



# ATLAS 4000 lb. ATV/UTV 12 VOLT DC ELECTRIC WINCH

## OWNER'S MANUAL & OPERATING INSTRUCTIONS



**NOT designed for use with cars, trucks,, or boats!  
The Atlas 4000 lb. ATV/UTV winch is intended for  
self-recovery of ATV or UTV off-road vehicles ONLY.**

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# TABLE OF CONTENTS

INDEX	PAGE
Winch Warranty .....	3
Winch Warranty Registration Form .....	4
Winch Description .....	5
Safety Instructions .....	6
Installation and assembly Steps .....	11
Winch Operation .....	22
Routine Maintenance .....	24
Technical Specifications .....	25
Parts List .....	26

**NOTE:** It is extremely important that you read and familiarize yourself with the correct operating procedures and winch pulling capabilities before you begin the assembly and operation of your new ATLAS 4000 lb. ATV/ UTV Winch.



# ATLAS LIMITED WARRANTY ONE YEAR PARTS ONLY

Atlas offers a limited one (1) year parts only warranty for all Atlas electric 12V winches sold in the USA. This warranty is extended only to the original retail purchaser. This limited one year warranty applies to manufacturing defects in materials and workmanship on all mechanical components of the Atlas winch. This limited one year warranty does not apply to electrical components consisting of motors, solenoids, and remote transmission devices. These electrical components carry a 90 day warranty.

Atlas electric winches are designed, manufactured, and intended for personal recreational self recovery usage. Although built for years of demanding service, the Atlas winch warranty is void when the winch is used for commercial or industrial applications.

The mounting plates and roller fairlead are warranted against defect in material and workmanship. The wire cable assemblies are warranted against defects in workmanship and materials to the original purchaser, but carry no further warranty after the initial use.

Greg Smith Equipment Sales will repair or replace, upon inspection of such parts, those parts that have been found to be defective in material or workmanship. Parts must be returned to Greg Smith Equipment (freight prepaid by customer) for inspection. The warranty does not apply to those products or parts that have been altered from their original configuration. Warranty does not apply to those products that have been misused or improperly installed.

The limited warranty does not cover any product or part that has been damaged by accident, overloading, misuse, collision, improper installation, modification, or abusive service. If the winch is used for any vertical hoisting operations, the warranty is void.

Greg Smith Equipment shall not be responsible or liable for any indirect or consequential damages to persons or equipment. These consequential damages may include, but are not limited to, lost profits or loss of use, down time or personal injuries resulting from the incorrect use of a winch.

Greg Smith Equipment Sales and Atlas Winch reserve the right to change the product design and specifications without notice.

The enclosed warranty registration cards must be returned to Greg Smith Equipment Sales **within thirty (30) days of the time of purchase for the warranty to be valid**. The warranty applies solely to the original purchaser of the winch and remains valid for the original installation of the winch.

# ATLAS WINCH WARRANTY REGISTRATION FORM

Thank you for purchasing an Atlas Personal Recreational Self Recovery Winch.  
For your warranty to be valid you must complete this form and return it to  
Greg Smith Equipment Sales within **thirty (30) days** of the time of purchase.

First Name: \_\_\_\_\_

Last Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_

State: \_\_\_\_\_

Zip: \_\_\_\_\_

E-Mail Address: \_\_\_\_\_

*(A valid E-mail is required.)*

Invoice Number: \_\_\_\_\_ Customer Number: \_\_\_\_\_

Model Number: \_\_\_\_\_ Serial Number: \_\_\_\_\_

Date of Purchase: \_\_\_\_\_

Where did you buy your Atlas winch? \_\_\_\_\_

What year and type of vehicle is your Atlas winch mounted on?

Make of Vehicle: \_\_\_\_\_

Year: \_\_\_\_\_

Model of Vehicle: \_\_\_\_\_

2 Wheel Drive or  4 Wheel Drive

What will you use your Atlas winch for?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Who installed your winch and how was it mounted?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Is this your first winch purchase?  Yes  No

If No, what other winch brand have you owned?

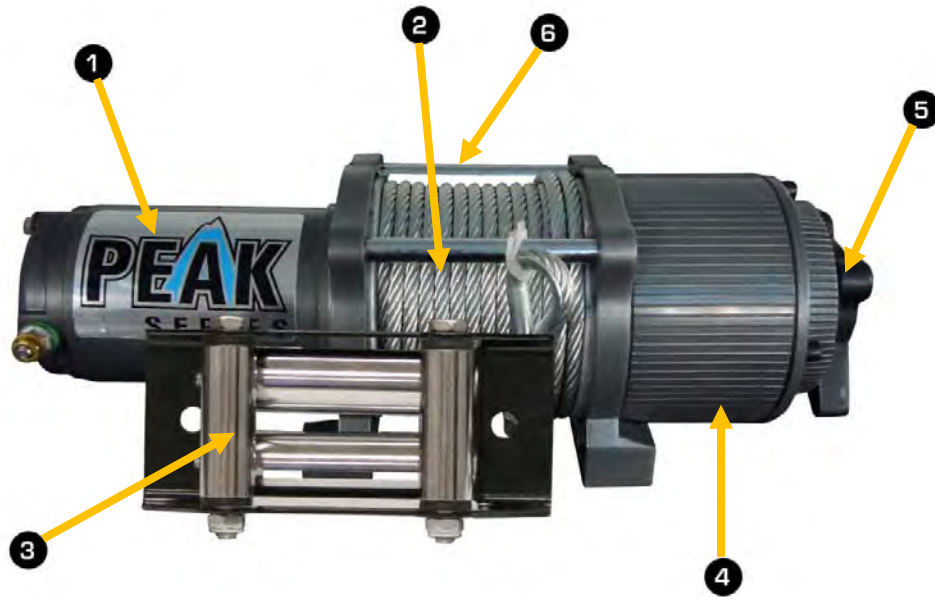
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

What factors made you purchase an Atlas winch?

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# WINCH DESCRIPTION

Please familiarize yourself with your winch and each of its components **BEFORE** using it in a “real-world” situation.



**1 Motor:** The 1.1hp 12 volt winch motor is normally powered by the vehicle's battery. (May be powered by an auxiliary battery) The motor provides power to the gear mechanism and winch drum which spools and unspools the wire rope (cable).

**2 Winch Drum:** The winch drum (spool) is the cylinder onto which the wire rope is wound. The drum is driven by the motor and drive train. Its direction can be changed using the Wireless Remote switch or the corded Handle Bar Rocker switch.

**Wire Rope:** The maximum amount of cable is determined by the diameter of the wire rope. The Atlas 4000 lb. winch comes standard with 47 ½ foot of ¼ inch diameter cable. The wire rope is looped at the receiving end to accept a clevis pinned hook.

**3 Roller Fairlead:** When using the winch at an angle, the roller fairlead helps to guide the wire rope onto the spooling drum and prevent damage to the wire rope. (The standard roller fairlead is not for use with synthetic rope, instead a Hawse fairlead; an available option should be used). A Hawse fairlead should be used with a synthetic rope. (Available option)

**4 Gear box:** The Gear box reduction gear transfers the power of the winch motor to the gear train. This design makes it possible for this winch to be lighter and more compact and yet provide an enormous amount of pulling power.

**5 Clutch:** The clutch controls the operation of the winch drum. The operator (when the clutch knob is moved) can manually disengage the winch drum (spool) from the gear train, enabling the drum to rotate freely (known as "free spooling"). Engaging the clutch "locks" the winch drum back onto the gear train. This allows the winch (power in and power out) to be powered by the 12 volt motor.

**6 Tie Rods:** Ties the motor and gear box together as a structural unit.

# GENERAL SAFETY WARNINGS

The operator of the winch must observe safety precautions for all persons (including the operator) in the area of the operating winch. Extreme caution must be used when operating a 12 volt DC winch in a recovery situation. If you are not familiar with the operation of a winch or winch recovery operations, please seek professional guidance before you begin winch operations. This manual serves as only a guide to help the owner/operator become familiar with their winch. The distributor of this winch cannot guarantee personal safety if the winch operator uses the winch in an unsafe or not recommended method. Read the following instruction manual carefully before attempting to operate your winch.

## 1) Dress Properly:

- Don't wear loose clothing or jewelry when operating the winch. Loose fitting clothes, jewelry, or long hair may be caught in the operating winch resulting in serious injury or death.
- Wear leather gloves when handling the wire rope winch cable. Do not handle cable with bare hands as broken wires can cause injuries.
- Non-skid footwear is recommended.

## 2) Keep a Safe Distance from the winch or vehicle:

- Make sure that all persons stand clear of loaded winch cable and the load being pulled. If the cable breaks or the anchor hook slips, the cable (under load) can whip back causing serious personal injury or death.
- Don't step over the cable when it is attached to another object. The winch could be engaged at any moment and the taut cable would be pulled up causing injury. Do not step over a taut cable (one that is being used) because of the chance of hook or cable failure.
- Keep proper footing and balance at all times. Do not use the cable as a hand support to walk between the vehicle and the pulled object. When operating a winch on a wet or slippery surface, take extra care to exercise all safety options.

## 3) Protect the wireless remote control:

- Do not expose to weather or water.
- Keep an extra set of fresh batteries in a safe location.
- Wireless remote can be easily damaged...take care to protect it before, during, and after use.

## 4) Do not overwork the winch:

- If the winch motor becomes too hot to touch, stop the operation. Let the motor cool for a few minutes.
- Don't maintain power to the winch if the motor stalls. This will shorten the life of the motor.
- Make sure your remote switch is protected and TURNED OFF when not in use.
- Don't exceed maximum line pull ratings shown in tables. Shock loads (resulting from "snatching" the object) must not exceed the maximum line pull ratings.

## 5) Do not leave winch in gear:

- Winch clutch should be disengaged when not in use and fully engaged when in use. Rotate the knob on side of winch to lock clutch "out of gear" or "into gear).

## 6) Check your winch for damaged or worn parts:

- Before using, please check your winch to make sure that all parts are in good repair and operating properly. Damaged parts should be properly repaired or replaced by CUSTOMER or replaced by a competent professional. Operating the winch with damaged or "compromised" parts may result in injury.

7) **Winch repair:**

- Use only factory authorized parts when repairing your winch or replacing accessories or parts. Failure to use quality repair parts may result in winch damage or personal injury.

8) **Spooling the wire rope (cable) onto the winch drum:**

- Heavy-duty leather gloves must be worn when spooling the cable onto the winch drum.
- To make sure the cable is wound correctly onto the drum, it is necessary to keep a (500 LB) load on the cable. The (500 LB.) can be created by one person. You must have proper foot wear and be on a level DRY surface. If you slip, you can get hurt! Spool out (either by power or manually) almost all the wire cable on the winch until about 4-5 wraps are still wrapped on the drum. These wraps help to secure the line to the drum. Keep the wire cable in front of the winch. It is best to spool back onto the drum about 5 feet of cable at a time. Make sure you are wearing thick leather gloves. Grab the wire cable in one hand and the remote in the other. Lean back slightly (standing) as you grip the cable. Exert pressure on the cable as you slowly walk toward the winch as the drum draws in the cable.

Keep the cable centered in the fairlead roller and make sure that the wire rope cable is spooling evenly across the face of the drum. Keep a constant pressure on the line. Turn off the winch and repeat this procedure until all of the wire rope (except 2 feet) is properly spooled onto the drum. Make sure you disengage and turn off the winch between each time you spool the 5 feet of cable on the drum. Do not allow the cable to slip through your hands. Do not get your hands closer than three feet from the roller with the winch under power.

- Turn off the wireless remote, put the clutch knob in “free spool” and finish spooling the cable by rotating the drum by hand. The clutch needs to be disengaged to allow the drum to “free spool”. For hidden winches, (positioned behind an ATV/UTV grill), it will be difficult to reach the drum to hand spool the last length of cable.
- You must use power. Be VERY CAREFUL.

 **WARNING**

The use of any other accessory or attachment other than those recommended in this instruction manual may present a risk of personal injury, winch damage, or vehicle damage.

## HOW TO KEEP YOUR WINCH OPERATING PROPERLY:

Please read the following before attempting to operate your winch in a “real-world” situation.

**Remember: Practice and common sense will help make the winch operator better at his job.**

1. **AVOID CONTINUOUS PULLS FROM EXTREME ANGLES.** The cable may not spool evenly onto the drum during certain winching operations. This is a common occurrence. Make sure that the cable is not “piling up” at one end of the drum. If “piling-up” of the cable at one end becomes an issue, relieve the vehicle load on the winch and move the anchor point until the cable begins to “even-out” over the winch drum. If there is a small amount of uneven spooling of the cable, (and the cable is not contacting any part of the winch when the drum is revolving), the cable operation may continue and the cable may be spooled properly after the winching operation is completed.



**SINGLE LINE**



**DOUBLE LINE**

2. If you are pulling a load over 1000 lbs. (make sure you understand exactly how much your vehicle **WEIGHS** under a variety of pulling conditions), we recommend the use of a pulley block to double the line and exert a greater pulling force.
3. Keep the remote control turned off until needed. Always make sure you have spare batteries for your wireless remote and that you have a clear line of sight to the winch control box.
4. Do not engage the clutch with the winch motor running. The motor must be stopped **BEFORE** you move the knob to engage and/or disengage the clutch.
5. Do not connect the hook around the stationary object and then around the pulling cable. The hook can cause damage to the cable when it “pulls against itself”.



**WRONG**



**RIGHT**

**TREE SAVER**

6. Always use a sling or chain to connect to the object being pulled. Make sure the sling or chain is properly rated correctly to withstand the pulling force. Remember that a “double line pull” exerts greater force than a “single line pull”.
7. When operating your winch, stay at a safe distance from the winch and the line of travel between the winch and the pulled object. Stop the winching process every three or four feet to make sure the cable is being spooled correctly on the winch drum.



8. Do not attach the tow hooks “on a double line pull” directly back to the winch mounting plate. The hooks must be attached to vehicle (ATV/UTV) frame as close to the winch as possible to maintain as straight as possible “double line pull” and prevent spooling at one end.
9. The use of a snatch block helps to increase the pulling power of the winch. The snatch block is essential for an effective “double line pull” operation. The pulling power of the winch is increased by up to 80% and the winching speed is cut in half.



Snatch block

10. Make sure to use the correct rated winch accessories when pulling. Bow shackles, snatch blocks, tree savers, and other “snatch” ropes and accessories should be used with extreme caution, and all safety procedures must be observed during winching operations.



Bow shackles



Tree saver

11. Make sure that at least five wraps of cable (rope) remain on the winch drum at all times. The five wraps are necessary to keep the line properly attached to the winch drum under a load.
12. Make sure the input voltage between the terminals of the motor is always 12 VDC. This input voltage is needed in order to achieve the maximum rated line pull during the winch operation.
13. Draping a heavy blanket or tarp over the extended winch cable is recommended. These items will act as a “dampener” if the line should break or the hook comes loose



# INSTALLATION

14. Tight and well spaced spooling avoids cable binding. Cable binding occurs when a load is applied and a cable strand is inclined between or on top of other strands. When this happens, alternatively power the winch in and out a little at a time. Do not attempt to free a bound cable (under load), by hand. This can result in injury. If the pulled vehicle is on an incline and exerting pressure on the line; chock the wheels to remove the line pressure BEFORE you attempt to free the bound or poorly wrapped cable on the drum.
15. Never work on or around the winch drum when winch is under a load (keep at least 5 feet away from the winch during the winching operation).
16. Never release the free spool clutch (move the clutch knob) when there is a load on the winch.
17. Inspect the wire rope and all equipment frequently. A frayed wire rope with broken strands should be replaced immediately. Use only Atlas approved controls, remotes, wire rope, and accessories. Do not weld or machine any part of the winch. (Such alterations will weaken the structural integrity of the winch and will void your warranty)
18. Prior to initiating winching operation, be sure any element which can interfere with safe winching is removed.
19. Do not disengage clutch if winch is under load or wire rope is in tension.
20. Take your time. Sloppy rigging causes accidents.
21. The wire rope must always spool onto the drum as indicated by the drum rotation label on the winch.
- 22. Do not exceed the pulling limits of this winch. Make sure you understand the “true weight” or “true load” of what you are attempting to move. A “stuck” ATV/UTV or an ATV/UTV with flat tires being pulled up an incline can exert force on the winch that is several times the normal rolling weight of the vehicle. There are many factors to consider when determining what size winch is needed to accomplish different pulling tasks. Remember: A 4000 LB. winch will not pull a 4000 LB. vehicle (in every circumstance)**
23. DO NOT drive your vehicle (either forward or backward) to assist the winch when the winch is attempting to pull a load. Vehicle movement, in combination with the operation of the winch may overload the winch cable or damage the winch. Quick movement (in addition to the pulling force of the operating winch) may create a shock load that is greater than the cable strength of the winch.  
  
**IMPORTANT:** A winch cable should not be used as a “tie down”, “snatch strap” or a “come-along”.
24. Shock loads are dangerous! A shock load occurs when an increased force is suddenly applied to the cable. A vehicle rolling back on a slack cable is one example of how a potentially dangerous shock load may occur.
25. The winches shown in this manual are not to be used in industrial applications.
26. Do not use winch for hoisting. A winch is NOT a hoist.
27. Never use a winch to lift, support or otherwise transport people. Use COMMON SENSE!

## SAFETY FIRST!

When installing your ATV/UTV winch system; please read and follow all mounting and safety instructions. Always use caution when working with electricity connections. Check system BEFORE energizing your winch circuit. Mounting locations of the winch parts and cable routing will vary; depending on make and model of the ATV/UTV.

Use common sense when mounting hardware or routing electrical cables.



## **WARNING**

Please read carefully!

### BATTERY HAZARDS:

- Batteries contain gasses which are flammable.
- Wear eye protection.
- Remove all personal metal jewelry.
- Disconnect the batteries power cables before installing or servicing the winch
- Do not lean over battery while making connections.
- Failure to take proper precautions may result in fire or serious injury
- Make sure the battery in your ATV/UTV is large enough to work with the winch motor. (When the winch is under a full load)
- Recommended battery size: 14 amp/hour or 250 CCA minimum.

## TO PREVENT SERIOUS INJURY OR DEATH FROM ELECTRICAL FIRE:

- Do not route electrical cables across sharp edges or pinch points.
- Do not route electrical cables through or near moving parts.  
(Suspension components, drive shafts or axels)
- Do not route electrical cables through or near any high heat parts.  
(Engine, exhaust headers, exhaust pipes)
- Avoid pinch and wear/abrasion points when installing all electrical cables.

## TO AVOID INJURY AND PROPERTY DAMAGE:

- Use caution when moving or repositioning any vehicle controls so as to not compromise the position that will provide clearance for all vehicle controls.
- Before securing the switch cable with tie wraps, make sure that the handlebars have full range of motion and all brake handles are easily accessible. It is recommended that the directional switch be installed on the left handlebar. A piece of electrical tape or plastic wire tie (or combination of both) around the handlebar will help prevent movement of the switch.
- Do not tighten over any cables.
- Do not use winch to secure a load during transport.
- Do not submerge the switch or solenoid pack in water.
- Do not use winch (cable) to tow other vehicles.
- Wear heavy leather gloves when handling the wire rope.
- Never attempt to use the winch with less than 5 wraps (1 layer per wrap) of wire rope around the drum.
- Caution should be used if the vehicle is tied down during a winching operation. This may lead to damage to the frame.
- Before winching, inspect all winch parts (including remote control) for damage or extensive wear.

## MOUNTING THE WINCH

**STEP 1:** To secure the winch to the ATV/UTV, use the vehicle manufacturer's winch mounting plate if available. If a mounting plate is not provided by the vehicle's manufacturer, then attach the (enclosed/provided) mounting plate to a flat, secure mounting location on the ATV/UTV using a minimum of 3/16 in. (4.8mm) thick steel mounting brackets. If mounting brackets need to be fabricated they will need to be welded or bolted to the frame using Grade 8 hardware. If you cannot fabricate, bend, weld, drill or tap steel, then find an ATV/UTV dealer to install the winch for you. Your winch **MUST** be securely attached to the frame section of your ATV/UTV.

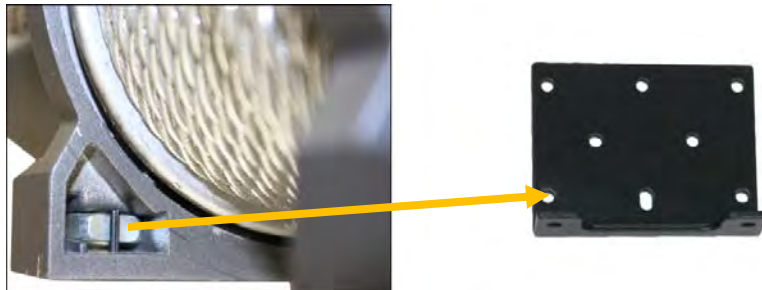
An improper installation will void the warranty.

**STEP 2:** Attach the roller fairlead to the mounting plate. M8 x 20 hex head bolts with lock washer, flat washer, and nylon lock nuts (included in winch hardware) should be used to mount to roller fairlead to the mounting plate. Tighten the M8 hex bolts and nuts using 13mm wrenches.

**STEP 3:** Make sure the winch is mounted so that the wire rope spools off the bottom of the winch. One of the roller fairlead's horizontal rollers will need to be removed to allow the coop cable end to be pulled through. To do this, use two 13mm wrenches and remove the nylon nut from the axle bolt. Slide the bolt out of the roller. Put the clutch in the "free spool" position and manually feed the cable past the horizontal roller. Re-install the other horizontal roller. Slide the bolt in and re-thread the nylon lock nut back onto the bolt. Tighten the nut and make sure the roller rotates. Remember, the wire rope (cable) should always spool off the bottom of the winch and through the roller fairlead.



**STEP 4:** Use M8x20 hex head bolts with lock and flat washers (included in winch hardware) should be used to mount the winch to the mounting plate. Torque the M8 mounting bolts to 12ft-lbs.



**STEP 5:** Attach the clevis hook to the wire rope.



## SOLENOID PACK INSTALLATION

The SOLENOID PACK is one of the most important safety features of your winch system. It disconnects the winch from the power source when the ATV/UTV is not in use. The SOLENOID PACK must be correctly installed to work properly.



It is recommended that the SOLENOID PACK be mounted close to the battery and in a location that is as clean and dry as possible. Locations will vary according to design of ATV or UTV. Many ATV/UTV manufactures provide specific mounting location and mounting hardware for the solenoid pack.



**STEP 1:** Make sure the SOLENOID PACK mounting location provides sufficient clearance from all metal structures such as frame tubes. **DO NOT** place tools or other items in a position that might come in contact with the solenoid pack terminals.



**STEP 2:** If mounting holes are needed, drill the mounting holes for the Solenoid Pack. (Use the Solenoid Pack as the template) Position the Solenoid Pack on the flat mounting surface and mark the mounting holes with a marker. Remove the Solenoid Pack and drill the holes using 1/4" drill bit. Clean up all drill shavings.



**STEP 3:** Do not mount the SOLENOID PACK at this time. Move on to the next part of the installation (**Handlebar Directional Switch Installation** – pg.15), as it will be easier to attach all the wiring to the Solenoid's contactors before attaching the Solenoid Pack to the ATV/UTV (**Wiring Installation** – pg. 17)

## HANDLEBAR DIRECTIONAL SWITCH INSTALLATION

# CAUTION

**Before mounting the handle bar switch; read safety warnings.**

- Do not route electrical cables across sharp edges.  
(Electrical cables insulation can be cut or worn through)
- Avoid pinch and wear/abrasion points when installing all electrical cables.
- Do not route electrical cables through or near moving parts.  
(Suspension components, drive shafts or axles)
- Do not route electrical cables through or near any high heat parts.  
(Engine, exhaust headers, exhaust pipes)

**STEP 1:** It is recommended that the switch be installed on the left handlebar. This is because the brake master cylinder is normally located on the right handle bar. Position the mounting bracket on the left handle bar such that the clutch handle clears the switch mounting bracket. (A piece of electrical tape around the handlebar will help prevent rotation of mount on the handle bar if the handle bar is made of small tubing).

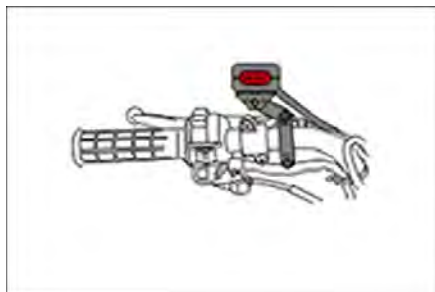


**STEP 2:** Use caution when moving or repositioning any vehicle controls so as to not compromise the position that will provide clearance for all vehicle controls. Factory installed controls should never be compromised.





**STEP 3:** Before securing the switch cable with tie wraps, make sure that the handlebars have full range of motion. Do not tighten winch electrical cables over any existing (factory installed) hoses or cables.



Always place the Handle Bar directional switch on the left hand side of the handle bar. Exact position may vary depending on the ATV/UTV make and model.

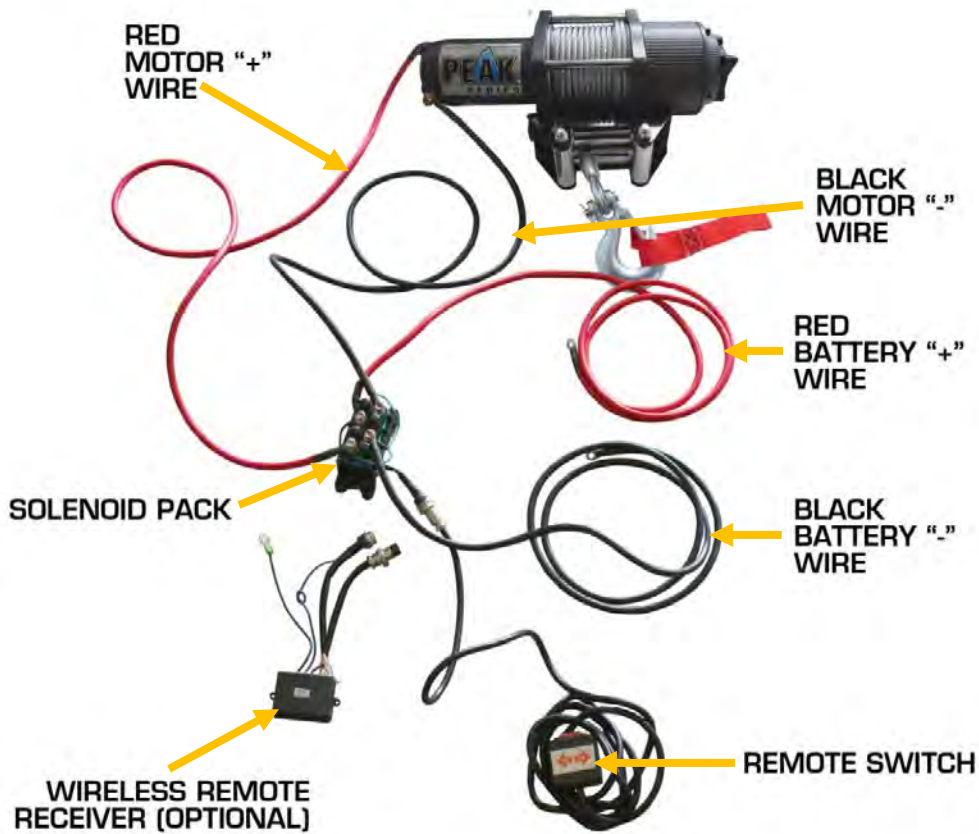
Handle Bar directional switch assembly



**STEP 4:** Make sure the handle bars have full movement before securing the wiring. Then secure all wiring with wire ties.



## WIRING INSTALLATION



Wiring Installation diagram

## CAUTION

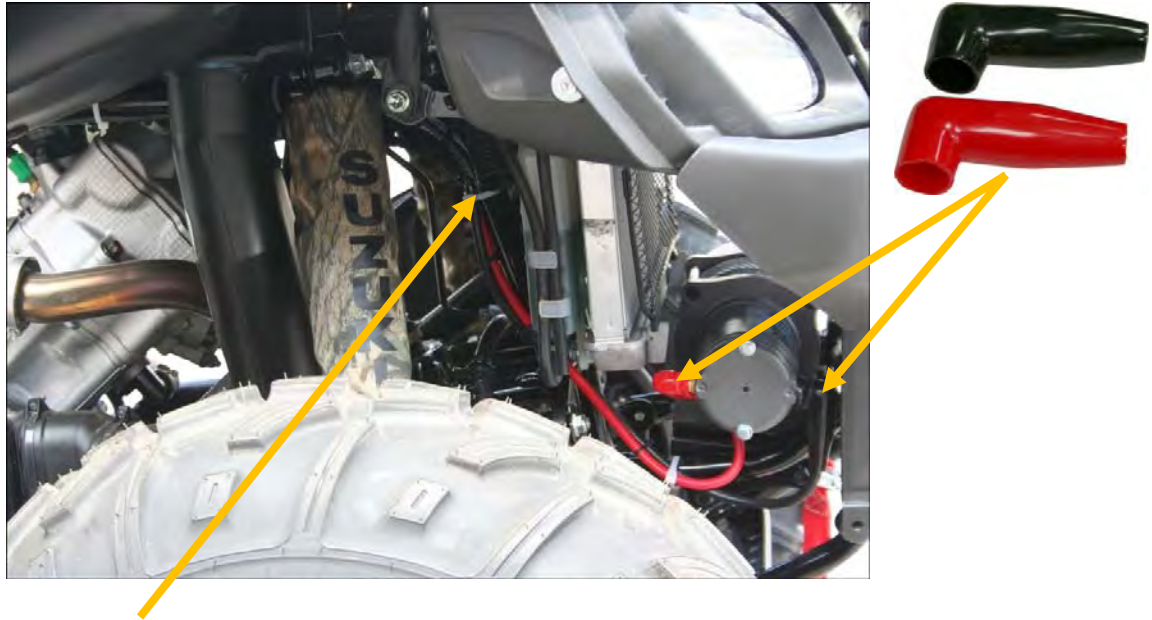
Before routing electrical wiring; read the safety warnings.

- Do not route electrical cables across sharp edges.  
(Electrical cable insulation can be easily cut)
- Avoid pinch and wear/abrasion points when installing electrical cables.
- Do not route electrical cables through or near moving parts.  
(Suspension components, drive shafts or axles)
- Do not route electrical cables through or near any high heat parts.  
(Engine, exhaust headers, or exhaust pipes)

**STEP 1:** Before you begin your ATV/UTV winch installation; plan out how you want to wire the winch. There are two electrical cable sets. The lengths are: (52 inches and 72 inches). **RED (positive)** and Black (negative). Determine the most effective electrical cable routing path, and choose the correct length cables. **Place the supplied terminal boots on cables before securing the cables to the motor.**



**STEP 2:** Attach the red power cable to the positive motor terminals on the winch. Thread the nut and washer on over the eyelet terminal of the power cable and tighten. Slide the terminal cover boot over the terminal connection. Repeat the process for the black power cable. Make sure the cables are routed so that trail debris will not collect on the cables or the cables will not become tangled with moving or stationary parts of the vehicle. (When the vehicle is at rest or in motion)



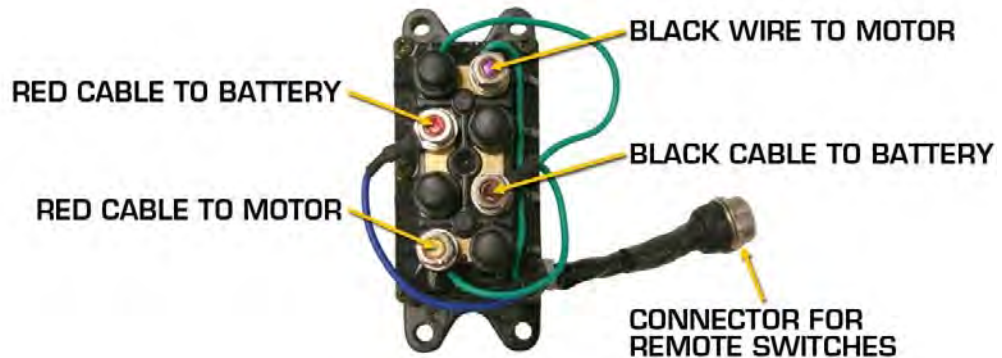
**STEP 3:** Route the wiring back to the Solenoid Pack so that the cables will not contact the motor's exhaust system, sharp metal edges, or other areas that may damage the cable due to pinch and wear/abrasion points. Use tie wraps to secure the cables to the frame or other secure points. When possible, route the winch motor power cables along the ATV's/UTV's existing wire routing paths. If cables are mounted or routed under the seat; make sure the wiring is not pinched when the seat is re-installed.



**STEP 4:** Mount the solenoid pack using the hardware provided with the winch or with the manufacturer's kit.

**STEP 5:** Attach the motor and battery cables to the SOLENOID PACK.

- Attach the red cable from the motor to the “yellow” terminal of the SOLENOID PACK.
- Attach the black cable from the motor to the “blue” terminal of the SOLENOID PACK
- Attach the red battery cable to the “red” terminal of the SOLENOID PACK and other end to positive post of battery.
- Attach the black battery cable to the “black” terminal of the SOLENOID PACK and other end to the negative post of battery.
- Attach the black cable from the receiver to the black terminal of the SOLENOID PACK.



When possible, route the winch kit power (red) and ground (black) wires along the ATV/UTV existing wire routing paths ( under the seat and battery location areas). Make sure the wiring is not pinched when the seat is reinstalled.

You may shorten the length of the cables. If you shorten the cables, slip on the heat shrink protective covers and install new eyelet terminals. Slide the heat shrink cover over the terminal and shrink the protective cover using a heat gun. Attach the SOLENIOD PACK to your predetermined position on the ATV/UTV. Make sure that the electrical cables do not cross sharp edges, moving parts, or contact vehicle parts that may become hot.



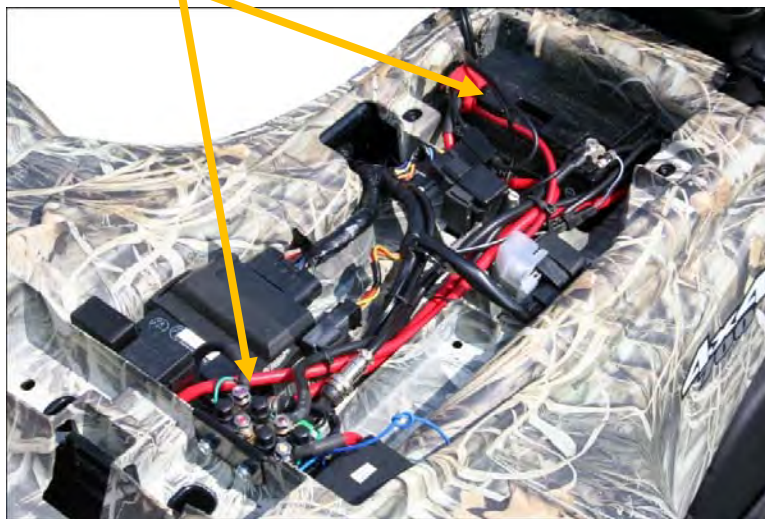
**STEP 6:** Make sure the remote receiver is mounted in a secure location. Secure loose wiring with zip ties or electrical tape.

## SYSTEM CHECK – BEFORE USING YOUR WINCH

**STEP 1:** Check that the electrical wiring to all components is correct. Make sure that all loose wires are tie wrapped tightly.



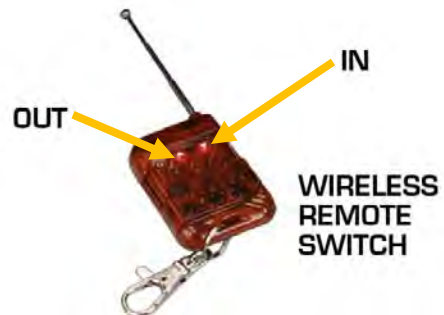
**STEP 2:** Check that there is no exposed wiring or exposed terminal ends. Cover any existing terminal exposures with terminal boots, heat shrink tubing or electricians tape.



**STEP 3:** Turn ATV/UTV key switch to ON position. (Make sure winch clutch is in the “engaged” position) Check winch for proper operation when in use with the handle bar switch. The wire rope should spool in and out in the direction indicated on the switch when the switch is activated. The wireless remote switch will activate the winch motor, and the wire rope (cable) should spool in and out in the direction indicated on the wireless remote switch.



Handle Bar Switch position for IN and OUT



Wireless Remote Switch IN and OUT position

# WINCH OPERATION

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# CAUTION

## KNOW YOUR WINCH:

Read and understand your winch manual BEFORE you operate your winch in a “real life” situation.

## SUGGESTION:

The best way to get acquainted with how your winch operates is to make a few test runs before you actually need to use it. Plan your test in advance. Remember you can hear your winch as well as you can see when it is operating. Get to recognize the sound of a light steady pull, a heavy pull, and sounds caused by load jerking or shifting. Soon you will gain confidence in operating your winch and its use will become second nature to you.

## OPERATION

**STEP 1:** Secure the vehicle by applying the parking brake or chocking the wheels.



**STEP 2:** Pull out (either with power or free spool) the desired length of winch cable and properly connect hook end to an anchor point. Disengaging the winch clutch allows rapid free spooling of the cable. The shifter tab located on the gear housing controls the operation of the clutch.

**STEP 3:** To disengage the clutch, move the clutch to the "free spool" position. Cable can be free spooled off the drum.



**STEP 4:** To engage the clutch, move the clutch into the "engaged" position. The winch is now ready for power pulling.



**STEP 5:** Recheck all cable rigging before proceeding. Then remove the wheel chocks.

**STEP 6:** It is recommended that the winching operation takes place from the driver's position to ensure safe operation. To commence winching operation, start vehicle engine, release the park brake and put transmission in neutral. Maintain engine speed at idle.

Always run the engine when using the winch to keep the battery charged. DO NOT operate the winch with the motor off as this will drain the battery; and may cause damage to the winch. (Vehicle will be hard to start with no battery power)

**STEP 7:** Operate the remote control switch or the handlebar switch until the vehicle has been retrieved. If the motor gets warm to the touch; stop winching and allow the motor to cool down. Overheating the motor will shorten its life.

**STEP 8:** Make sure the cable is winching onto the drum evenly during the recovery operation.



**Note:**

- Never winch (try self-recovery) with your vehicle in gear or in park. This would damage your vehicle's transmission.
- 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.
- Keep hands, clothing, hair and jewelry clear of the drum area and cable when winching.
- 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 brake, it can suddenly whip back causing a hazard for anyone in the area.
- Do not shift the Handle Bar directional switch or wireless remote switch into the “on” positions (IN or OUT) when the winch is being used. This may cause damage to the winch.
- CHECK THE WINCH CAREFULLY AND THOROUGHLY BEFORE EACH USE!
- Follow a regular maintenance schedule for the winch.



# ROUTINE MAINTENANCE

- Keep your winch clean. Remove all mud, dirt, and trail debris from the winch.
- It is highly recommended that the winch be used regularly (once a month). Simply power the cable out and then power back in. This will keep all components in good working condition so that the winch can be relied on when needed. Contact your authorized outlet for technical assistance and repairs.
- Should you encounter a problem during installation or operation of your winch, please follow these steps:
  1. Refer to your operator's guide and installation instructions. It has illustrations and detailed information on the installation and safe and a replacement parts list and assembly diagrams. If you are unable to resolve the problem, go to the "Mounting The Winch" section. (pg. 12)
  2. Contact your dealer where you purchased your winch. USE ONLY approved replacement parts.

# PARTS LIST

**Rated line pull:** ..... 4000 lbs. (1815 kg.) single line  
**Motor:** ..... Permanent magnet: 0.8kw/1.1hp 12V  
**Battery size:** ..... 14 amp/hour minimum or 250 CCA  
**Gear reduction ratio:** ..... 128.2:1  
**Gear train:** ..... 3 stage Planetary  
**Clutch (free spooling):** ..... cam activated  
**Brake:** ..... Mechanical  
**Cable (Diameter):** .....  $\Phi 1/4'' \times 47.5'$  ( $\Phi 6\text{mm} \times 14.5\text{m}$ )  
**Drum size (Diameter):** .....  $\Phi 1.77'' \times 3.19''$  ( $\Phi 45\text{mm} \times 81\text{mm}$ )  
**Overall dimensions (L x W x H):** ..... 13.9" x 4.6" x 5.1" (354mm x 118mm x 130mm)  
**Weight:** ..... N.W/G.W:29.75lbs /13.5kg  
**Duty Cycle:** ..... Intermittent  
**Finish:** ..... Silver Gray Powder Coat

## WINCH DIMENSIONS



## PERFORMANCE DATA

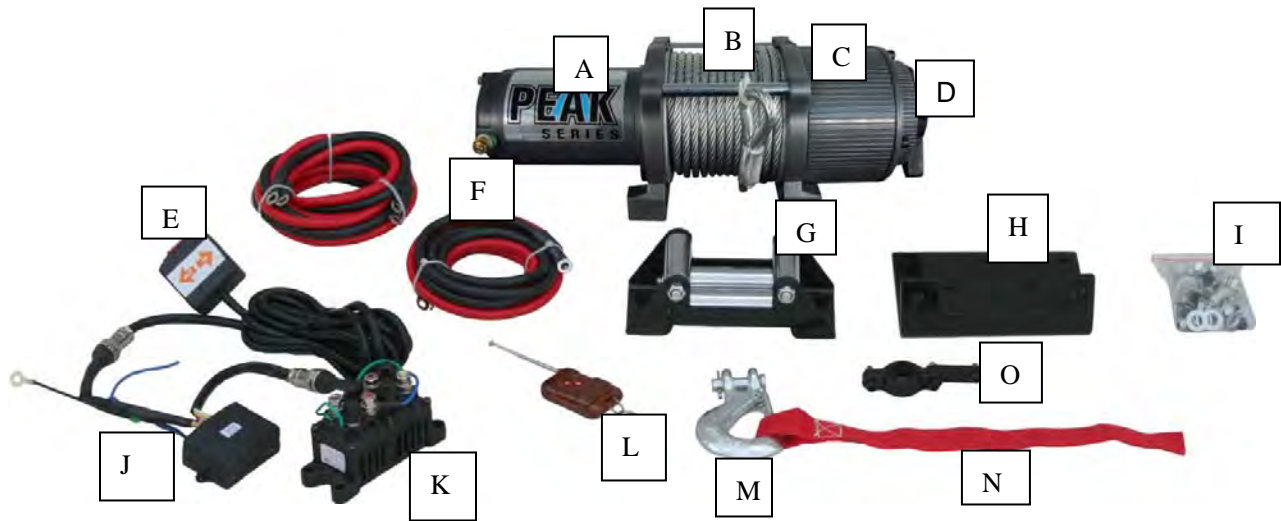
Line pull Lbs (kgs)	Line Speed ft/min (m/min)	Motor Current Amps
0	23.7(6.7)	26
500(227)	23.1(5.95)	35
1000(454)	20.6(5.3)	70
1500(680)	16.7(4.3)	98
2000(907)	13.4(3.45)	107
2500(1134)	10.7(2.75)	129
3000(1361)	8.5(2.2)	138
4000(1815)	6.79(1.75)	205

Above performance specs are based on first layer of drum

## PULLING POWER

Wire rope layer on drum (1<sup>st</sup> is closest to drum)

Lbs (kgs)	Layer
4000(1815)	1 <sup>st</sup>
2817(1278)	2 <sup>nd</sup>
2573(1167)	3 <sup>rd</sup>
2363(1072)	4 <sup>th</sup>
1975(896)	5 <sup>th</sup>



- A) MOTOR
- B) WIRE ROPE
- C) GEARBOX
- D) CLUTCH HANDLE
- E) HANDLE BAR DIRECTIONAL SELECTOR SWITCH
- F) POWER CABLES (52 inch and 72 inch)
- G) ROLLER FAIRLEAD
- H) MOUNTING PLATE
- I) HARDWARE KIT( FOR MOUNTING THE WINCH AND ROLLER FAIRLEAD TO THE MOUNTING PLATE)
- J) WIRELESS REMOTE RECEIVER
- K) SOLENOID PACK
- L) WIRELESS TRANSMITTER
- M) HOOK
- N) HOOK LEADER
- O) MOUNTING BRACKET FOR THE HANDLE BAR SWITCH

Installation photos shown are on a Suzuki King Quad 4x4. Suzuki factory winch mounting hardware kit was used and installed with the Atlas 4000 lb. winch and Atlas accessories and hardware.

