

BRONCO®

ATV & UTV COMPONENTS

ATV/UTV WINCH

4500LBS

INSTRUCTION BOOK

Bronco® ATV/UTV offers a winch for any size vehicle.

All winch sizes are available with steel wire or with Imported German synthetic rope.

All are also available wired or wireless.

For more info please visit BroncoATV.com



As you read these instructions, you will see WARNINGS and CAUTIONS. Each message has a specific purpose. WARNINGS and CAUTIONS identify the hazard, tips on how to avoid the hazard, and the probable consequence of not avoiding the hazard. **PLEASE WORK SAFELY!**



WARNINGS are safety messages that indicate a potentially hazardous situation, which, if not avoided, can result in serious injury or death

CAUTIONS are safety messages that indicate a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury. A CAUTION may also be used to alert against unsafe practice



DISCLAIMER: This item is sold without any expressed or implied warranty of merchantability or fitness for a particular purpose. By purchasing and installing this product the user agrees to these terms: Bronco®, the Manufacturer, Distributor nor Dealer shall be held liable for any special, incidental, or consequential damages, including vehicle damage, death or injury, any loss of revenue, any incurred cost, or cost of purchase from the use or misuse of this product.

GENERAL SAFETY PRECAUTIONS



WARNING!

MOVING PART HAZARDS

To prevent serious injury and property damage:



Do not operate or install winch without reading and understanding these instructions and the Basic Guide to Winching Techniques.



Keep hands clear of wire rope, hook and fairlead opening during operation and when spooling.



WARNING!

Take your time. Sloppy rigging causes accidents.

The wire rope must always spool onto the drum as indicated by the drum rotation label on the winch.

BATTERY HAZARDS

Batteries contain gasses which are flammable. Wear eye protection.

Remove all metal jewelry

Do not lean over battery while making connections.

Failure to take proper precaution may result in fire or serious injury.

GENERAL SAFETY PRECAUTIONS



WARNING!



Use supplied hook strap for spooling wire rope.



Stand clear of wire rope and load during operation
Keep others away



Inspect winch installation and wire rope condition before operating winch.
Do not use as a hoist



Do not use to move persons



Do not exceed winch's rated capacity.

Never touch wire rope or hook while in tension.

Be certain the anchor you select will withstand load.



Never wrap wire rope back onto itself. Use a choker chain or free trunk protector on the anchor.

Prior to initiating winching operation be sure any element which can interfere with safe winching is removed.

Do not disengage clutch if winch is under load or wire rope is in tension.

CAUTION!

TO AVOID INJURY AND PROPERTY DAMAGE!

Do not use winch to secure a load during transport.

Do not submerge in water.

Do not use to tow other vehicles.

Wear heavy leather gloves when handling the wire rope.

Never winch with less than 5 wraps 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 remote control lead for damage.



WINCH SPECIFICATIONS:

Single line rated pull	4500lbs(2045kg)
Gear reduction ratio	136:01:00
Cable length	φ 5.5mmx15.2m
Mounting dimensions	76.2mmx124mm

Overall dimensions	360x118x118mm
Brake	mechanical brake
Fairlead	roller fairlead
Drum length	80mm

BRONCO® WIRED & WIRELES WINCH STATISTICS:

Winch Capacity	Line Pull (lbs)	Line Pull (kgs)	Line Speed	Motor(Amps)
4500lb Performance Data	0	n/a	18.63ft(5.68m)	24
	1000	454	14.13ft(4.31m)	86
	2000	909	12.33ft(3.76m)	155
	3000	1363	7.25ft(2.21m)	229
	4000	1818	4.1ft(1.25m)	256
	4500	2045	2.98ft(0.91m)	278

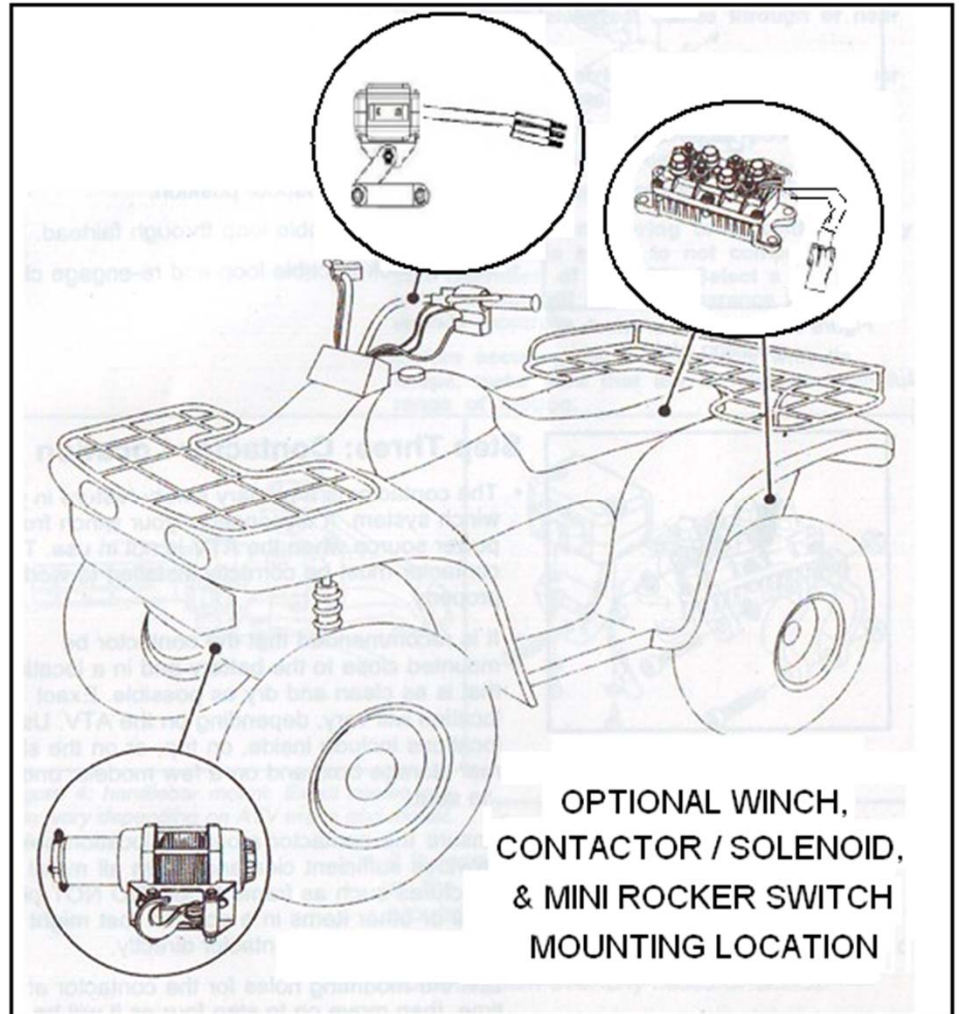
Above performance specs are based on first layer of drum

STEP ONE : SAFETY FIRST

When installing your ATV/UTV winch system, read and follow all mounting and safety instructions.

Always use caution when working with electricity and remember to verify that no exposed electrical connections exist before energizing your winch circuit.

Figure 1: To install the complete kit, you will need to mount the winch, contactor/solenoid, and handlebar mounted Mini-rocker switch. Mounting locations may vary depending on make and model of the ATV. Read and understand the following instructions to choose the appropriate mounting locations.



STEP TWO: WINCH MOUNTING

To secure the winch, always use:

- *A flat, secure mounting location at least 3/16 in. (4.8 mm) thick
- *5/16-18 x 1 in., grade 5 hex head cap screws and lock washer supplied in winch kit
- *Torque mounting bolts to 12 ft-lbs(1.7 kg-m)
- *Attach fairlead to winch mounting plate using 3/8-16 bolts , nuts and washers.
- *Attach the clevis hook to the wire rope at this time. If using a winch bumper install before attaching the hook
- *Put clutch in freespool position.
- *Manually feed cable loop through fairlead.
- *Attach hook to cable loop and re-engage clutch.

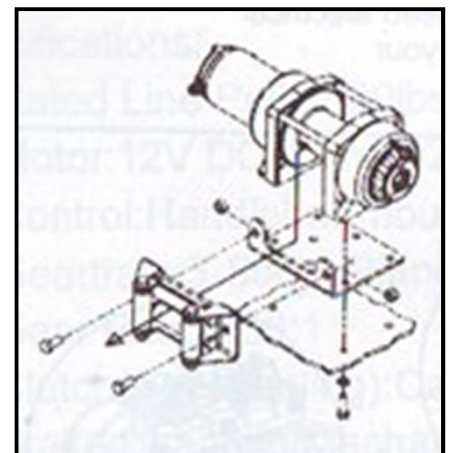


Figure 2: Orientation of winch to mounting plate

STEP THREE: CONTACTOR/SOLENOID LOCATION



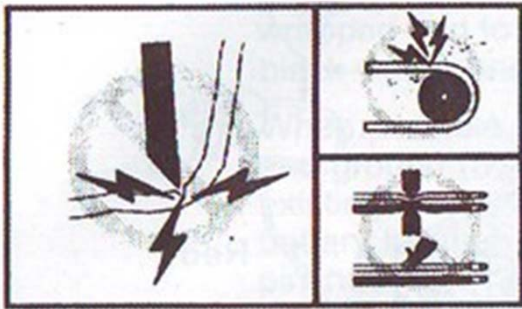
*The contactor/solenoid is the primary safety feature in your winch system. It disconnects your winch from its power source when the ATV is not in use. The contactor/solenoid must be correctly installed to work properly.

·It is recommended that the contactor/solenoid be mounted close to the battery and in a location that is as clean and dry as possible. Exact locations include inside, on top, or on the side of rear storage box, and on a few models, under the seat.

·Ensure the contactor/solenoid mounting location selected provides sufficient clearance from all metal structures such as frame tubes. **IMPORTANT** Do not place tools or other items in a position that might come in contact with the contactor directly.

·Drill the mounting holes for the contactor at this time, then move on to step 4 as it will be easier to attach all the wiring to the contactor before attaching it to the ATV/UTV. DO NOT mount the contactor/solenoid at this time

STEP FOUR- HANDLEBAR SWITCH INSTALLATION. TIPS AND PRECAUTIONS.



WARNING!

TO PREVENT SERIOUS INJURY OR DEATH FROM ELECTRICAL FIRE:

- *Do not route electrical cables across sharp edges.
- *Do not route electrical cables through or near moving parts or parts exposed to high heat.
- *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. Reference OEM service manual for instructions on removal and installation.
- *Before securing the switch cable with the wraps, make sure that the handlebars have a full range of motion.

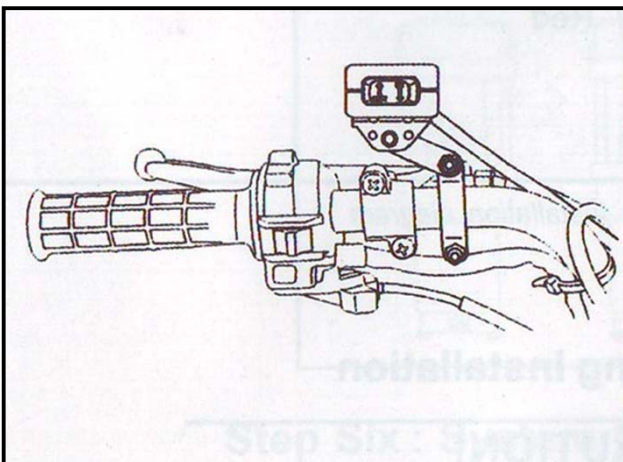


Figure 4: Handlebar mount, Exact positioning may vary depending on ATV/UTV make and model.

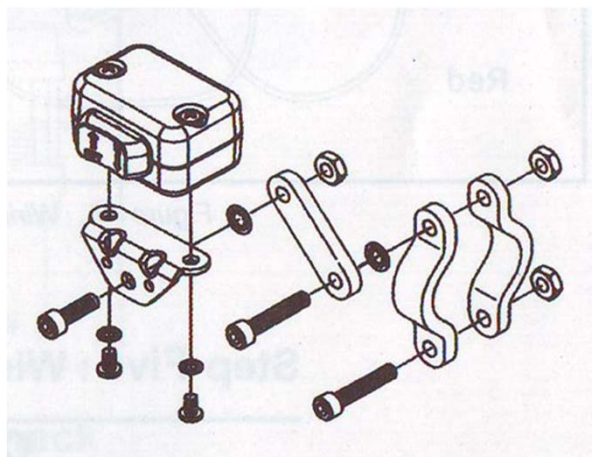


Figure 4b: Mini-rocker switch assembly



Figure 5: shows the contact/solenoid with connector and extra powerwire needed to splice into a keyed power wire.



Test light.

IMPORTANT

It is recommended that the switch be installed on the left handlebar. A piece of electrical tape around the handlebar will help prevent rotation of mount on the handle bar. Do not tighten over any hoses or cables.

There are 2 ways in which power can be supplied to the winch.

1) Highly suggested Keyed On Power. The solenoid includes a long red power wire that connects to the solenoid. The end of wire without connector must be spliced into a power wire on the ATV/UTV that is only powered when the key is turned to the "ON" position.

As shown to the left a test light can be used to check if a wire will be key powered.

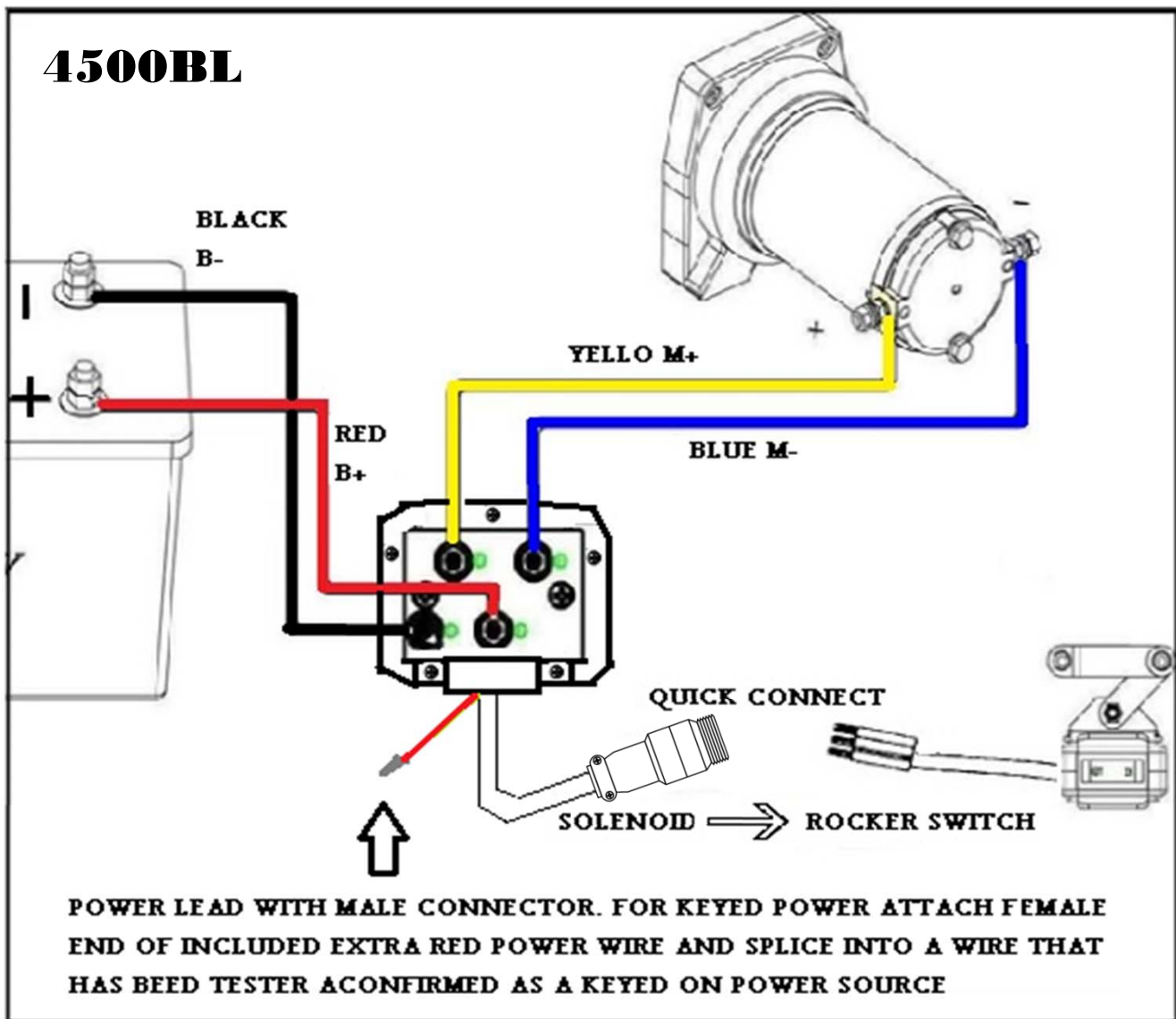
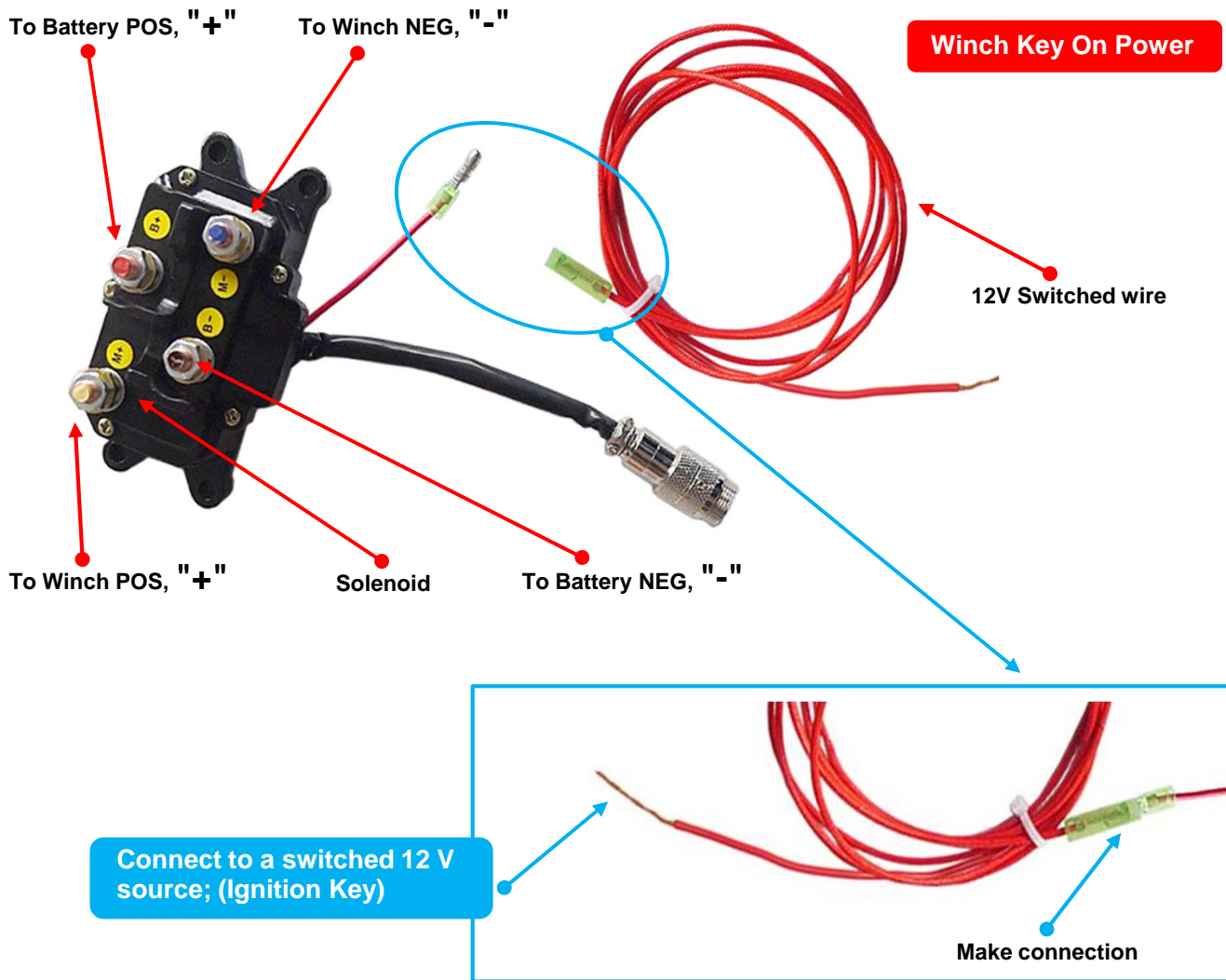


Figure 6, 7 & 7b Wiring installation diagram



Use a test light to locate a suitable wire.



Image is a modified solenoid wired with included battery terminal
When connected to B+post
it provides power to winch at all times.
BE CAREFUL

2) **Constant Power.** There is an extra battery terminal included with your winch kit. If you want the winch to have power when the handlebar switch or remote buttons are pressed whether the key is on or not than cut off the connector on the solenoid, attach battery lead, and connect to the red terminal on the contactor/solenoid.

CAUTION! must be used when wiring this way
the winch will spool anytime the in or out buttons are pressed.

After deciding the way you want the winch powered
proceed to step 5

Step Five: Wiring Installation

CAUTION!

Place the supplied terminal boots on wires before securing to the contactor.

All wires must be attached to the contactor/solenoid before final mounting of the the contactor/solenoid unit to the the ATV/UTV.

For installing the handlebar rocker switch simply attached quick connect plug of contactor/solenoid to the quick connector on the handlebar switch.

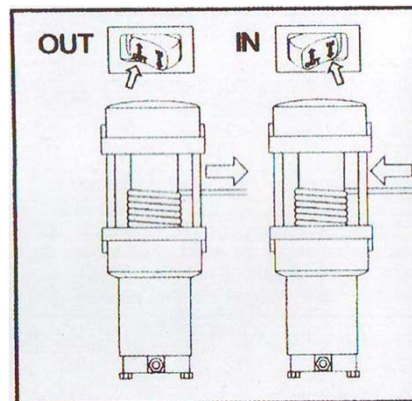
Attach the red battery power wire to the positive red contactor post and other end to the positive (+) battery post. Attach the black battery power wire to the black contactor post and negative (-) battery post.

! IMPORTANT - Whenever possible, route the winch kit power wire (red) and ground (black) wire along the ATV or UTV's existing wire routing path. Ensure the wiring is not pinched when the seat is reinstalled.

After a wire route has been chosen and wires are secured attach the contactor/solenoid to the predetermined position on the ATV/UTV.

! IMPORTANT - Assure that cables do not cross sharp edges, moving parts, or contact items that may become hot. Premature failure can result.

Make sure to secure loose wiring with zip ties or electrical tape prior to final reassembly.



Step Six: System Check

Before using the winch, verify the following:

1. Wiring to all components is correct. All loose wires are tie wrapped tight.
2. There are no exposed wiring or terminals. Cover any existing terminal exposures with terminal boots, heat shrink tubing or electricians tape.
3. Check the chosen power method is functioning (keyed or constant power). For keyed please turn ATV key switch to ON position. Check winch for proper operation. The wire rope should spool in and out in the direction indicated on the switch.

Testing/Operation

4. Make sure the positive power lead from solenoid to battery is connected.
5. Pull approximately 20 ft of cable off the winch by hand.
6. Re-engage the winch clutch.
7. Test the remote transmitter. The transmitter has push buttons labeled according to their function.
To operate the winch, hold "ON/OFF" button down for 2 seconds to activate the "IN" and "OUT" functions.
(1 flash indicates transmitter is "ON", 2 flashes indicate transmitter is "OFF").
8. Run winch in the "OUT" direction briefly. Make sure the motor has stopped fully before reversing to prevent premature solenoid failure. Run winch in the "IN" direction briefly.
9. Follow instructions in your winch owner's manual for properly reeling in the rest of the cable.
The transmitter is clearly labeled and a red LED flashes when the winch is in operation.
To turn transmitter off, press and hold the "ON/OFF" button for 2 seconds to disable the transmitter.
This will pro-long the battery life of the transmitter. The transmitter automatically turns off after 20 minutes.

! WARNING: Unplug remote adapter cable when not in use.

Item Description

Item No.	Description	Qty
1	SCREW M6 X 15	4
2	MOTOR	1
3	MOTOR BASE	1
4	NUT M8	4
5	BRAKE	1
6	SCREW M4 X 12	3
7	O RING	2
8	SLIDING BEARING	2
9	DRIVE SHAFT	1
10	TIE BAR	3
11	DRUM	1
12	CLIP	1
13	SPLINE SPRING	1
14	JOINT GEAR	1
15	SCREW M6 X 10	3
16	CLIP	2
17	GEARBOX BASE	1
18	SEALS	2
19	PLANETARY GEAR 1	1

Item No.	Description	Qty
20	WASHER	2
21	PLANETARY GEAR 2	1
22	PLANETARY GEAR 3	1
23	WASHER	1
24	SLIDING BEARING	1
25	FORK PIN	1
26	GEARBOX END COVER	1
27	CLUTCH KNOB	1
28	SCREW M6 X 12	3
29	SOLENOID	1
30	ROLLER FAIRLEAD	1
31	HAND SAVER STRAP	1
32	HOOK	1
33	WIRE ROPE	1
34	HANDHELD SWITCH	1
35	MINI ROCKER SWITCH	1
36	CIRCUIT BREAKER	1
37	SOCKET LEADS	1
38	MOUNTING PLATE	1

