Models RC23, RC23-S & RC30

These instructions apply to all models listed.

Details and procedures unique to a specific model are labeled appropriately.





Thoroughly read manual furnished with this product and be familiar with controls. Do not allow individuals to operate winch without understanding safe operation and procedures for equipment.

PROPRIETARY STATEMENT

The Powerwinch RC23 and RC30 Trailer Winches are products of Scott Fetzer Electrical Group or SFEG, located in Fairview, Tennessee, USA. The information contained or disclosed in this document is considered proprietary to SFEG. Every effort has been made to ensure that the information presented in this document is accurate and complete. However, SFEG assumes no liability for errors or any damages that result from use of this document.

The information contained in this manual pertains to the current configuration of the models listed on the title page. Earlier model configurations may differ from the information given. SFEG reserves the right to cancel, change, alter or add any parts and assemblies, described in this manual, without prior notice.

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SAFETY INFORMATION

The following Safety Precautions Must be followed at ALL Times. Failure to follow the warnings and cautions in this manual could result in serious injury and/or property damage.

This product can expose you to chemicals including Di- isodecyl phthalate (DIDP), Vinyl Chloride and Cumene, which are known to the state of California to cause cancer or birth defects or other reproductive harm. For more information visit www.P65warnings.ca.gov.

A CAUTION

ALWAYS block vehicle wheels to help prevent vehicle from moving when pulling a load with winch.

▲ CAUTION

SHOCK HAZARD. ALWAYS unplug wiring harness before attempting to install, relocate, service or perform maintenance on winch.

▲ CAUTION

NEVER use winch to lift or move people or animals.

▲ CAUTION

NEVER use winch for overhead lifting.

▲ CAUTION

NEVER attempt to pull a load greater than rated load of winch.

A CAUTION

ALWAYS stand away from winch during operation. ALWAYS stand clear of area behind and between load and winch. ALWAYS keep

objects, people and animals away when operating the winch. Serious injury could occur if cable breaks.

A CAUTION

NEVER wear loose fitting clothes, scarves, ties or jewelry when operating winch. Loose clothing can become caught in moving parts.

A CAUTION

ALWAYS keep hands clear of cable spool (drum area).

A CAUTION

ALWAYS wear leather gloves when handling cable. Steel cable can cause serious damage to hands.

A CAUTION

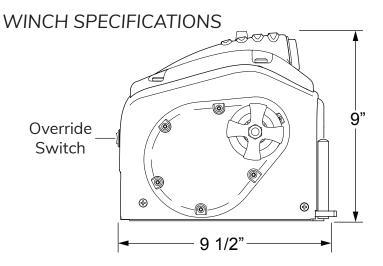
ALWAYS remove all tools used for manual override operation before operating winch with electrical power.

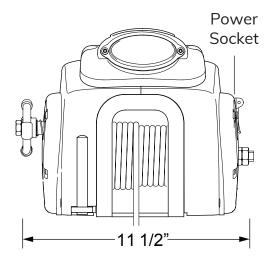
▲ CAUTION

NEVER use winch to exclusively hold, support or permanently secure load. Use separate straps to support load.

SPECIFICATIONS

Various load conditions 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 charts below are based on a single line pull and provided as a guideline in calculating pulling capabilities.





Cable fasteners on this or any winch are not designed to hold rated loads independently. ALWAYS leave a minimum of five wraps of cable on drum to achieve rated load values.

Model	Part Number	Line Speed @ Capacity (FPM)	Gear Ratio	Voltage	Circuit Breaker	Unit Weight
RC23	P55750	14	225: 1	12 VDC	60 amps	34 lbs.
RC23-S	P55750-S	14	225: 1	12 VDC	60 amps	24 lbs.
RC30	P55950	8	450: 1	12 VDC	60 amps	36 lbs.

Noise Level during Operation: less than 98db (A).

APPROXIMATE ROLLING LOAD CAPACITIES (VALUES ARE IN POUNDS)

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

- A 10% incline (6°) is 1 foot rise in 10 feet.
- To convert from pounds (lbs) to kilograms (kgs) divide by 2.2.
- Capacity can be increased by using a pulley block.

WINCH & BOAT CAPACITIES (VALUES ARE IN POUNDS)

Model	Part Number	Vertical Lift Capacity	Double Line Pull	Approx. Boat Weight*	Approx. Boat Size*
RC23	P55750	2400	4300	7500	Up to 23 Feet
RC23-S	P55750-S	2000	N/A	6250	Up to 23 Feet
RC30	P55950	4000	7500	11500	Up to 30 Feet

^{*} Boat size and weight is approximate and varies depending on boat type.

When calculating boat weight, use the fully loaded weight that includes boat, motor, fuel, water, gear etc.

INSTALLATION

MOUNTING UNIT

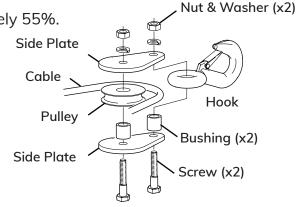
The following instructions are for standard mounting of the winch. Winch can be mounted on trailer in the same position and location as an existing hand winch.

- 1. Remove existing hand winch.
- 2. Position unit on trailer mount stand.
- 3. Confirm that winch's hook and bow eye on boat are at the same height when boat is in fully loaded position on trailer.
 - A. If bow eye is too high, extra pull is required of winch and extra stress is exerted on boat's stern and bow eye.
 - B. If necessary, raise or lower winch stand. In most cases, trailer manufacturers have adapters available for use with a winch.
 - C. RC30 winches wind over the top of spool, RC23 winches wind underneath cable spool. This will affect height for proper installation.
- 4. Confirm a minimum clearance of 12 inches between winch and bow eye when boat is in fully loaded position. If necessary, extend bow stop to obtain clearance.
- 5. Bolt unit using a minimum of two (2) 3/8" grade 5 machine bolts and lock nuts. If existing mounting holes do not line up with winch, use bottom of winch as a template and drill two (2) 7/16" holes in the mounting surface of trailer stand.
- 6. If using a double line pull (using a pulley block), install a ¾" eyebolt on stand as close as possible to base of winch. Eyebolt is supplied by installer.

ASSEMBLING PULLEY BLOCK*

Pulley block can increase the pulling capacity approximately 55%.

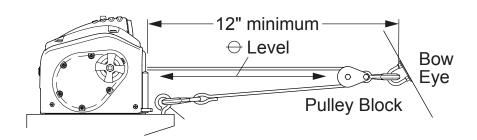
- 1. Place two screws through one tear drop plates and hold in place.
- 2. Slide a bushing over each screw.
- 3. Slide pulley wheel and hook over bushings as shown. Components fit loosely on bushings.
- 4. Wrap cable around pulley.
- 5. Place second tear drop plate over screws and secure using washers and nuts provided.



*Only included with cable

DOUBLE LINING WINCH

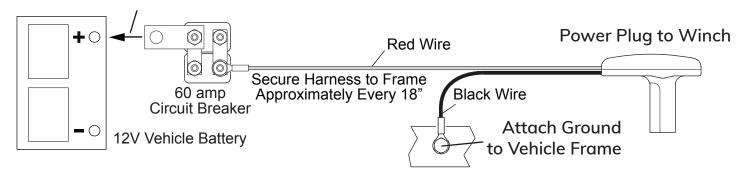
- 1. With cable threaded through block, hook pulley block to bow eye.
- 2. Power out cable and attach cable hook to eyebolt next to winch.
- 3. Power in cable.



WIRING UNIT

The following instructions are for permanently wiring the winch. If installing with kit, follow directions with kit.

- 1. Attach circuit breaker to battery's POSITIVE (+) post or positive (+) terminal of starter solenoid.
- 2. Attach ground wire (black) to vehicle frame. Clean metal frame with a wire brush or equivalent then attach ground lug using a 5/16" bolt and lock nut (bolt and nut not furnished).
- 3. Route wire under vehicle and along frame. Avoid sharp edges and moving parts. Secure wire to frame approximately every 18" using nylon ties or equivalent.



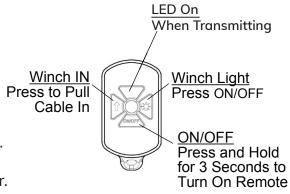
NOTE: If winch does not operate, follow troubleshooting guide on page 10 and check in-line fuse (page 9) before returning winch.

REMOTE TRANSMITTER

RC23, RC23-S and RC30 winches are equipped to operate with a RF (Radio Frequency) transmitter and receiver. Transmitter and receiver are factory programmed to communicate with each other.

TESTING REMOTE

- 1. Connect wire harness to winch.
- 2. Press and hold remote's ON/OFF button for 3 seconds. LED will illuminate and the winch light will flash.
- 3. Loosen clutch knob, turn counter clockwise to prevent winch from pulling cable in.
- 4. Press and hold ↑ button and verify that motor is running. Release button. If motor runs, winch is ready for use.
- 5. Tighten clutch knob, winch can now pull boat onto trailer.





WHEN NOT IN USE, press ON/OFF button to turn off remote. This will prevent winch from accidentally operating when not in use.

PROGRAMMING A REPLACEMENT REMOTE

- 1. Connect wire harness to winch.
- 2. Release clutch knob and pull cable out about 4 feet.
- 3. Hold down up position of the toggle on back of winch for 5 seconds.
- 4. When LED on winch lights up, release toggle.
- 5. Press ↑ button on key fob until LED flashes one time. Then release.
- 6. Wait for light on winch to flash 4 times, and turn off.
- 7. Hold on/off button on key fob for 3 seconds untl LED on winch flashes once.
- 8. After LED has flashed one time, tighten clutch knob and press ↑ botton on key fob to run cable/ strap in. Press light button on then off to test LED.

REMOTE OPERATIONAL NOTES

- Transmitter (remote) is an electronic device and should be kept dry at all times.
- Remote operates best within a 10'-15' range from winch (receiver). Maximum operating distance is 30'- 40'. Actual distance may vary depending on environment remote is used in.
- For best operation, hold remote level with or above winch.
- Transmitter and receiver have been tested and complies with limits for a Class B digital device pursuant to Part 15 of FCC Rules.
 - Equipment generates, uses and can radiate radio frequency energy. There is no guarantee that interference will not occur in any particular installation. This interference may affect radio and television reception.
- To prevent accidental operation of winch and to preserve battery life, remote must be turned off after every use.

REPLACING REMOTE BATTERY

Remote uses a 12V size A23 battery. Batteries are available through your local battery outlets. For best performance, battery should be changed every 3 months or twice during boating season. Actual battery life is dependent on frequency of use, environmental conditions and condition of remote.

- 1. Remove small screws from back of remote.
- 2. Carefully separate two halves of remote.
 - **NOTE:** When removing old battery, make note of polarity of battery. When inserting new battery, place negative end against coil spring terminal.
- 3. Remove old battery and insert new battery.
- 4. Reattach covers and screws removed previously.



OPERATION

A WARNING

To avoid personal injury and property damage, ALWAYS clear area around and behind boat of people, animals and obstructions before

loading or unloading boat.

A WARNING

NEVER stand between load or anchor point and winch. Serious personal injury could occur if cable breaks.

A WARNING

NEVER use winch alone to secure the boat to trailer during transit. Use separate straps or equivalent to secure boat to trailer.

▲ CAUTION

ALWAYS wear leather gloves when handling cable. Steel cable can cause serious damage to hands.

NOTICE

After using winch, ALWAYS disconnect wire harness from socket to avoid moisture collection in socket and prevent possibility of short circuiting.

NOTICE

To prevent damage to motor, DO NOT operate winch continuously for periods over 20 minutes. Allow motor to "rest" for a minimum of 1 hour.

UNLOADING BOAT

- 1. Attach winch hook to bow eye on boat.
- 2. Connect power to winch. Wire harness plug goes into socket on right side of winch.
- 3. Remove tie down straps from boat.
- 4. Slowly turn clutch knob counterclockwise to release winch brake.
- 5. Allow boat to slide off trailer. If necessary, clutch knob can be tightened to slow speed of boat.
- 6. When boat is in water, release cable hook.
- 7. Tighten clutch knob clockwise until finger tight to set brake.
- 8. While maintaining tension in cable, press ↑ button on remote. Roll the cable/strap up completely.
 - A. Cable will wind underneath spool shaft for RC23 units and over spool shaft for RC30` unit due to gear train difference.

NOTICE

DO NOT allow cable hook to roll into winch. Damage to level wind plate can occur.

9. Secure hook to prevent any accidental injury or damage.

LOADING BOAT

- 1. Align boat and trailer.
- 2. Loosen clutch knob turn counterclockwise and free-wheel cable to boat. Attach hook to eye on the bolt.

NOTE: If winch cable/strap is initially difficult to pull out, try engaging motor for a few seconds with clutch fully released. This should free clutch allowing cable/strap to pull out.

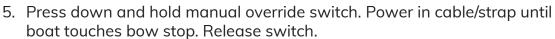
- 3. Tighten clutch knob clockwise until finger tight to set brake.

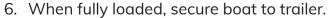
 DO NOT over tighten clutch knob; over tightening can cause damage to clutch.
- 4. Step clear of cable/strap, winch and boat.
- 5. Turn on remote by pressing ON/OFF button until LED illuminates and winch light flashes.
- 6. Press and hold ↑ button. Power in cable until boat touches bow stop. Release button.
- 7. When fully loaded, secure boat to trailer.

MANUAL OVERRIDE SWITCH

If remote is lost or damaged before retrieving boat, a manual override switch is provided on back of winch.

- 1. Connect power to winch. Wire harness plug goes into socket on right side of winch.
- 2. Align boat and trailer.
- 3. Loosen clutch knob, turn counterclockwise and free-wheel cable/strap to boat. Attach hook to the eye on boat.
- 4. Tighten clutch control knob clockwise until finger tight to set brake. DO NOT over tighten clutch knob; over tightening can cause damage to clutch.







EMERGENCY HAND CRANK

An emergency hand crank is stored in LHS cover. Crank is used when there is no power (i. e. a dead battery).



NEVER use hand crank to assist a running motor. Serious personal injury can occur.

- 1. Disconnect wire harness from winch.
- 2. Remove outer nut from shaft on side opposite clutch knob.
- 3. Remove emergency crank handle from storage position and place on shaft.
- 4. Secure handle to shaft with nut removed previously. Tighten nut snugly against handle.
- Tighten clutch knob, turn clockwise until finger tight to set brake.
 DO NOT over tighten clutch knob; over tightening can cause damage to clutch.
- 6. Turn crank handle to clockwise to wind in cable and counterclockwise to release cable. RC30 will wind over top cable spool, while RC23 will wind underneath cable spool.
- Clutch Knob Manual Crank

 Outer Nut

 Storage Position
- 7. After boat has been secured on trailer, remove handle from shaft. Replace nut on shaft and tighten firmly against inner nut.
- 8. Place handle in storage position. Make sure handle is firmly seated in storage position before traveling.



ALWAYS remove all tools used for manual override operation before operating winch with electrical power.

OPERATING LIGHT



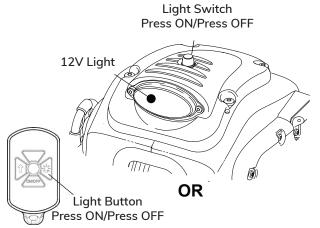
DO NOT operate light for longer than 20 minutes at a time to avoid damaging light.

RC23 and RC30 winches are equipped with a 12V light mounted on top of unit. Light can be used when winch is running or when it is idle. Two methods of operating light are available. Connect wire harness to winch.

<u>From winch:</u> A switch is located on top of unit. To turn light ON or OFF press and release light switch.

With remote: To turn light ON or OFF press and release light button.

NOTE: Light will automatically turn off after 20 minutes.



MAINTENANCE



ALWAYS disconnect wire harness from winch before attempting to install, service or perform any maintenance on unit.

LUBRICATION

Following steps should be performed a minimum of once a year.

<u>Cable:</u> Lubricate cable with Whitmore's Wire Rope Spray, WD40 or equivalent. Spray shaft and cable as cable is being wound.

<u>Gears:</u> Remove covers and lubricate gears with a lithium base grease. Be careful not to get grease on clutch lining (refer to item 2 on page 11).

REPLACING CABLE

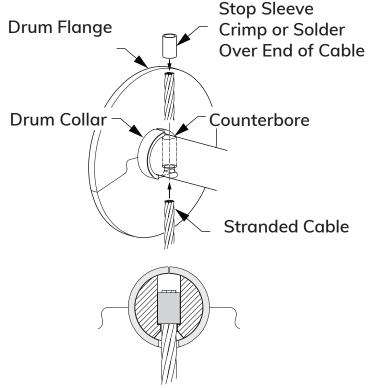
CAUTION ALWAYS use Powerwinch replacement cable. Winch rating and cable strength are matched for safe and optimum performance. NEVER

replace cable with parts not approved by Powerwinch.



ALWAYS wear leather gloves when handling cable. Steel cable can cause serious damage to hands.

- Unplug wire harness from winch. 1.
- Loosen clutch knob (turn counterclockwise) and pull hook out completely. 2.
- Cut old cable off approximately 2" from drum shaft.
- Slide collar away from cable then push 4. old cable out of drum shaft.
- Insert new cable through shaft. Cable 5. must be inserted through side opposite counter bore.
- Insert stop sleeve over end of cable until 6. cable is flush with end of stop. Solder or crimp stop onto cable.
- Pull cable back through shaft until stop 7. is seated in counter bore of hole.
- 8. Slide collar around cable. Notch on the collar fits around cable.
- 9. Tighten clutch knob, turn clockwise until finger tight to set brake. DO NOT over tighten clutch knob; over tightening can cause damage to clutch.
- 10. Reconnect wire harness to unit. Powerin cable, keeping tension on cable as it is winding.
 - A. Cable will wind over top cable spool



Completed Installation

for RC30 models, and underneath cable spool for RC23 models.

NEVER wind cable incorrectly, it may cause loss of power and risk **NOTICE** damage to level wind plate. If cable is too loose or wound on one side, unwind cable then rewind while keeping tension on cable.

REPLACING STRAP

CAUTION | ALWAYS use Powerwinch replacement strap. Winch rating and strap strength are matched for safe and optimum performance. NEVER

replace strap with unapproved strap.

- 1. Unplug wire harness from winch.
- 2. Loosen clutch knob, turn counterclockwise and pull strap out completely.
 - Spit Lock A. If removing cable, Washers please refer to steps 3 & 4 in REPLACING CABLE Section on page 7.
 - B. If replacing cable with strap, the drum collar and



- 3. Loosen and remove bolts with $\frac{5}{32}$ " Allen key and remove strap, lock washers, and strap plate.
- 4. Grab the non-hook looped side of new strap, fold in edges of loop to allow adequate clearance for bolt holes in strap plate.
- 5. Insert Strap Plate into loop, and with fold seam of strap facing downward and the winch facing toward operator, place bolts through holes in strap plate.

Strap Plate

Bolts

- 6. Place split lock washer(s) on bottom side of plate (i.e., washers should be between shaft and plate).
 - **NOTE:** Make sure split of lock washer is facing toward exterior of winch to avoid tearing strap while under load.
- 7. Using 5/32" Allen key, tighten bolts down.
 - NOTE: Screw each bolt until finger tight and then tighten in small increments switching from bolt to bolt as to allow strap to tighten evenly and avoid uneven strap plate installation.
 - A. Before tightening bolts completely, rotate strap around strap plate to point towards rear of winch. This will allow strap to properly lay when winding, underneath spool.
- 8. Tighten clutch knob, turn clockwise, until finger tight to set brake. DO NOT over tighten clutch knob; over tightening can cause damage to clutch.
- 9. Reconnect wire harness to unit. Power-in the strap, keeping tension on strap as it is winding.

REPLACING IN-LINE FUSE

NOTICE

ALWAYS use correct rated fuse. Using wrong fuse can cause winch to not operate and/or cause damage to electrical components.

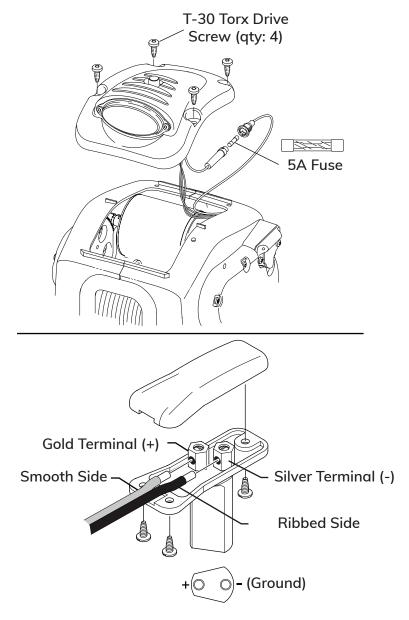
An in-line fuse is located under top cover of unit. In-line fuse is a standard automotive AGC glass type fuse. Required rating is 5A, 250V. Fuses are available at local automotive parts stores.

To access fuse:

- 1. Disconnect wire harness from winch.
- 2. Remove four (4) T-30 torx drive screws that attach top.
- 3. Lift top up. Use care to not break or damage wires.
- 4. Locate fuse holder and open to inspect/replace fuse.
- 5. Test operation of winch.

If fuse blows when power is applied, check the polarity of wires in the wire harness connector.

- 1. Disconnect wire harness from winch AND battery.
- 2. Test continuity of the wires:
 Using a continuity tester, place one probe in negative terminal of connector.
 Touch the second probe against vehicle frame.
- 3. If there is no continuity, remove cover from plug.
- 4. The smooth wire goes to gold terminal (+). Ribbed wire goes to silver terminal (-).



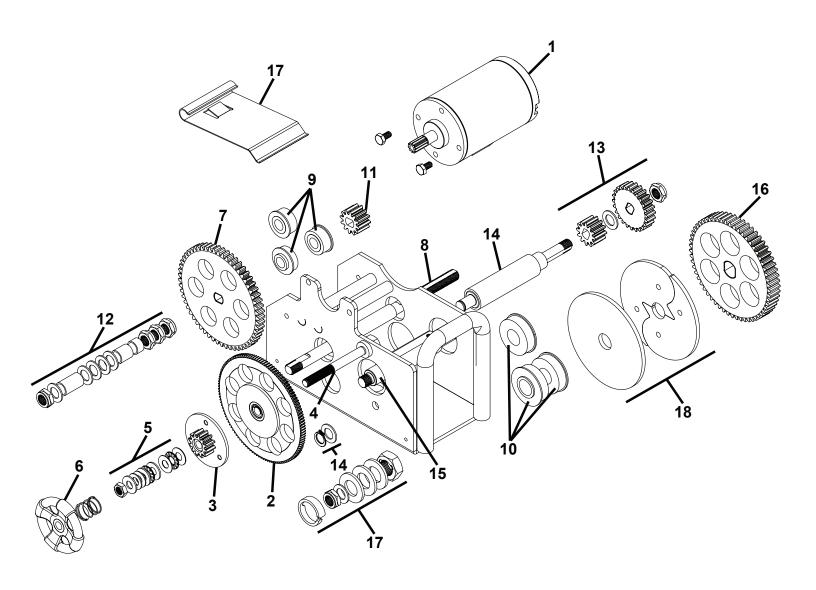
If connector is wired correctly (step 4), but there is no continuity (step 3), harness is defective and must be replaced.

TROUBLESHOOTING GUIDE

\ \ / '	1.0 11.0				
VVir	nch Does Not Operate				
Α.	Confirm power to winch. 1. Check vehicle battery is fully charged. 2. Confirm connections are tight & clean. 3. Check wires for wear or bare that may cause shorts.		Correct as required.		
B.	Check circuit breaker at battery.				
	Bypass circuit breaker and test winch. Does the winch run?	Yes	If winch runs, circuit breaker is bad, replace.		
	NOTICE DO NOT operate winch without circuit breaker. Removing circuit breaker from the circuit is ONLY for testing.	No	Reconnect circuit breaker. Contact your authorized service center.		
C.	Check In-Line Fuse.				
	A 5 amp in-line fuse is located under top cover of winch. Refer to page 12.	Yes	Fuse is good. Contact your authorized service center.		
		No	Replace Fuse and test.		
	NOTE: If fuse blows immediately when power is applied, disconnect to Check polarity of wiring in connector (refer to page 11). Correct as re-				
Loa	d Slips				
Α.	Load slips during retrieval.		rust washers and thrust bearings e worn or deformed. Replace.		
В.	Load slips back after boat is retrieved.		lutch bearing inside 120 tooth gear as failed. Replace gear assembly.		
C.	Check clutch lining.				
	Clutch lining is located on 120 tooth gear under LHS (clutch side) of case. Ensure that clutch is clean free of grease.	Clean as required. If clutch lining is worn or damaged, replace 120 tooth gear assembly.			
Key	Fob Remote Does Not Operate Winch				
	For optimum performance, remote should be operated within 10-15 to additional information.	feet fro	om winch. Refer to page 2 for		
Α.	Check remote battery				
	Battery must provide a minimum of 9V to correctly	Yes	Battery is good, go to step B.		
	transmit to the receiver.	No	Replace battery.		
B.	Reprogram remote/receiver.				
	Follow directions on page 3.	Yes	Remote works.		
		No	Transmitter or receiver is defective. Contact your authorized service center.		
Ligh	nt Will Not Turn On (Winch Does Not Operate)				
Α.	Check bulb.				
	Refer to page 7 for access and replacement information.	Yes	Bulb is good, go to step B.		
		No	Replace bulb.		
B.	Light does not turn on with switch but works with remote.		Switch is bad, replace.		
C.	Light does not turn on with remote but works with switch.		Check remote. Refer to page 2.		

ILLUSTRATED PARTS LIST

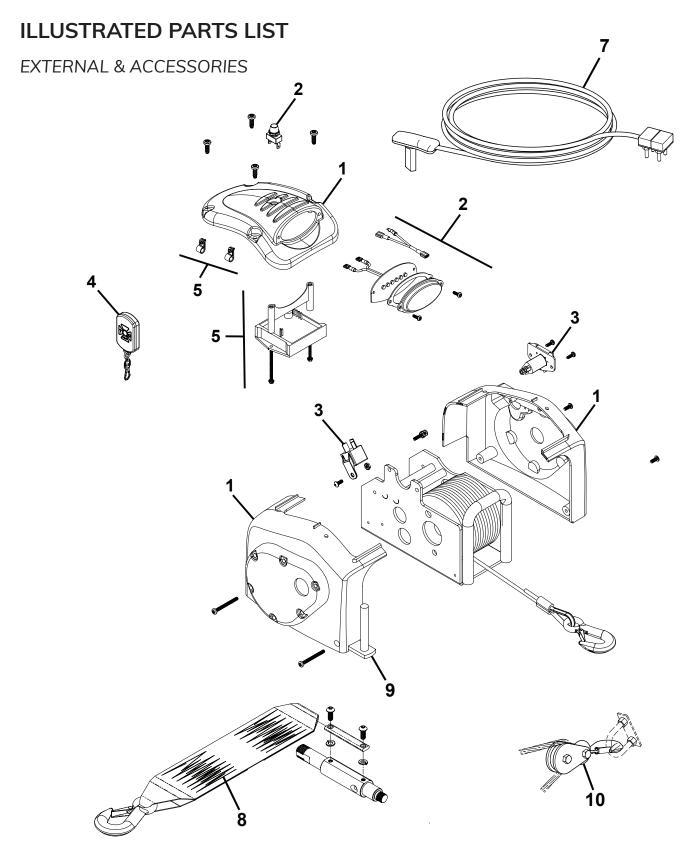
INTERNAL PARTS



Powerwinch

RC23, RC23-S & RC30 Trailer Winch

Item	Description	RC23	RC23-S	RC30	Notes
1	Motor Kit	R1000	R1000	R1000	
2	120 Gear Assembly Kit	R1001	R1001	R1001	
3	Pinion Gear Kit	R1002	R1002	R1002	
4	1st Shaft Kit	R1003	R1003	R1003	
5	1st Shaft Accessory Kit	R1004	R1004	R1004	
6	Clutch Knob Kit	R1005	R1005	R1005	
7	2nd Shaft 57T Gear Kit	R1006	R1006	R1006	
8	2nd Shaft Kit	R1007	R1007	R1007	
9	2nd/3rd Small Bearing Kit	R1008	R1008	R1008	
10	2nd/3rd Large Bearing Kit	R1009	R1009	R1009	
11	2nd Shaft 12T Gear Kit	R1010	R1010	R1010	
12	2nd Shaft Accessory Kit	R1011	R1011	R1011	
13	3rd Shaft Gear Kit			R1012	
14	3rd Shaft Kit			R1013	
15	Final Shaft Kit	R1014	R1014	R1014	
16	Final Shaft Gear Kit	R1015	R1015	R1015	
17	Final Shaft Accessory Kit	R1016	R1016	R1016	
18	Final Shaft Flange Kit	R1017	R1017	R1017	



6 - Includes assembly hardware.

Please refer to the table on page 14 to determine if shown items are used with your model.

Powerwinch

RC23, RC23-S & RC30 Trailer Winch

1 Cover Kit R2000 R2000 R2000	
2 LED Light Kit R2001 R2001 R2001	
3 Power/Relay Kit R2002 R2002 R2002	
4 Remote Control Fob Kit R2003 R2003 R2003	
5 Remote Control Module Kit R2004 R2004 R2004	
6 Case Hardware Kit R2005 R2004 R2004	
7 Wiring Harness Kit R3001 R3001 R3001	
8 Universal Strap Kit R3010 R3010	
9 Crank Handle Kit R3008 R3008 R3008	
10 Pulley Block Kit R3000 R3000	

WARRANTY

SFEG warrants to the FIRST retail Purchaser that the Powerwinch Product described in this manual is free of defects in material and workmanship within the terms and conditions as set forth below. SFEG's obligation under this warranty is limited to the repair or replacement, at SFEG's option, of any defective component within the stated warranty period. THIS WARRANTY IS NOT TRANSFERABLE.

1. Duration

- a. 1 year on parts.
- b. SFEG will pay the transportation charges for return shipment to the purchaser of any product received for legitimate warranty repair.

Warranty duration is not extended by the length of time the product is not in use or the time that the purchaser is deprived the use of the product. The duration of coverage is determine by the date of the original product purchase, not the date of repairs.

2. What is Covered Under This Warranty?

Defects in the manufacturer's material and workmanship of product under normal use, and which occur within the duration of the warranty period.

3. What is Not Covered Under This Warranty?

- a. Improper installation and/or any consequent damage or failure that results from improper installation of the product.
- b. Normal wear.
- c. Conditions that are not related to the material or workmanship of the product: including any failure that results from an accident, wind, rain, or other acts of God.
- d. Purchaser's abuse, including but not limited to neglect; failure to operate, use or maintain the product in accordance with the instructions provided with the product.
- e. Any component not sold or manufactured by SFEG.
- f. Any failure that results from the use of another manufacturer's product with a SFEG product that is not specifically approved by SFEG.
- g. Any incidental, indirect, or consequential loss, damage or expense that may result from any defect, failure or malfunction of the product.
- h. The removal or alteration of any product component or device. In the event of such removal or alteration, this warranty is void.
- i. Any expense related to delivery or pick-up of product to/from the service dealer.

4. Responsibilities of the Purchaser

IN ORDER FOR THE WARRANTY TO BE HONORED, THE PURCHASER MUST HAVE PROOF OF PURCHASE. FAILURE TO PROVIDE THE REQUIRED DOCUMENTATION MAY DELAY OR VOID ANY WARRANTY CLAIM.

- a. Retain dated proof of purchase for the product, and provide it as requested.
- b. Perform "Periodic Maintenance" as specified in Owners Manual.
- c. Use reasonable care in maintenance, operation, use and storage of the product in accordance with the instructions contained in the owner's manual.

THIS WARRANTY GIVES THE OWNER SPECIFIC LEGAL RIGHTS. THE LAWS OF CERTAIN JURISDICTIONS MAY GRANT THE OWNER ADDITIONAL RIGHTS AND PRIVILEGES. Except as set forth above; SFEG makes no warranty, whether statutory or otherwise, including without limitation, any warranty of merchantability or fitness for a particular purpose. SFEG shall have no liability except to repair, replace or adjust defective products and parts. SFEG specifically excludes any liability, whether in contract, tort or otherwise, for personal injury, property damage, economic or consequential losses. SFEG has not authorized any person or company to alter the terms of this warranty.

It is SFEG's policy and practice to continuously improve the company's products and services. Therefore, SFEG reserves the right to make changes in design and components, without notice, whenever it is believed the quality of the product will be improved, but without incurring any obligation to incorporate such improvements in any product which has been shipped or in service.

For Your Records	
Dealer/Installer	
NAME: .	
ADDRESS: .	
-	
- PHONE: ₋	
PURCHASE DATE:	

PRODUCT NAME/
DESCRIPTION:

PART NUMBER:

Retain your original proof of purchase. It is required for all warranty repairs and returns.