# ATV/UTV WINCH

**INSTRUCTION BOOK** 

2500 LBS 3000 LBS 3500 LBS





As you read these instructions, you will see WARNINGS and CAUTIONS. Each message has a specific purpose. WARNINGS and CAUTIONS identify the hazard, indicate how to avoid the hazard, and advise of 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.

#### **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.

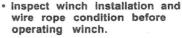


◆ Use supplied hook strap for spooling wire rope.

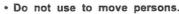


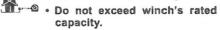
· Stand clear of wire rope and load during operation.

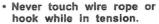


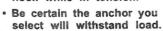


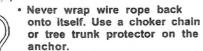












- Prior to initiating winching operation be sure any element which can interfere with safe winching is removed.
- · Do not disengage clutch if winch is under load or wire rope is in tension.

#### 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 eve protection.
- · Remove all metal jewelery.
- · Do not lean over battery while making connections.
- · Failure to take proper precaution may result in fire or serious injury.

#### **CAUTION!**

#### TO AVOID INJURY AND PROPERTY DAMAGE:



· Do not use winch to secure a load during transport.



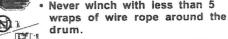
Do not submerge in water.



· Do not use to tow other vehicles.



· Wear heavy leather gloves when handling the wire rope.



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 re-

mote control lead for damage.



## ATV/UTV 2500lbs WINCH

#### Specifications:

1)Rated Line Pull: 2500lbs. (1134kgs.) single-line 2)Motor: 12V DC, 0.9hp (700w)permanent magnet 3)Control: Handlebar mounted Mini-rocker switch

4) Geartrain: 3-Stage Planetary

5)Gear Ratio: 136:1

6)Clutch(freespooling):Cam activated

7)Brake: Dynamic.Mechanical brake is available.

8)Drum Diameter/Length: 2.0"/2.9"

9) Wire Rolle:50',3/16"diameter(15.2m,4.8mmdiam)

10)Fairlead:Roller

11) Recommended Battery: 12 Amp/hour minimum

for winching

12)Battery Leads: 6 gauge 13)Finish: Black

#### Performance Data

| Line Pull (lbs./ kg.) | Line Speed  | Motor (Amps) |
|-----------------------|-------------|--------------|
| 0                     | 27ft (8.3m) | 15           |
| 1,000 (454)           | 20ft (6.1m) | 60           |
| 1,500 (680)           | 14ft (4.3m) | 100          |
| 2,000 (907)           | 10ft (3m)   | 130          |
| 2,500 (1134)          | 7ft (2.1m)  | 160          |

## Above performance specs are based on first layer of drum

| Layer | Rated Line Pull (lbs./kgs)  | Tatal Rope On Drum (ft/m ) |
|-------|-----------------------------|----------------------------|
| Luyor | rated Line ( uli (ibs./kgs) |                            |
| 1     | 2500 (1134)                 | 8.85 (2.7)                 |
| 2     | 2134 (968)                  | 19.22 (5.86)               |
| 3     | 1861 (844)                  | 31.11 (9.48)               |
| . 4   | 1650 (748)                  | 44.52 (13.58)              |
| 5     | 1483 (673)                  | 50.0 (15.2)                |

## ATV/UTV 3000lbs WINCH

#### Specifications:

1)Rated Line Pull: 3000lbs. (1360kgs.) single-line 2)Motor: 12V DC, 1.0hp (770w)permanent magnet 3)Control: Handlebar mounted Mini-rocker switch

4)Geartrain:3-Stage Planetary

5)Gear Ratio: 136:1

6)Clutch(freespooling):Cam activated

7)Brake: Dynamic.Mechanical brake is available.

8)Drum Diameter/Length: 2.0" /2.9"

9) Wire Rolle:50',3/16" diameter(15.2m,4.8mm diam)

10)Fairlead:Roller

11)Recommended Battery: 12 Amp/hour minimum for winching

12)Battery Leads: 6 gauge

13)Finish: Black

### Performance Data

| Line Pull (lbs./ kg) | Line Speed  | Motor (Amps) |
|----------------------|-------------|--------------|
| 0                    | 27ft (8.3m) | 15           |
| 500 (227)            | 20ft (6.1m) | 40           |
| 1,000 (454)          | 16ft (4.9m) | 60           |
| 2,000 (907)          | 9ft (2.7m)  | 130          |
| 3,000 (1361)         | 5ft (1.5m)  | 190          |

#### Above performance specs are based on first layer of drum

| Layer | Rated Line Pull (lbs./kgs) | Tatal Rope On Drum (ft/m) |
|-------|----------------------------|---------------------------|
| 1     | 3000 (1361)                | 8.85 (2.7)                |
| 2     | 2561 (1162)                | 19.22 (5.86)              |
| 3     | 2234 (1013)                | 31.11 (9.48)              |
| 4     | 1981 (899)                 | 44.52 (13.58)             |
| 5     | 1779 (807)                 | 50.0 (15.2)               |

## ATV/UTV 3500lbs WINCH

### Specifications:

- 1) Rated Line Pull:3500lbs.(1581kgs.)single-line
- 2) Motor:12V DC,1.1hp(825w)permanent magnet
- 3) Control: Handlebar mounted Mini-rocker switch
- 4) Geartrain: 3-Stage Planetary
- 5) Gear Ratio:136:1
- 6) Clutch(freespooling):Cam activated
- 7) Brake: Dynamic. Mechaniocal brake is available.
- 8) Drum Diameter/Length:2.0"/2.9"
- 9) Wire Rolle:50',3/16"diameter(15.2m,4.8mm diam)
- 10) Fairlead: Roller
- 11) Recommended Battery: 12 Amp/hour minimum for winching
- 12) Battery Leads: 6 gauge
- 13)Finish:Black

#### Performance Data

| Line Pull(lbs./kg) | Line Speed  | Motor(Amps) |
|--------------------|-------------|-------------|
| 0                  | 27ft(8.3m)  | 15          |
| 500(227)           | 20ft(6.1m)  | 40          |
| 1,000(454)         | 16ft(4.9m)  | 60          |
| 2500(1134)         | 7ft(2.1m)   | 160         |
| 3500(1581)         | 4.3ft(1.3m) | 210         |

### Above performance specs are based on first layer of drum

| Layer | Rated Line Pull(lbs./kgs) | Tatal Rope On Drum(ft/m) |
|-------|---------------------------|--------------------------|
| 1     | 3500(1581)                | 8.85(2.7)                |
| 2     | 2561(1162)                | 19.22(5.86)              |
| 3     | 2234(1013)                | 31.11(9.48)              |
| 4     | 1981(899)                 | 44.52(13.58)             |
| 5     | 1779(807)                 | 50.0(15.2)               |

### Step One: Safety First!

When installing your ATV 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.

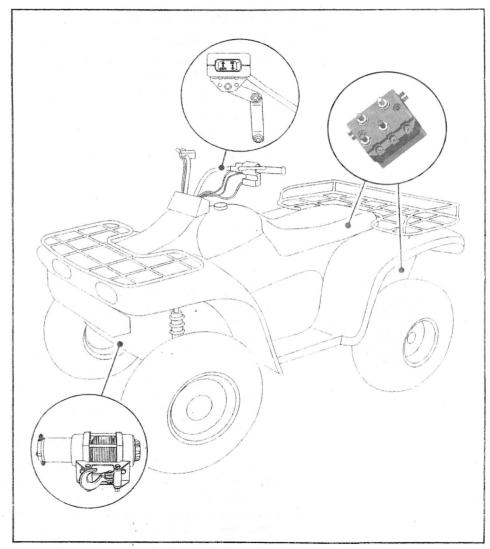
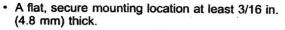
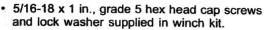


Figure 1: To install the complete kit, you will need to mount the winch, contactor handlebar mounted Mini-rocker switch. Mounting locations may vary depending on make and model of the ATV. Read and understand the following instructions to choose the appropriate mounting locations.

### **Step Two: Winch Mounting**

To secure the winch, always use:







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.

- Put clutch in freespool position.
- Manually feed cable loop through fairlead.
- · Attach hook to cable loop and re-engage clutch.

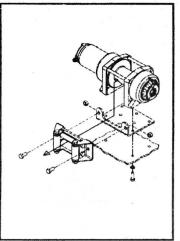


Figure 2: Orientation of winch to mounting plate.

Figure 3. Contactor for the ATV winch

### **Step Three: Contactor Location**

- The contactor is a primary safety feature in your winch system. It disconnects your winch from its power source when the ATV is not in use. The contactor must be correctly installed to work properly.
- It is recommended that the contactor be mounted close to the battery and in a location that is as clean and dry as possible. Exact location will vary, depending on the ATV. Usual locations include inside, on top, or on the side of rear storage box, and on a few models, under the seat.
- Ensure the contactor mounting location selected 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 contactor directly.
- Drill the mounting holes for the contactor at this time, then move on to step four as it will be easier to attach all the wiring to the contactor before attaching it to the ATV. DO NOT mount the contactor at this time.

## **Step Four: Handlebar Switch Installation**

#### A V

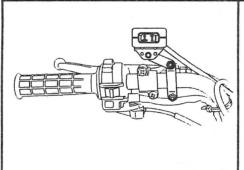
#### WARNING!

## 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.
- Do not route electrical cables through or near any high heat parts.
- 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 safe operation of the ATV. Select a mounting 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.



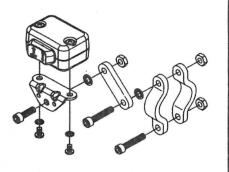


Figure 4: handlebar mount. Exact positioning may vary depending on ATV make and model.

Figure 5: Mini-rocker switch assembly.

- 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.
- Once the handle bar switch is mounted, route the two bullet terminal wires back to where the contactor will be mounted. Splice the end of the red 20ga wire to a key controlled electrical wire of the ATV. Using a test light, locate a suitable wire from the ATV key switch. The wire should only have power when the key is in the "ON" position.

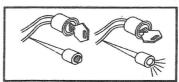


Figure 6: Use a test light to locate a suitable wire.

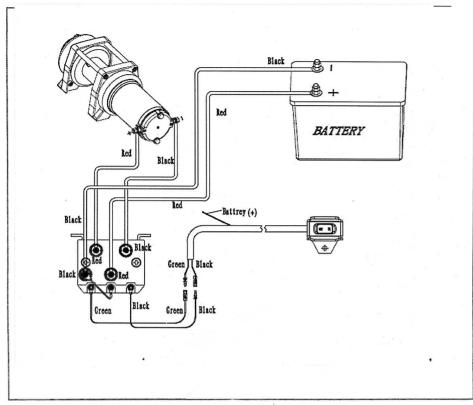


Figure 7. Wiring Installation diagram

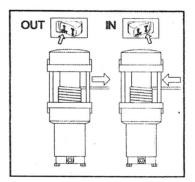
#### Step Five: Wiring Installation

#### CAUTION!

Place the supplied terminal boots on wires before securing to the contactor. All wires must be attached to the contactor before mounting the contactor to the ATV.

 Attach the red and black 39 in (1.0m) wires to the motor terminals on the winch.

- If only installing the handlebar switch, attach the terminals on the green and black handle bar switch wires directly to the terminals of the contactor.
- Attach the 59 in. (1.5m), red wire to the positive red contactor post and battery (shrink wrapped end to battery). Attach the 59 in. (1.5m), black wire to the black contactor post and battery.
- When possible, route the winch kit power (red) and ground (black) wires along the ATV's existing wire routing path in the under seat and battery location areas. Ensure the wiring is not pinched when the seat is reinstalled.
- Attach the contactor to the predetermined position on the ATV. Assure that cables do not cross sharp edges, moving parts, or contact items that may become hot.
- Secure loose wiring with zip ties or electrical tape prior to final ATV reassembly.



#### Step Six: System Check

Before using the winch, verify the following:

- Wiring to all components is correct. All loose wires are tie wrapped tight.
- There are no exposed wiring or terminals. Cover any existing terminal exposures with terminal boots, heat shrink tubing or electricians tape.
- 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.