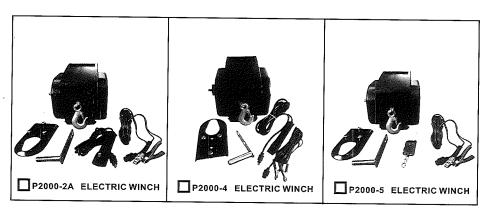
# **Electric Winch**

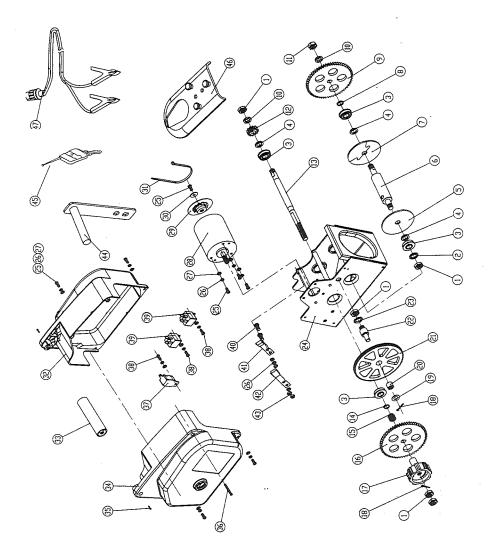
(Permanent magnetic motor)

## **Assembly & Operating Instructions**



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## Winch Assembly Drawing



## 2000LB WINCH SPECIFICATIONS

Capacity:	6000Lb.Rolling		
	5000Lb.Marine		
	2000Lb.Pulling Capacity		
Max.Boat Size	18Feet		
Max.Boat Weight:	5000Lbs.		
Line Speed:	5.5Feet/Minute without Load		
Cable Length:	Ф4.8mmX9.2m		
Hook Size:	1/4"		
Power Supply:	12Volts		
Power Cord:	.5m Negative Pole		
<u> </u>	5m Positive Pole		
Remote Switch wire length:	3m		
Mounting Plate:	8-3/4"length x4-15/16"widthx3/16"height		
Overall Dimensions:	241.3mm x190.5mmx254mm		
Weight:	N.W:10kgs G.W:11.5kgs		

#### **INCLUDED ACCESSORIES**

Connecting Plate, Emergency Crank Handle

### **PRODUCT FEATURES**

- 1. Convenient, portable power for pulling boats, stuck vehicles and other heavy items.
- 2. Powerful 2,000 Lb pulling capacity.on hard, smooth ground...
- 3. 12Volt powered for convenient use without small gas engines.
- 4. Portable, with built-in carrying handle and quick-attach mounting plat

## SAVE THIS MANUAL

You will need this manual for the safety warnings and cautions, assembly instructions, operating procedures, maintenance procedures, trouble shooting, parts list, and diagram.keep the manual book in a safe, dry place for future reference.

### NOTICE

The warnings, cautions, and Instructions discussed in this instruction 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**

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

#### <u>Advice</u>

The winch has functional difference compared with the common same model in the market.Our cluth is gear cluth,Other common winch is friction clutch.The operator should pay attention to the situation.

## READ ALL INSTRUCTIONS BEFORE USING THIS TOOL!

## SAFETY PRECAUTIONS

Warning! Observe safety precautions for personal safety and the safety of others. Improper equipment operation may cause personal injury and equipment damage.

Read the following carefully before attempting to operate your winch and keep the instructions for future reference.

#### Warning!

## MOVING PARTS ENTANGLEMENT HAZARD

Failure to observe these instructions could lead to severe injury or death.

## To avoid injury to hands or fingers

Always keep hands clear of wire rope.hook loop,hook and fairlead opening during installation,operation, and when spooling in or out.

Always use extreme caution when handling hook and wire rope during spooling operations.

Always use supplied hook strap whenever spooling wire rope in or out, during installation or operation to avoid injury to hands or fingers.

#### Warning

## CHEMICLAND FIRE HAZARD

Failure to observe these instructions could lead to severe injury or death.

Always remove jewelry and wear eye protection.

Never lean over battery while making connections.

Always verify area when drilling is clean of fuel line, fuel tank, brake lines, electrical wires, etc.

Never route electrical cables:

-Across any sharp edeges.

-Through or near moving parts.

-Near parts that become hot.

Always insulate and protect all exposed wiring and electrical terminals.

Always install termnial boots as directed in installation instructions.

## FALLING OR CRUSHING HAZARD

Failure to observe these instructions could lead to severe injury or death.

Never use as an overhead hoist, or to suspend a load.

Never use to lift or move persons.

#### CAUTION

## MOVING PARTS ENTANGLEMENT HAZARD

Failure to observe these instructions could lead to minor or moderate injury.

#### General Safety:

Always know your winch: Take time to fully read and understand the included Installation and Operation guide, and Basic Guide to Winching Techniques, in order to understand your winch and winching operation.

Never operate this winch if you are under 16 years of age.

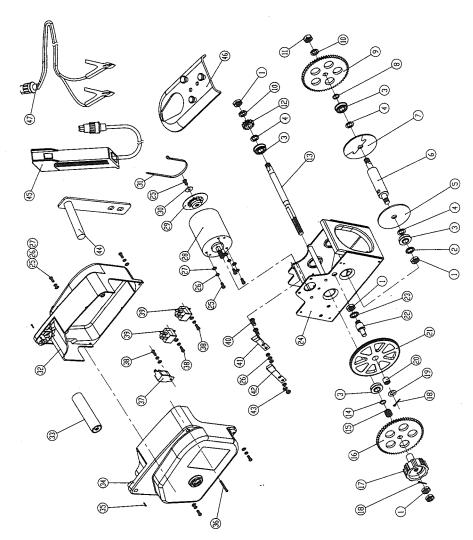
Never operate this winch when under the infulence of drugs, alcohol or medication.

Never exceed winch or wire rope rated capacity. Double line using a snatch block to reduce winch load.

## Parts List-2000LBS( P2000-5)

Item No.	Description	item No.	Description
1	Hexagon thin nut	25	Screw
2	Internal tooth lock washer	26	Spring washer
3	Bearing	27	Washer
4	Flat gasket	28	Motor
5	Tension Disc	29	One-way impeller assembly
6	Drum shaft	30	Washer
7	Cable protector panel	31	Nylon Ribbon
8	Drum shaft bushing	32	Right shell
9	Transmission gear	33	Handle
10	Spring washer	34	Left shell
11	Hexagon thin nut	35	Screw
12	Samll gear	36	Screw
13	Long shaft	37	35A Over-current protector
14	Circlips for shaft	38	Screw
15	Clutch spring	39	40A Solenoid
16	Transmission gear	40	Screw
17	Clutch knob	41	SSSplinter1
18	Cotter pin	42	Splinter2
19	Washer	43	Hexagon thin nut
20	Bearing	44	Hand crank
21	Dual gear	45	Wireless Remote Control
22	Dual gear shaft	46	Mounting plate housing
23	Lock washer	47	Dural color electrical cord
24	Winch Frame	48	Cable 4.8mmX9.2m

## Winch Assembly Drawing



#### Installation Safety:

Always choose a mounting location that is sufficiently strong to withstand the maximum pulling capacity of your winch.

Always use factory approved switches, remote controls, accessories and installation components.

Always use Grade 5 or better hardware, never weld bolts and never use longerbolts than those supplied from factory.

Always complete winch mounting and attachment of hook to hook loop before wiring winch before installation. Always position fairlead with WARNIING label on top.

Always spool the wire rope onto the drum as indicated by the drum rotation label on the winch. Required for automatic brake to work (if winch is so equipped) and for correct installation orientation.

Always prestretch wire rope and respool under load before use. Tightly wound wire rope reduces chances of "binding", which is wire rope working its way down into a loosely wound wire rope layer and catching or damaging itself.

#### CAUTION

#### MOVING PARTS ENTANGLEMENT HAZARD

Failure to observe these instructions could lead to minor or moderate injury.

#### Winch Safety:

Always inspect winch installation and wire rope condiction before operating winch. Frayecd, kinked or damaged wire rope must be replaced immediately. Loose or damaged winch installation must be corrected immediately. Never leave remote control plugged into winch while free spooling, rigging or sitting idle.

Never hook wire rope back onto itself. This damages the wire rope. Always use a choker chain, wire choker rope, or tree trunk protector on the anchor.

Always prior to winching, remove any element that may interfere with safe winch operation.

Always take your time when rigging for a winch pull.

Always be certain the anchor you select will withstand the load, and the strap or chain will not slip.

Never engage or disengage clutch if winc is under load, wire rope is in tension or wire rope drum is moving.

Always unspool as much wire rope as possible when rigging Double line or pick distant anchor point.

Never winch with less than 5 wraps of wire rope around the drum, the wire rope could come loose from the drum.

Always stand clear of wire rope and load during operation. Never touch wire rope or hook while in tension or under load.

Never touch the wire rope or hook while someone is at the remote swtich or during winch ing operation.

Never touch wire rope or hook while remote control is plugged into the winch.

Always stand clear of wire rope and load and keep others away while winching.

#### CAUTION

## MOVING PARTS ENTANGLEMENT HAZARD

Failure to observe these instructions could lead to minor or moderate injury.

Winch Safety:

Always require operator and bystanders to be aware of stability during winching of vehicle and/or laod.

Always keep the remote control lead clear of the drum, wire rope and rigging. Insepct for cracks, pinches, frayed wires or loose connections. Replace if damaged.

Always pass remote control through a window to avoid pinching lead in door, when using remote inside a vehicle.

#### CAUTION

### CUT AND BURN HAZARD

Failure to observe these instructions could lead to minor or moderate injury.

TO avoid injury to hands or fingers:

Always wear heavy leather gloves when handling a wire rope.

Never let wire rope slip through your hands.

#### TO avoid injury to hands or fingers:

Always be awar of possible hot surface at winch motor, drum or wire rope during or after winch use.

#### Notice

#### AVOID WINCH AND EQUIPMENT DAMAGE.

Always avoid continuous side pulls which can pile up wire rope at one end of the drum. This candamage your wire rope or winch.

Always ensure the clutch is fully engaged or disengaged.

Never use winch to tow other vehicles. Shock loads could momentarily exceed capacity of wire rope and

Always use care to not damage your frame when anchoring your vehicle during a winching operation.

Never "jog" wire rope under load. Shock loads could momentarily exceed capacity of wire rope and winch.

Never use winch to secure a load during transportation.

Never submerge winch in water.

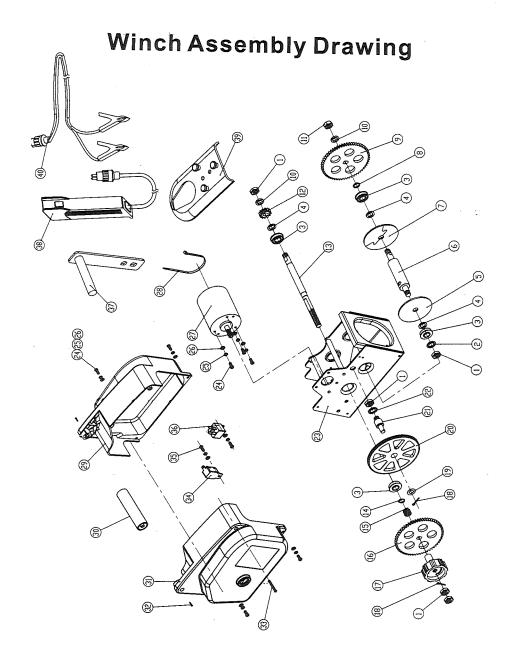
Always store the remote control in a protected, clean, dry area.

## Operation instruction:

- 1, KEEP WORK AREA CLEAN, Cluttered areas invite injuries.
- 2. OBSERVE WORK AREA CONDITIONS. Do not use winches in damp, wet ,or poorly lit locations. Don't expose accessory tools 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 ACCESSORY EQUIPMENT. When not in use, accessory tools 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 TOOL OVER LOADED. It will do the job better and more safely, steadily 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 ACCESSORY TOOL FOR THE JOB. Don't use the tools which are not suitable for winches.
- 7. DRESS PROPERLY. Do not wear loose clothing or shaky jewelry, 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. USE EYE, EAR AND BREATHING PROTECTION. Always wear ANSI approved impact safety goggles if you are producing metal filings or wood chips. Wear and ANSI approved dust mask or respirator when working around metal, wood, and chemical dusts and mists. Use ANSI approved ear protection when working in a loud or noisy environment.
- 9. DO NOT ABUSE THE POWER CORD. Assure the power cord from damage, either from impacts, pulling or corrosive materials. Do not yank battery's cord to disconnect it from the battery. Don't use other inappropriate accessories to exceed the rated line pull of winches.
- 10.PEOPLE DO NOT STAND OVER NEAR. Keep proper footing and balance at all times.Don't reach over or across running machines ,to avoid leading to severe injury or death.
- 11.MAINTAIN TOOLS WITH CARE. Keep tools sharp and clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect power cord periodically and, if damaged, have it repaired by a professional 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, grease, chemicals and corrosive materials at all times.
- 12. REMOVE ADJUSTING TOOLS AND WRENCHES. Be sure that not used tools adjusting wrenches are removed from the machine surface before operation.
- 13. AVOID UNINTENTIONAL STARTING. Be sure that you are absolutely prepared to begin working before turning the start switch on.

## Parts List-2000LBS( P2000-4)

Item No.	Description	Item No.	Description
1	Hexagon thin nut	25	Screw
2	Internal tooth lock washer	26	Spring washer
3	Bearing	27	Washer
4	Flat gasket	28	Motor
5	Tension Disc	29	One-way impeller assembly
6	Drum shaft	30	Washer
7	Cable protector panel	31	Nylon Ribbon
8	Drum shaft bushing	32	Right shell
9	Transmission gear	33	Handle
10	Spring washer	34	Left shell
11	Hexagon thin nut	35	Screw
12	Samli gear	36	Screw
13	Long shaft	37	35A Over-current protector
14	Circlips for shaft	38	Screw
15	Clutch spring	39	40A Solenoid
16	Transmission gear	40	Screw
17	Clutch knob	41	SSSplinter1
18	Cotter pin	42	Splinter2
19	Washer	43	Hexagon thin nut
20	Bearing	44	Hand crank
21	Dual gear	45	Remote control housing
22	Dual gear shaft	46	Mounting plate housing
23	Lock washer	47	Dural color electrical cord
24	Winch Frame	48	Cable 4.8mmX9.2m



14. STAY ALERE. Watch what you are doing. Do not operate this machine when you are tired.

15. DO NOT OPERATE THIS MACHINE WHILE UNDER THE INFLUENCE OF ALCOHOL. DRUGE, OR PRESCRIPTION MEDICINES.

- 16. CHECK FOR DAMAGED PARTS. Before using the winch, carefully check all parts to assure normal operation, which can provide safe and precaution function. Check for effectiveness of all parts, any broken parts, 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 can not be turned on and off properly.
- 17. REPLACEMENT PARTS AND ACCESSORIES. When replacing, don't use different replacement parts of different model and specification, using any other parts will make the warranty invalid. Only use parts and accessories intended for use with this tool, which are available from distributors.

- 1. Always connect red rope to the positive pole of battery, connect black rope to the negative pole.
- 2.Don't use your winch continuously or else your battery power will use up soon.
- 3. keep your engine running while using this winch, to continually recharge the engine. 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.
- 5. Always wear ANSI approved safety glasses when working around or with a battery.

## MOUNTING YOUR 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

1. Select a mounting site on the bumper of your vehicle ,truck bed ,boat trailer, or other suitable location.

NOTE: This winch can generate 2,000Lbs.pulling force. Be sure the location you select can with stand this much force. You may need to use steel reinforcement plates, or weld on additional bracing, depending on the desired mounting location.

- 2. Align the winch with the desired location, and mark for drilling the locations of the 2 holes on the base of the winch.
- 3. Drill these 2 holes locations on your vehicle.
- 4. Using hardened steel bolts at least M8 in diameter, install your winch to the location.

#### Temporary Mounting

- 1. Attach the Adapter Plate, as shown:
- 2. Index the heads of the plate studs into the keyhole slots on the back of the winch.
- 3. Attach the Winch / Adapter Plate assembly to your trailer hitch, by inserting the trailer hitch ball through the shaped hole in the Adapter Plate.

## To Connect The Electrical Wiring:

The winch contains 25A over-current protection device but you still need to note: The use of an "Overload Protection Device" (circuit breaker) is highly recommended in order to protect the vehicle and its battery from damage in case of a winch failure/overload. A 50-amp circuit breaker (not included) should be purchased and installed in a safe location as close to the vehicle's battery as possible. The circuit breaker will be installed inline with the winch 's "20" Lead Wire" (part #47) RED wire and the vehicle battery.

#### **USING YOUR WINCH**

1. 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

2. To pull out the cable turn the CLUTCH KNOB (#15) counterclockwise UNLOAD to loosen it, then pull out the cable you need .Always leave at least five turns of cable on the spool to prevent pulling the cable out of the winch.

3. 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 to LOAD

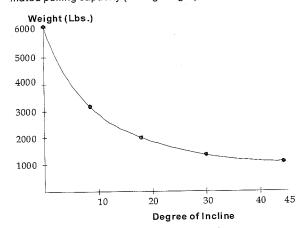
5. when it is safe to do so, use the power switch in the remote control to retract the cable, and winch the item as desired.

## **PULLING CAPACITY**

- 1. This winch has a capacity of 2,000Lbs. Applying this measurement to practical applications, you can use this winch to move the following.
- a. Move a load from a dead stop of up to 2,000Lbs, on level ground.
  b. Move a water Bourne craft of up to 5,000Lbs.

C. Maintain movement of a wheeled vehicle of up to 6,000Lbs.

2. Pulling Capacity is reduced as incline increases. For example, rolling capacity is reduced from 6,000Lbs on flat ground to 1,100Lbs.on a 45 incline. Please refer to the following chart for estimated pulling capacity (rolling weight) on various inclines.



## **USING THE EMERGENCY HAND CRANK**

Warning: Do Not Use the crank to assist an operating winch. This will damage the winch and may cause personal injury.

The function of the the emergency hand crank: When no power in the battery but the cable is still loaded, it can help to loose and retreat the cable temporarily. Never use the hand crank to operate the winch to make it loaded.

1. Turn the clutch knob clockwise to LOAD until hand tight. Place the hand crank on the long shaft.

2. Place the end of the hand crank outside.

3. Rotate the hand crank conterclockwise to tighten the cable. Clockwise turn it until the cable loose and has no any load.

#### MAINTENANCE

1. Lubricate the cable occasionally with a light oil.

2. 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.

## The working performence difference between P 2000-2A ,P2000-4andP2000-5

The working performance of P2000-2A:

It has clutch device, its cable only can be advanced by hand, but can be retreated by electricity. If you need to advance the cable when the winch is loaded:at first, you have to disengage clutch then, turn the hand crank to the cable retreating direction to make the clutch disengaged. So you can advance the cable.

## The working performance of P2000-4( It has wired remote control):

It has clutch device, its cable can be pulled out by hand and has electric advancing , retreating cable function.

## The working performance of P2000-5(It has wireless remote control):

It has clutch device, its cable can be pulled out by hand and has electric advancing , retreating cable function.

## Parts List-2000LBS( P2000-2A)

Item No.	Description	ltem Number	Description
1	Hexagon thin nut (galvanized)	21	Dual gear shaft
2	Internal tooth lock washer	22	lock washer
3	Bearing	23	Winch Frame
4	Flat gasket	24	Screw
5	Tension Disc	25	Spring washer
6	drum shaft	26	Washer
7 ·	Cable protector panel	27	Motor
8	Drum shaft bushing	28	Nylon Ribbon
9	Transmission gear	29	Right shell
10	Spring washer	30	Handle
11	Hexagon thin nut	31	Left shell
12	Samll gear	32	Screw
13	Long shaft	33	Screw
14	Circlips for shaft	34	35A Over-current protector
15	Clutch spring	35	Screw
16	Transmission gear	36	Solenoid
17	Clutch knob	37	Hand crank
18	Cotter pin	38	Remote control housing
19	washer	39	Mounting plate housing
20	Dual gear	40	Dural color electrical cord