OPERATING INSTRUCTIONS

Please read and save these instructions. Read carefully before attempting to assemble, install, operate or maintain the product described. Protect yourself and others by observing all safety information. Failure to comply with these instructions could result in personal injury and/or property damage. Retain instructions for future reference

Powerwinc

Ouality Winches Since 1956

"RF" REMOTE CONTROLLED TRAILER WINCHES WITH SPOTLIGHT

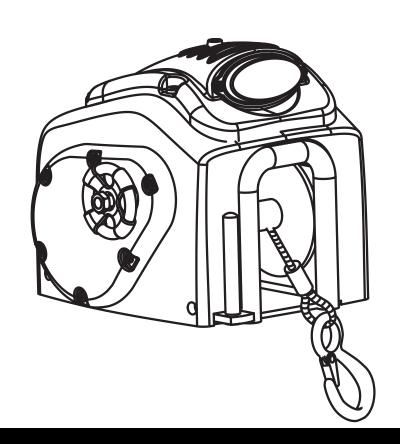
BOAT TRAILER WINCH MODELS RC30 (P77950) & RC23 (P55750)

DESCRIPTION:

Trailer winches are used for launching and unloading boats. These winches feature power-in/free-wheel out capabilities. These winches operate by means of a wireless remote system within a radius of 25 feet around the center of the winch. These winches also come equipped with a 12-volt spotlight to help improve visibility while operating in hours of darkness.

UNPACKING:

When unpacking, inspect carefully for any damage that may have occured during transit. Make sure that any loose fittings, bolts, etc., are tightened before putting unit into service.



General Safety Information Throughout this manual potential safety hazards will be noted with the following terms. Please read and understand

these terms before operating the product.

A DANGER

Danger means a hazard that will cause death or serious injury if the warning is ignored.

AWARNING

Warning means a hazard that could cause death or serious injury if the warning is ignored.

A CAUTION

Caution means a hazard that may cause minor or moderate injury if the warning is ignored. It also may mean a hazard that will only cause damage to property

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General Safety Information (continued)

The following safety precautions must be followed at all times

NOTE: Note means any additional information pertaining to the product or its proper usage.

The following safety precautions must be followed at all times:

1. Read all manuals included with this product carefully. Be thoroughly familiar with the controls and the proper use of the equipment. Only persons well acquainted with these rules of safe operation should be allowed to use the winch.

AWARNING Always unplug the wiring harness to

prevent accidental starting before attempting to install, service, relocate or perform any maintenance.

- 2. Never use the winch to lift or move people or animals.
- 3. Stand away from the winch when in use and keep children away from winch area at all times.

AWARNING Always stand clear of the area behind

and between the load or anchor point and the winch. Serious injury could occur, if the cable breaks.

- 4. Always keep hands clear of cable spool (drum area).
- 5. Do not wear loose fitting clothing, scarves, or neck ties. Loose clothing may become caught in moving parts and result in serious personal injury.
- 6. Never use the winch for overhead lifting.
- 7. Always wire the winch with circuit breakers. Failure to use the breakers could cause overheating thus creating a potential fire hazard or motor damage.

The cable fasteners A DANGER on this or any winch are not designed to hold rated loads.

Always leave a minimum of five wraps of cable on the drum at the bottom layer to achieve a rated load.

- 8. Inspect the entire cable for weak or worn condition or kinking (short tight twist or curl) before each use.
- 9. When replacing the cable, always use a Powerwinch cable with the same winch rating and cable strength.
- 10. Never substitute rope for cable. Possible injury could occur.
- 11. Do not attempt to pull a load greater than the rated load of the winch.
- 12. Do not use the winch to hold or support the load once a job is complete or to permanently secure the load. Damage could occur to the winch or the load.
- 13. Never wrap the winch cable around the load. Use an EcostrapTM or chain to prevent the cable from kinking or fraying.

A CAUTION

After using the winch, always

disconnect the power cord from the socket to avoid moisture collection in the socket and prevent the possibility of short circuiting.

- 15. Always block the vehicle wheels to help prevent the vehicle from rolling when pulling a load with the winch.
- 16. Do not operate the winch under the influence of drugs, alcohol, or other medication.

AWARNING Secure the boat to the trailer after

winching the boat onto the trailer or personal injury could occur.

Specifications

Various load conditions will affect winch performance. The line pull required for a specific application depends on the weight of the load, condition of the trailer rollers, and the degree of the loading ramp incline. The chart below is based on a single line pull and is a guideline to aid in calculating pulling requirements.

NOTE: The noise level of this winch in operation is below 98db (A).

CHART #1 - Approximate Rolling Load Capacities. (Values are in pounds)

% Incline	Level Surface	<u>5%</u>	<u>10%</u>	<u>20%</u>	<u>30%</u>	<u>50%</u>	<u>70%</u>	<u>100%</u>
Deg Incline	0 DEG	3 DEG	6 DEG	11 DEG	17 DEG	26 DEG	35 DEG	45 DEG
RC23	24000	13340	10040	6800	5220	3720	3060	2580
RC30	40000	23345	17570	11900	9135	6510	5355	4515

- A 10% incline (or 6 deg) is 1 foot rise in 10 feet.
- To convert from pounds to kilos divide by 2.2
- Capacity can be increased (almost doubled) by using a pulley block.

CHART #2 - Winch and Boat Capacities

Model	Single Line Capacity	Double Line Pull	Approximate* Boat Weight	Approximate* Boat Size
RC23	2400 lbs	4300 lbs	7500 lbs	17-23 ft
RC30	4000 lbs	7500 lbs	11500 lbs	23-30 ft

^{*} Boat size and weight is approximate and varies depending on boat type. When calculating boat weight be sure to use fully loaded weight- including boat, motor, fuel, water, gear etc.

CHART #3 - Winch Specifications

Model	Line Speed @ Capacity (FPM)	Gear Ratio	Voltage (Volts)	Circuit Breaker (Amps)	Unit Weight (lbs)	Depth	Height	Width
RC23	14	225:01:00	12	60	Χ	XX	XXX	XXXX
RC30	8	450:01:00	12	60	Х	XX	XXX	XXXX

Winch Installation MOUNTING

The winch can be mounted on the trailer in the same position and location as an existing hand winch. After removing the hand winch, bolt the Powerwinch unit using a minimum of (2) 3/8" Grade 5 machine bolts and lock nuts. The Powerwinch Quick Mount Kit (P7700000AJ) is available from the dealer.

The cable hook on the winch and the bow eye on the boat should be at the same height when the boat is in the fully loaded position on the trailer. If the bow eye is too high, extra pull is required of the winch and extra stress is exerted on the boat's stern and bow eye.

To achieve equal height of the winch and boat, raise or lower the winch stand. In most cases, the trailer manufacturer will have an adapter available for use with a winch

A CAUTION

A minimum of 12 inch clearance is

required between the winch and the bow eye to prevent the cable hook from being drawn into the winch drum when the boat is in the fully loaded position on the trailer. If necessary, extend the bow stop to obtain the clearance. When using a double line pull (using a pulley block), install an appropriate eye bolt on the winch stand as close as possible to the base of the winch. If a Quick Mount Kit is used, make sure the winch is in the forward position before installing the eye bolt.

PERMANENT WIRING FOR MODELS RC23 and RC30

To permanently wire the winch, refer to Figure 1 follow the outlined procedures.

1. Attach the circuit breaker to the positive (+) battery post or to the positive (+) battery side of the starter solenoid (See Figure 1).

A CAUTION Never attach the circuit breaker to the

battery ground terminal.

- 2. Run the wire under the vehicle to the battery, attaching at suitable intervals to the vehicle frame. Use nylon wire ties (not supplied) to secure the wire to the vehicle frame about every 18 inches. If no wire ties are available use electrician's tape. Avoid sharp edges or places where the wire might rub.
- 3. Attach the ground wire (black) to the vehicle frame using a 5/16" bolt and lock nut. Before attaching the wire, clean the metal with a wire brush, steel wool, or sandpaper.
- 4. Remove the knock out plug in the spare tire well and draw the excess wire up into the vehicle.

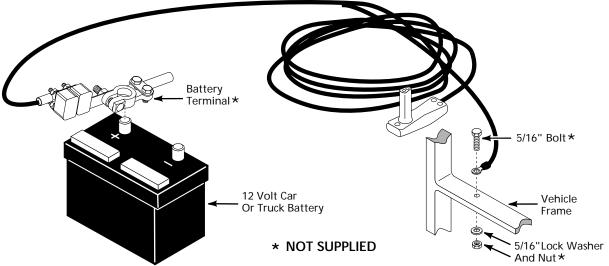


Figure 1 - Permanent Wiring Hookup for Models RC23 & RC30

Transmitter Instructions

The Powerwinch RC30 and RC23 winches are equipped to operate with a radio frequency remote transmitter and receiver module (located inside of winch cover). Every transmitter and receiver module must be programmed by the operator to communicate with one another before the initial use of the winch. Please refer to the instructions below so that proper communication between the transmitter and receiver module can be established.

TRANSMITTER FUNCTIONS

1. Place the transmitter in the palm of the hand. The button to the lower left is the power ON/OFF switch. Press this button and the red LED will light indicating that the transmitter is powered up and ready for use.

The transmitter must be turned off after every use to preserve battery life.

2. The button in the upper right corner is the button that will be used to activate the Powerwinch. The button to the upper left will not be used at this time.

If this is the your first time using the Powerwinch please go to (Learning Your Transmitter).

3. After the transmitter is learned to your Powerwinch just press the ON/OFF button to energize your transmitter and then press the button to the upper right and your winch will start running.

Use extreme caution when using this system.

- 4. The transmitter is a electronic device so keep as dry as possible.
- 5. If the LED fails to light or the range of the transmitter has decreased change the battery in your transmitter. It takes a A23 12 volt battery available at many stores.

Learning Your Transmitter

In the rear of your Powerwinch RC23/RC30 winch you will find a black oval housing with two red switches (This is the Manual Overide/Learn Switch, See Figure 3). The red button closest to the wires is the learn button and the button farthest from the wires is the manual override switch that allows you to operate the Powerwinch without the use of the transmitter.

Before learning the transmitter make sure the clutch is fully disengaged on the Powerwinch head.

- 1. Make sure that the winch is wired to a 12-volt battery as described earlier.
- 2. To learn the transmitter, first turn power on to the transmitter the red LED will light.
- 3. Press and hold the learn button (closest to the wires) for 2 seconds.
- 4. Now press the right hand button on the transmitter and hold for 1 second. Release the button and press it again and hold for one second.
- 5. Release, your Powerwinch transmitter is now learned to your receiver. Pressing the button should activate the Powerwinch head.

OPERATING INSTRUCTIONS

In case you would ever lose your transmitter and have to obtain another from Powerwinch Inc, you can remove all transmitters by pressing and holding the learn button for 25 seconds with the Powerwinch head powered up. Of course you would have to repeat the learn process for a new transmitter.

This Device complies With The FCC Part15. Operation is subject to the following two conditions.

- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

Section 15.105 Information to the user

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- -- Increase the separation between the equipment and receiver.
- -- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- -- Consult the dealer or an experienced radio/TV technician for help.

Transmitter Functions



Figure 2 - Transmitter Key Fob

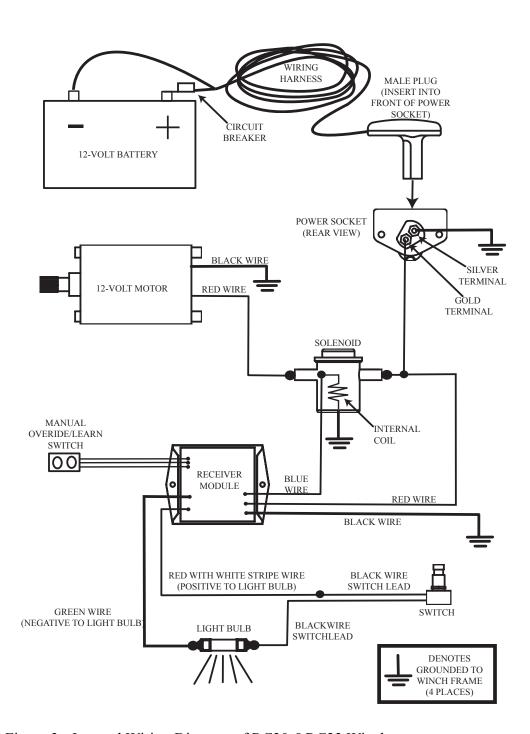


Figure 3 - Internal Wiring Diagram of RC30 &RC23 Winches

RC30 &RC23 Winch Troubleshooting

Limited Warranty

A. This Limited Warranty is given by the Powerwinch Division of the Scott Fetzer Company (the "Company") to the original purchaser (the "Purchaser") of a Powerwinch Product (the "Product") specified in this manual. This Limited Warranty is not transferable to any other party.

- B. Responsibilities of the Company under this Limited Warranty:
- 1. Repair or replace (at the discretion of the Company) any part or parts of the Product found by the Company to be defective within a one (1) year period from the date of purchase.
 - 2. The Company will pay the transportation charge for shipment back to the Purchaser of any Product received for legitimate Warranty repair.
- C. Responsibilities of the Purchaser under this Limited Warranty:
 - 1. Purchaser will have to show dated proof of purchase to qualify for service under the provisions of the Limited Warranty.
 - 2. Promptly notify the Seller or the Company of any claim hereunder.
- 3. At the Option of the Company, return the Product to the Company for inspection. Authorization must be given prior to any Product return. Call the Company at (513)-539-7215 or write the Company at 301 Lawton Ave., Monroe, OH 45050 for authorization and complete instructions on how to return the Product directly to the Company.
- 4. Use reasonable care in maintenance, operation, use and storage of the Product in accordance with the instructions contained in the Owner's Manual.
- 5. Have Warranty work performed by a representative approved by the Company.
- 6. Except as noted in B.2., transportation charges are the responsibility of the Purchaser.
- D. This Limited Warranty covers:
 - 1. Defects in workmanship or materials.
 - 2. Any part or parts of the Product sold or manufactured by the Company.
- E. This Limited Warranty does not cover:
 - 1. Any failure that results from improper installation of the Product.
- 2. Any failure that results from accident, Purchaser's abuse, neglect, modification, improper maintenance, or failure to operate and use the Product in accordance with the instructions provided in the Owner's Manual supplied with the Product.
- F. There is no other express warranty. Implied warranties, including those of merchantability and fitness for a particular purpose, are limited to one (1) year from date of purchase. This is the exclusive remedy and any liability for any and all incidental or consequential damages or expenses whatsoever is excluded.

Some states do not allow limitations on how long an implied warranty lasts, or do not allow exclusion or limitation of incidental or consequential damages, the above limitations may not apply to you. This Limited Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.



For Replacement Parts Please Call (800) 243-3097



(800) 243-3097