



## 2000 lb WINCH

### *Instruction and Operation Manual*

12 Volt DC Electric Winch

PART NUMBER 823-223C

**OPERATING INSTRUCTIONS  
READ BEFORE OPERATING**

**CUSTOMER MUST RECEIVE COPY OF OPERATING INSTRUCTIONS AT TIME OF SALE.**

Please read and understand this entire instruction booklet before use. Your safety depends on your caution. Use good judgment when operating the Winch.

This Winch is designed for intermittent duty and is NOT designed for hoisting or industrial use. If used for hoisting the Warranty will be void.

Free spool is operated by the pull knob, which disengages the motor from the spool. Wire can then be pulled out without using the electric motor.

**WARNING** never release the free spool when a load is present.



A Tension plate mounted on the winch reduces snarling and backlash while pulling the cable out.

This winch is a very powerful machine. If used incorrectly, personal injury or damage to the winch or machine can result.



Keep in mind that maximum pulling capacity becomes less as more layers of cable are added. Working load of 2000 pounds is based on one layer of cable.

**WARNING** Never pull out or wind in cable without using the Hand Saver bar.



**WARNING** Never put your fingers in the hook of the cable, personal injury may result.

Do not attempt long pulls at heavy loads

Do not run the winch without the engine running for long periods of time. The draw on the battery is significant.

For loads over 1000 pounds we recommend using a pulley block. This reduces the actual load by half.

After reading this instruction manual and installing your winch use it lightly to become familiar with its operation.

Use caution when using your winch. Do not stand close to the cable while pulling. In the event of a cable failure it is best to be out of harms way.

Inspect the cable and other components frequently. If a fray is found in the wire replace it immediately.

Never use the winch with the cable strung all the way out. A minimum of five (5) wraps of cable must always remain on the spool.

Never hook the cable to itself, instead use a nylon strap to secure the hook.

Lay a heavy blanket or jacket over the cable during a pull, if the cable were to break this will act as a damper.

Never use the winch to lift or move people.

Never use the winch for overhead hoisting.

Never allow shock loads to be applied to the winch or cable.

Avoid pulls from severe angles, this will cause the cable to wrap up on one side of the spool and may cause damage to the winch and/or cable.

Always operate the winch with an unobstructed view.

Inspect all equipment before beginning a pull. Hooks, Pulley Blocks, straps and other devices will wear and need to be replaced occasionally.

Use only the factory approved switches and wiring procedures.

Correct installation of your winch is required for proper operation. Mounting kits are available for most popular applications. Detailed mounting procedures are outlined with the mounting kit.

Winch must be mounted with the cable to the bottom of the spool. Improper mounting will void your warranty.

Keep the cable tightly wound to prevent the cable from wedging in between the next layer of cable.

Keep the duration of the pulls as short as possible.

Do not allow the cable to kink. This is safety problem. If kinks develop replace the cable immediately. Replace cable with manufacturers replacement parts only.

***Periodically check mounting bolts and wiring for fit and wear. Replace if necessary.***

## **Winch Control Installation Instructions**

For all wiring routing refer to FIGURE A.

1. Choose a mounting location for the relay. Consider the following points when making this choice.
  - a. The relay should be located in a protected area that will not interfere with the normal operation of the machine.
  - b. You will need to run wires from the relay to the winch, battery, and switch.
  - c. You will need to access the connections on the relay during installation.
  - d. The relay needs to be mounted securely enough to stay in place during riding.
2. Attach the 14-foot long red #10 wire to the 5/16"center terminal stud on the top of the relay marked "BATT +" and install one red boot cover on the stud.
3. Attach the 14-foot long #10 black wire to the 5/16" terminal stud on the side of the relay marked "BATT -". Install one black boot cover over the stud.
4. Mount the relay in the location you chose in step 1 and route the red and black wires to the battery.
  - a. These wires must be well clear of any moving parts of the machine.
  - b. Do not allow the wires to come in contact with any hot parts of the machine such as the exhaust or cylinder head.
5. Cut the black wire to an appropriate length to connect to the negative terminal of the battery. Strip the end and install the large yellow ring terminal provided. Secure the ring terminal to the negative post of the battery.
6. Choose a location for the 40-amp circuit breaker. Install circuit breaker boot over circuit. Consider the following points when making this choice.
  - a. The 12 inch red #10 wire in this kit must reach from the positive battery post to the "BAT" connection stud on the circuit breaker.
  - b. The circuit breaker should be located in a protected area that will not interfere with the normal operation of the machine
7. Secure the small ring terminal on the 12" red #10 wire to the "BAT" connector stud on the circuit breaker.

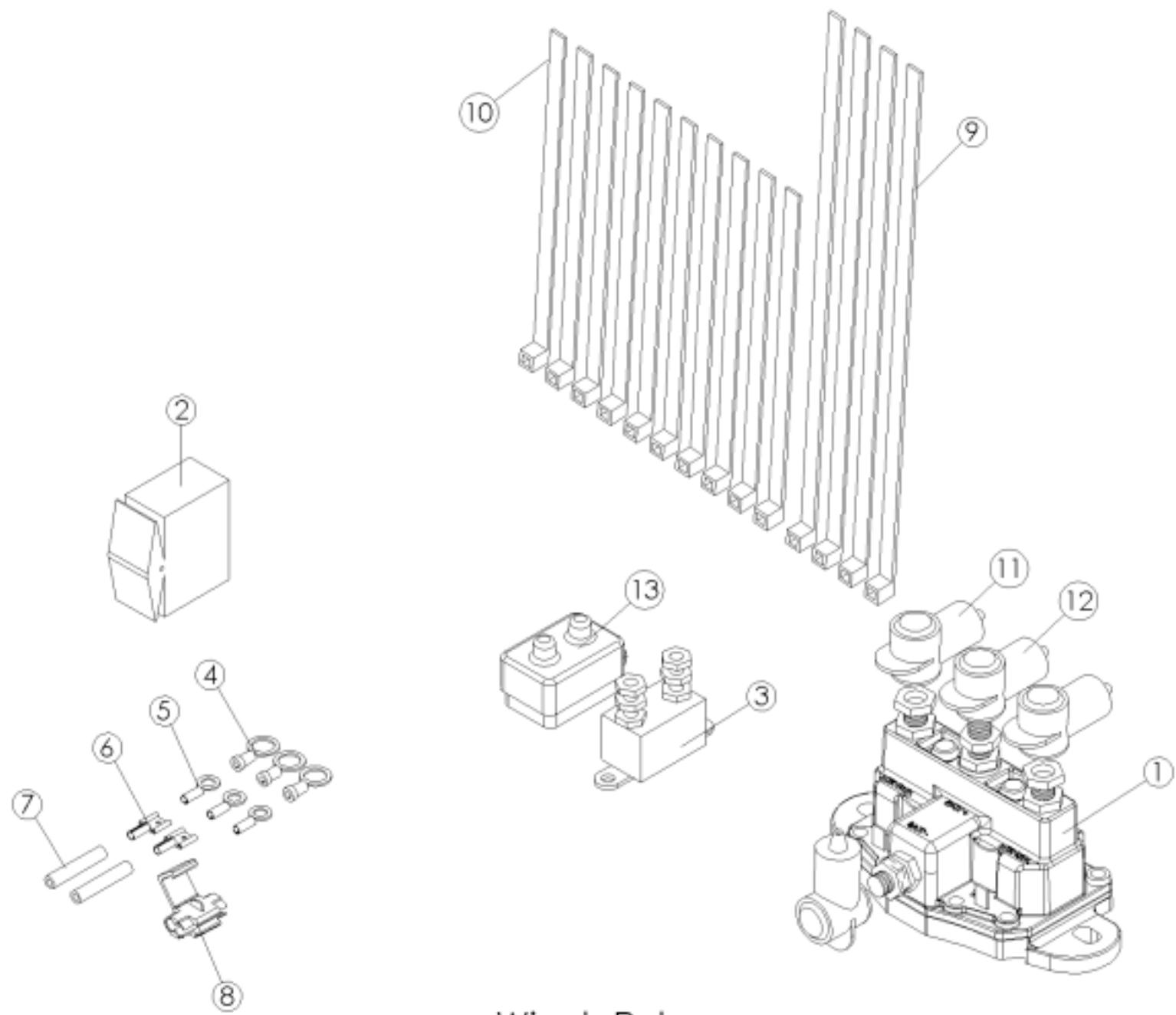
## **CAUTION**

In the next step you will route the 12" red #10 wire to the positive battery post. **Do not connect to the battery at this time.** The connection to the positive battery post will be the last step of installation.

8. Secure the 40-amp circuit breaker in the location you chose in step 6 and route the 12" #10 red wire to the positive battery post. **Do not connect to the positive battery post at this time.**
9. Cut the red #10 wire from the relay to an appropriate length to connect to the "aux" connection stud on the 40-amp circuit breaker. Strip the end and install the small yellow ring terminal provided. Secure the ring terminal to the "aux" connection stud on the 40-amp circuit breaker.
10. If your winch has leads coming out of the motor, route them to the relay. If they are not long enough, extend them with the yellow butt splice connectors provided and the red and black #10 wire left over from steps 5 and 9. If your winch has stud connections for the motor, use the #10 red and black wire left over from steps 5 and 9 and the small yellow ring connectors provided to make motor leads for your winch. When routing these leads to the relay keep the following points in mind.
  - a. These wires must be well clear of any moving parts of the machine.
  - b. Do not allow the wires to come in contact with any hot parts of the machine such as the exhaust or cylinder head.
11. Cut the red motor lead to an appropriate length to connect to the relay stud marked "mtr fwd". Strip the end and install a large yellow ring terminal. Secure the ring terminal to the relay stud marked "MTR FWD" and install one black boot cover on the stud

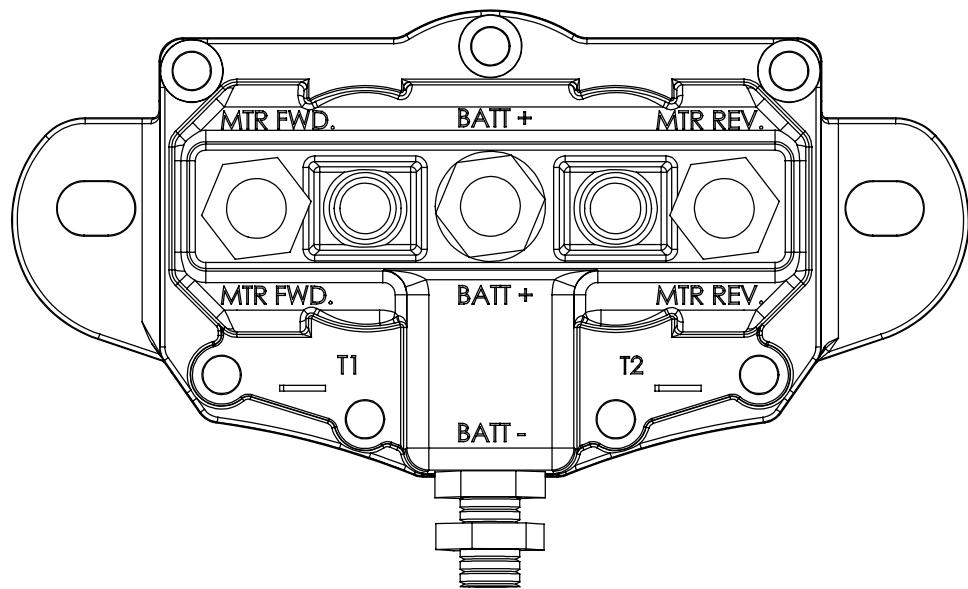
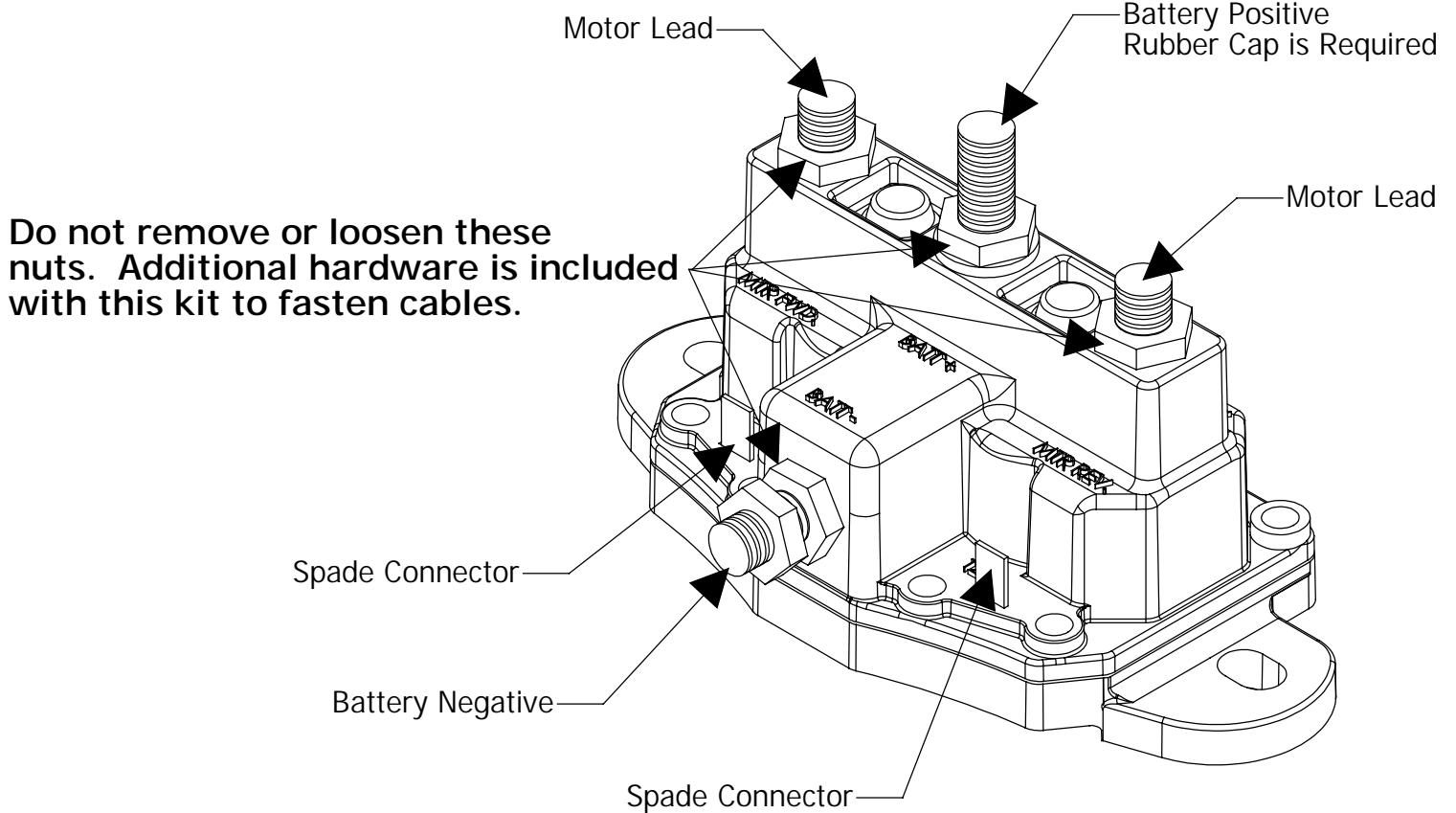
12. Cut the black motor lead to an appropriate length to connect to the relay stud marked "MTR REV". Strip the end and install a large yellow ring terminal. Secure the ring terminal to the relay stud marked "MTR REV" and install one black boot cover on the stud.
13. Mount the rocker switch in the designated space provided by the manufacturer of the machine.
14. Route the two blue and one red wire from the rocker switch down the handle bar and through the bodywork. Make sure there are enough slack for the steering and all other machine functions to operate but not so much that the wires could become entangled.
15. With a 12-volt test light or meter locate a wire that is only hot when the ignition switch is in the "on" position. Use the blue scotch lock tap connector to connect the red wire from the rocker switch to this wire.
16. Route the two blue wires from the rocker switch to the relay.
  - a. These wires must be well clear of any moving parts of the machine.
  - b. Do not allow the wires to come in contact with any hot parts of the machine such as the exhaust or cylinder head.
17. Cut the blue wires to an appropriate length to connect to the spade connectors marked "T1" and "T2" on the relay.
18. Strip the two blue wires and install the blue female spade connectors provided. Slide one of these on to each of the spade connectors on the relay.
19. Recheck your installation.
  - a. All wiring is secured and out of the way of all moving parts of the machine.
  - b. All wiring and components are away from heat sources such as exhaust pipe and cylinder head.
  - c. All components of the relay system are located so as not to interfere with the safe and normal operation of the machine.
  - d. The #10 red wire from the 40-amp circuit breaker to the battery **is not** connected to the battery.
20. Test the control circuit of your winch control system by completing the following steps.
  - a. Turn the ignition switch to the on position (do not start engine).
  - b. Operate the rocker switch in the up and down direction.
    - You should hear a "click" from the relay when you operate the rocker switch
    - The winch should **NOT** run at this time.
  - c. If you do not hear a "click" from the relay, check for 12 volts on the red wire from the rocker switch with the ignition switch in the on position.
21. When you have verified proper operation of the control circuit, connect the red #10 wire from the 40-amp breaker to the positive post of the battery.
22. Place your winch in "free spool" and pull out approximately 3 feet of cable.

Turn the ignition switch on and operate the rocker switch in the "UP" direction. Verify that operating the rocker switch in the "UP" direction causes the winch to wind cable in. If operating the rocker switch in the "UP" direction causes the winch to unwind cable, switch the position of the two blue wires at the spade connectors on the relay.

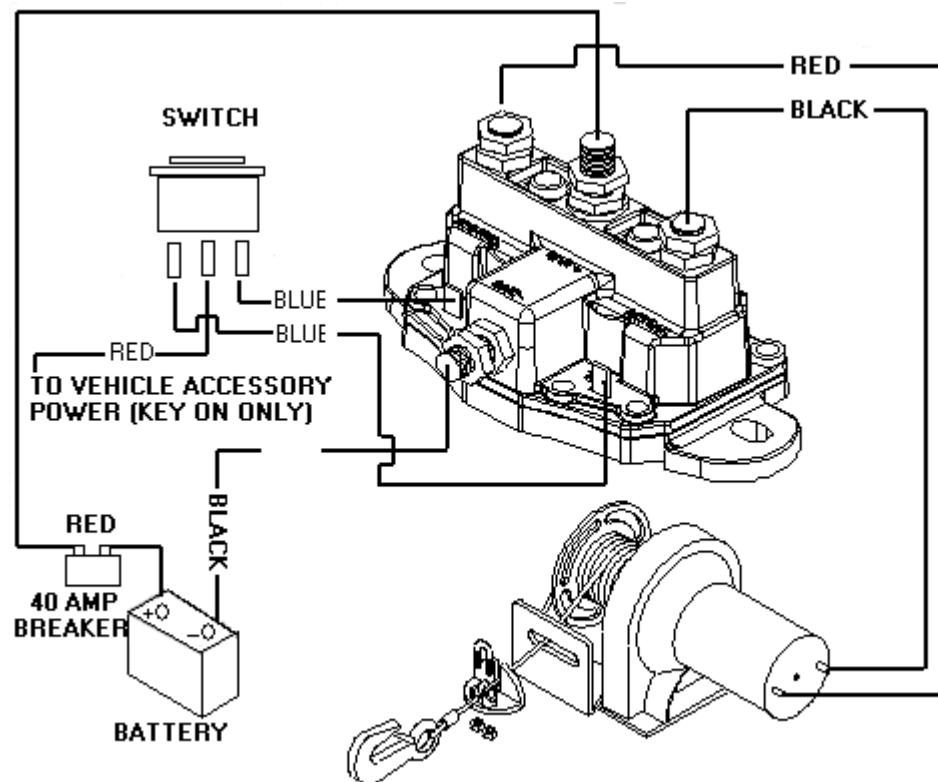


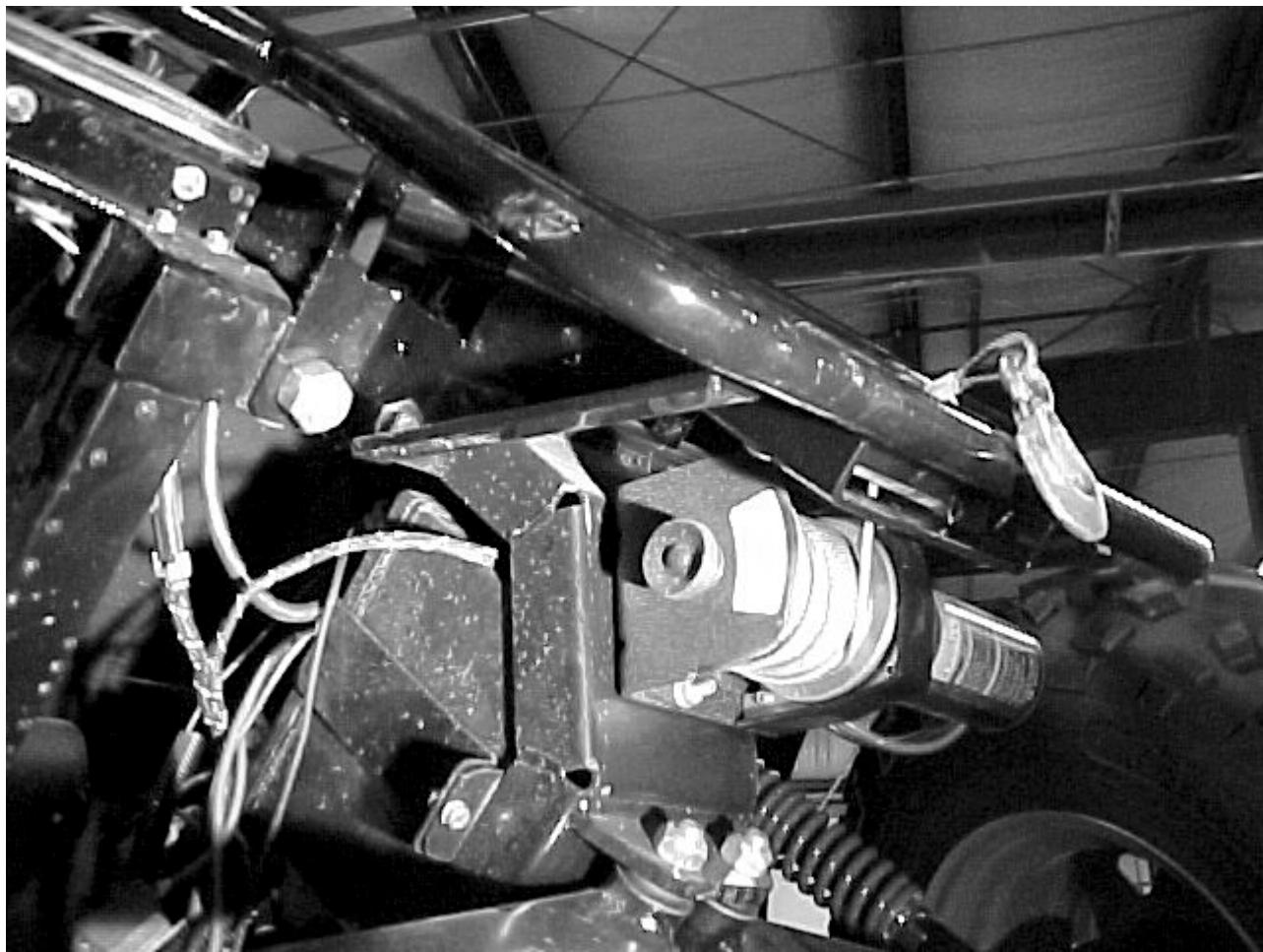
**Winch Relay  
Parts List**

ITEM NO.	PART NO.	QTY.	DESCRIPTION	ITEM NO.	PART NO.	QTY.	DESCRIPTION
1	HOUSING	1	Winch Relay	10	TIE,Small	10	Small Wire Tie
2	WNRSWITCH-2	1	R-2 switch		FTN516R	4	5/16" Fine Thread
3	WNBREAKER	1	Inline Circuit Breaker	11	WNINSULATORB	3	Boot, Black
	N10-32	4	#10-32 Nut	12	WNINSULATORR	1	Boot, Red
4	RT516-10W	3	5/16" Ring Terminal	13	WNBREAKERCOVER	1	Boot, Circuit Breaker
5	RT10-10W	3	#10 ring terminal				
6	STF16-14	2	31713 Female Connector				
7	BC12-10	2	16 Gauge Butt Splice				
8	SCOTCHLOCK	1	Scotch Lock				
9	TIE, Large	4	Large Wire Tie				



# Figure A





### **ATR Winch mounting instructions**

All directions are referring to while the operator is sitting in the machine.

The Land Pride 2000 lb winch is mounted directly to the front of the frame with two 5/16" x 1-1/4" Bolts. *See picture above.*

