIEVAL AND MINIMUM FRICTION BASED RETRIEVAL.
- ANY MODIFICATIONS TO THE ELECTRIC WINCH ITSELF OR ITS COMPONENTS SUCH AS THE POWER CORD OR REMOTE, WILL RESULT IN AN INSTANT LOSS IN WARRANTY.
- A common modification we've witnessed customers make is the conversion of the stock alligator clips to an Anderson plug. If done professionally, the conversion may be successful. However on too many occasions, customers often return the winch reporting power supply issues, without realising its due to the modification.
- 6. TENSION ON THE STEEL CABLE IS REQUIRED WHEN SPOOLING THE WINCH IN AND OUT.
- The winch drum may need to rotate several times until required tension of the cable on the drum occurs. This will occur when the cable is loose on the drum and patience will be required as the winch drum rotates tensioning the cable.



TROUBLESHOOTING TIPS Resolving potential faults of an electric winch

- LIKE ANY PIECE OF EQUIPMENT, MAINTENANCE IS REQUIRED TO ENSURE EASE OF USE AND LONGEVITY OF THE WINCH.
- Cleaning the winch after applications involving salt, water or dirt.
- Lubrication of internals, preventing wear to the teeth of gears and allowing for much smoother operation.



- 8. BUILT TO BE USED IN ALL CONDITIONS, OUR ELECTRIC WINCH IS WEATHER SEALED ALLOWING FOR USE DURING NORMAL WEATHER CONDITIONS.
- However, this does not mean that the winch is waterproof and under no circumstance should it be fully submerged underwater, as its not only dangerous, but the electric portion of the winch is at risk of being permanently damaged. In the event that the winch is fully submerged, disconnect the power cord prior to handling the winch.

- IF YOU'VE USED YOUR WINCH DAYS PRIOR WITH IT WORKING PERFECTLY, ONLY TO FIND THAT ALL OF THE SUDDEN THE ELECTRICAL COMPONENT DOESN'T WORK, YOU MAY HAVE DAMAGED YOUR POWER CABLE.
- The copper used to transfer electricity within the cable is thin and prone to separating when treated without care. In order to prevent this from occurring, store the winch in a safe place, making sure no objects are lying on top of the winch. Make sure to pack the power and remote leads in a safe place. If heavy objects or items are packed on top of the power and remote leads, this may lead to the internal copper fibres inside the lead to separate causing the power/remote lead to not be able to transmit power. In this instance a new power/remote lead will need to be purchased.



TROUBLESHOOTING TIPS Resolving potential faults of an electric winch

10.NEXT TO THE CLUTCH ARE TWO BOLTS THAT SERVE THE PURPOSE IN SECURING THE HANDLE FOR MANUAL OPERATION OF THE WINCH.

- Consumers often mistake these bolts for an additional measure to secure the clutch. However, the clutch doesn't require the additional security of the bolts.
- In fact by utilising the bolts to tighten the clutch, irreversible damage can occur to the clutch knob and gears within the winch, rendering the electrical component useless.





- 11.IF YOUR WINCH SLOWS AND BECOMES
 HARDER TO SPOOL IN AND OUT DURING
 ELECTRICAL OR MANUAL OPERATION, OR
 EVEN SEIZES...
- Utilise WD-40 as a lubricant.

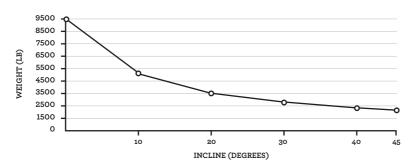




PULLING CAPACITY OF THIS ELECTRIC WINCH

- This winch has a capacity of 3500lbs.
 Applying this measurement to practical
 application, you can use this winch to move
 the following:
 - a. Move a load from a dead stop of up to 3500lb on level ground
 - b. Move a water-borne craft of up to 9500lb
 - c. Maintain movement of a wheeled vehicle of up to 11,000lb.
- Pulling Capacity is reduced as incline increases. For example, rolling capacity is reduced from 6000lb on flat ground to 9500lb on a 45° incline. Please use the block and tackle and use of pulleys.

Please refer to the following chart for estimated pulling capacity (rolling weight) on various inclines.



WINCH SPECIFICATIONS

Capacity:	11,000lb rolling
	9500lb Marine
	3500lb Pulling Capacity
Max Boat Size:	18ft
Max. Boat Weight:	5000lb
Line Speed:	1.38m/min
Cable Length:	10.5m
Hook Size:	¾" opening x 3¾" length

Power Supply:	12 Volts
Power Cord:	3.0m Negative Lead
	3.0m Positive Lead
Wireless remote:	choose
Remote Switch:	3m
Mounting Plate:	8¾" x 4¹5/16" x 3/16"
Overall Dimensions:	9½" x 7½"x 10"
Net Weight:	12kg