

CHAMPION

POWER EQUIPMENT™

OWNER'S MANUAL



1,588 kg (3,500 lb.)

WINCH



MODEL NUMBER

100243

SAVE THESE INSTRUCTIONS

Important safety instructions are included in this manual.

MADE IN CHINA
REV 100243-20160829

12039 Smith Ave.
Santa Fe Springs CA 90670
USA / 1-877-338-0999
www.championpowerequipment.com

Have questions or need assistance?

Do not return this product to the store!

WE ARE HERE TO HELP!

Visit our website:

www.championpowerequipment.com

for more info:

- Product Info & Updates
- Tech Bulletins
- Frequently Asked Questions
- Product Registration

– or –

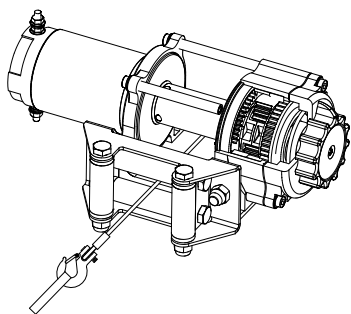
Call our Customer Care Team Toll-Free at:

1-877-338-0999

Parts Ordering:

Mon – Fri 8:30 AM – 5:00 PM (PST/PDT)

Toll Free: 1-877-338-0999



1,588 kg (3,500 lb.) WINCH

TABLE OF CONTENTS

Introduction	1	Operation	9
Introduction	1	General tips for safe operation	9
Manual conventions	2	Self recovery	9
Safety rules	3	Winching techniques A-Z	10
Controls and features	5	Maintenance	11
Winch	5	Lubrication	11
Assembly	6	Cable assembly replacement	11
Mounting the winch	6	Specifications	12
Solenoid/contactor location	6	Performance specifications	12
Install the rocker switch	6	Parts diagram	13
Winch Wiring	7	Parts list	14
Wiring diagram	8	Troubleshooting	15

INTRODUCTION

Introduction

Congratulations on your purchase of a Champion Power Equipment product. Champion Power Equipment and Champion Engine Technology designs, builds, and supports all of our products to strict specifications and guidelines. With proper product knowledge, safe use, and regular maintenance, this product should bring years of satisfying service.

Every effort has been made to ensure the accuracy and completeness of the information in this manual, and we reserve the right to change, alter and/or improve the product and this document at any time without prior notice.

Since CPE/CET highly value how our products are designed, manufactured, operated and serviced, and also highly value your safety and the safety of others, we would like you to take the time to review this product manual and other product materials thoroughly and be fully aware and knowledgeable of the assembly, operation, dangers and maintenance of the product before use. Fully familiarize yourself, and make sure others who plan on operating the product fully familiarize themselves too, with the proper safety and operation procedures before each use. Please always exercise common sense and always err on the side of caution when operating the product to ensure no accidents, property damage, or injury occurs. We want you to continue to use and be satisfied with your CPE/CET product for years to come.

Record the model and serial numbers as well as date and place of purchase for future reference. Have this information available when ordering parts and when making technical or warranty inquiries.

Champion Power Equipment Support	
1-877-338-0999	
Model Number	
100243	
Serial Number	
Date of Purchase	
Purchase Location	

This manual uses the following symbols to help differentiate between different kinds of information. The safety symbol is used with a keyword to alert you to potential hazards in operating and owning power equipment.

Follow all safety messages to avoid or reduce the risk of serious injury or death.

 **DANGER**

DANGER indicates an imminently hazardous situation which, if not avoided, **will** result in death or serious injury.

 **WARNING**

WARNING indicates a potentially hazardous situation which, if not avoided, **could** result in death or serious injury.

 **CAUTION**

CAUTION indicates a potentially hazardous situation which, if not avoided, **may** result in minor or moderate injury.

CAUTION

CAUTION used without the safety alert symbol indicates a potentially hazardous situation which, if not avoided, **may** result in property damage.

 **NOTE**

If you have questions regarding your winch, we can help. Please call our help line at **1-877-338-0999**.

SAFETY RULES

WARNING

Read this manual thoroughly before operating your winch. Failure to follow instructions could result in serious injury or death.

WARNING

Do not exceed the rated capacity.

DANGER

Do not use this winch for lifting or moving people or animals.

DANGER

Keep yourself and others a safe distance to the side of the cable when under tension.

DANGER

Never step over a cable or near a cable under load.

WARNING

The wire rope may break before the motor stalls. For heavy loads at or near rated capacity, use a pulley block/snatch block to reduce the load on the wire rope.

WARNING

Do not move the vehicle to pull a load (towing) on the winch cable. This could result in cable breakage.

WARNING

Do not use the winch to secure or hold a vehicle for a long period of time. Do not use the winch to secure a vehicle for transport.

WARNING

Disconnect the remote control and battery leads when not in use.

WARNING

Avoid “shock loads” by using the control switch intermittently to take up the slack in the wire rope. “Shock loads” can far exceed the rate capacity for the wire rope and drum.

Do not accelerate your vehicle while winching. Loss of traction can cause a shock load on the cable.

CAUTION

Use hook strap when handling the hook for spooling or unspooling the wire rope.

⚠ WARNING

When re-spooling the cable, ensure that the cable spools in the under-wind position with the cable entering the drum from the bottom, not the top.

To re-spool correctly, and while wearing gloves, keep a slight load on the cable while pushing the remote button to draw in the cable. Walk toward the winch and do not allow the cable to slide through your hands. Do not let your hands get within 30 cm (12 in.) of the winch while re-spooling. Turn off the winch and repeat the procedure until a few feet of cable are left. Disconnect the remote control and finish spooling by rotating the drum by hand with the clutch disengaged. Keep hands clear of the fairlead and drum while the winch is under power .

⚠ WARNING

Do not use as a hoist. Do not use for overhead lifting.

⚠ CAUTION

Use gloves to protect hands when handling the cable. Never let the cable slide through your hands.

⚠ CAUTION

Do not wrap the cable around any object and hook it back onto itself.

⚠ CAUTION

Duration of winching pulls should be kept as short as possible.

If the motor becomes uncomfortably hot to the touch, stop winching immediately and let it cool down for a few minutes. Do not pull for more than one minute at or near the rated load.

⚠ CAUTION

If the motor stalls, do not maintain power to the winch.

Electric winches are designed and made for intermittent use and should not be used in constant duty applications.

⚠ CAUTION

Apply blocks to the wheels of the vehicle when on an incline.

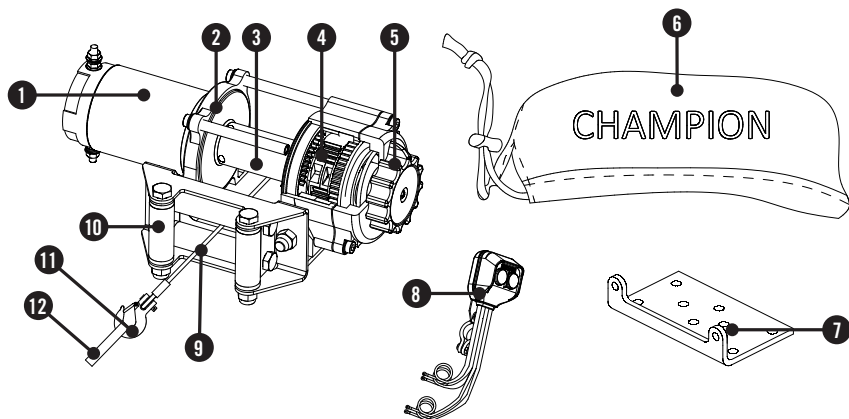
⚠ CAUTION

Never release the free-spool clutch when there is a load on the winch.

CONTROLS AND FEATURES

Read this owner's manual before operating your winch. Familiarize yourself with the location and function of the controls and features. Save this manual for future reference.

Winch



- (1) **Motor** - 1.4 HP/1 kW 12V DC motor provides power to the planetary gear mechanism.
- (2) **Braking System** - Braking action is automatically applied to the winch drum when the winch motor is stopped and there is a load on the wire rope.
- (3) **Winch Drum** - The winch drum is the cylinder on which the wire rope is stored. It can feed or wind the rope depending on the remote winch switch.
- (4) **Planetary Gear System** - The reduction gears convert the winch motor power into extreme pulling forces. This system allows high torque while maintaining compact size and light weight.
- (5) **Free Spooling Clutch** - The clutch allows the operator to manually disengage ("Out") the spooling drum from the gear train, free spool. Engaging the clutch ("In") locks the winch into the gear system.
- (6) **Winch Cover**
- (7) **Mounting Channel**
- (8) **Remote Switch** – Rocker switch with handlebar mount for powering the rope in or out of your winch drum.
- (9) **Wire Rope** - 4.8 mm x 15m (3/16 in. x 49 ft.) galvanized aircraft cable designed specifically for load capacity of 1,588 kg (3,500 lb.) The wire rope feeds onto the drum in the "under wind" position through the roller fairlead (10) and is looped at the end to accept the clevis hook pin.
- (10) **Roller Fairlead** - When using the winch at an angle the roller fairlead acts to guide the wire rope onto the drum and minimizes damage to the wire rope from abrasion on the winch mount or bumper.
- (11) **Clevis Hook** – Provides a means for connecting the looped ends of cables to an anchor.
- (12) **Strap** – Used to assist cable feed.

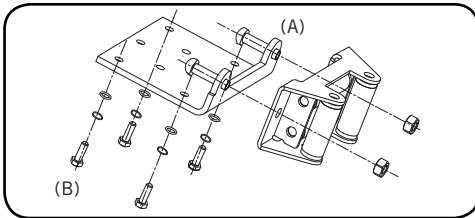
Mounting the Winch

This CPE 1,588 kg (3,500 lb.) winch is designed with a bolt pattern that is standard in this class of winch. Many winch mounting kits are available that utilize this bolt pattern for the most popular ATVs and UTVs. If you cannot find a kit locally, contact CPE and we will provide you with the name of a dealer.

! CAUTION

Mounting bolts must be SAE grade 5 or better and torque to 34 ft. lb.

1. Insert M10x20 bolts through the mounting channel holes and attach the roller fairlead to the mounting channel with the M10 lock nuts provided. (A)



2. Turn the winch upside down. Place the mounting channel on the winch, making sure the winch is centred in the middle of it.
3. Thread the M8x25 bolts through the M8 flat and lockers washers, and then thread through the mounting channel. Tighten the bolts. DO NOT over tighten. (B)
4. Turn winch right side up. Disengage the clutch by moving the Cam Ring to the "Out" position. Release the wire rope and pull through the roller fairlead.
5. Attach the clevis hook to the cable, and then hand strap to the clevis hook.

Mounting the Winch Cont'd.

CAUTION

If utilizing a mounting plate, ensure that the three major sections (motor, drum and gear housing) are properly aligned. Proper alignment of the winch will allow for even distribution of the full rated load.

NOTE

The type of vehicle to which the winch and mounting channel will be applied, will dictate the type of mounting kit that should be used (Speed Mount™ Hitch Adapter, Standard Mounting Channel, or Specialty Mounting Kit).

ASSEMBLY

Winch Wiring

⚠ CAUTION

Never route electrical cables across any sharp edges, through or near moving parts, or near parts that become hot.

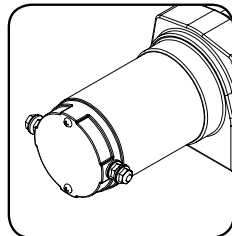
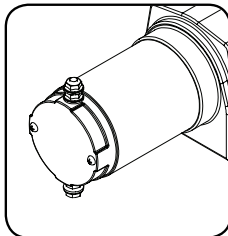
1. Connect the battery leads. **FOR WINCH TO FUNCTION PROPERLY:** Connect the red (+) lead of the remote to the red (+) terminal of the vehicle's 12 volt battery. Connect the black (-) lead of the remote to the black (-) terminal of the vehicle's 12 volt battery.
2. Attach the remote lead to the winch and test for proper operation.
3. Check for proper drum rotation. Pull and turn the clutch knob to the "out" position (Free spooling). Pull out some cable from the drum, and then turn the clutch knob to the "In" position to engage the gears. Press the cable out button on the switch. If the drum is turning and releasing more cable then your connections are accurate. If the drum is turning and collecting more cable then reverse the leads on the motor. Repeat and check rotation.

⚠ CAUTION

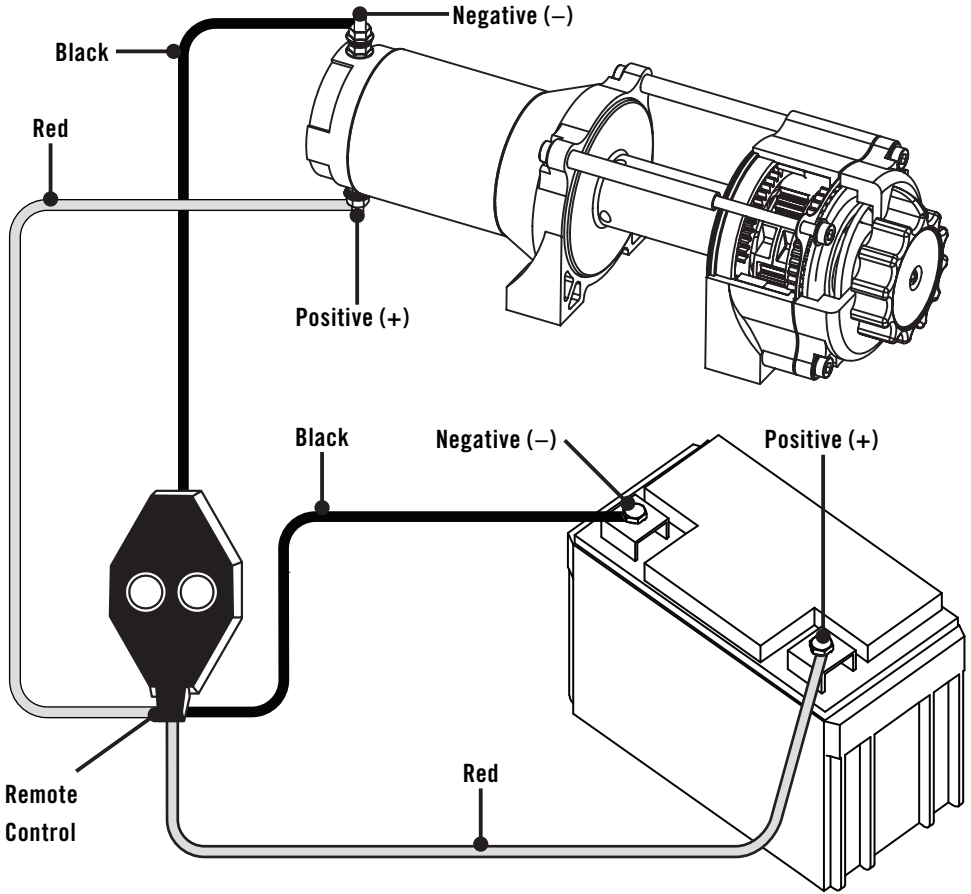
Battery cables should not be drawn taut. Leave some slack for cable movement.

Winch Wiring Cont'd.

With some applications the motor leads may need to be rotated to avoid interference with other components.



Wiring Diagram



OPERATION

General Tips for Safe Operation

Overloads can damage the winch, motor and/or rope. In some cases, you may find yourself needing more pulling power. For loads over 50% winch rating when spooling on first rope layer we recommend the use of a pulley/snatch block to double the wire rope line. The use of a pulley/snatch block increases mechanical advantage and will:

- Effectively double winching power
- Reduce the number of rope layers on the drum, and
- Reduce the load on the rope by as much as 50%

To review Line Pull and Cable Capacity please refer to Specifications Section found within the manual. When doubling the line back to the vehicle, attach to the tow hook, frame or other load-bearing part. The vehicle engine should be kept running during operation of the winch to minimize battery drain and maximize power and speed of the winch. If the winch is used for a considerable time with the engine off the battery may be drained and too weak to restart the motor.

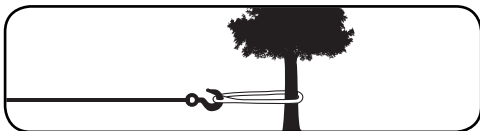
Get to know your winch before you actually need to use it. We recommend that you set up a few test runs to familiarize yourself with rigging techniques, the sounds your winch makes under various loads, the way the cable spools on the drum, etc.

Inspect the wire rope and equipment before each use. A frayed or damaged rope should be replaced immediately. Use only manufacturer's identical replacement rope with the exact specifications. Inspect the winch installation and bolts to ensure that all bolts are tight before each operation. Store the remote control inside your vehicle in a place where it will not be damaged.

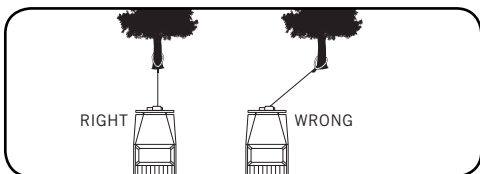
Any winch that appears to be damaged in any way, is found to be worn, or operates abnormally **MUST BE REMOVED FROM SERVICE UNTIL REPAIRED**. It is recommended that the necessary repairs be made by a manufacturer's authorized repair facility. Pull only on areas of the vehicle as specified by the vehicle manufacturer. Only attachments and/or adapters supplied by the manufacturer are to be used.

Self Recovery

Locate a suitable anchor such as a strong tree trunk or boulder. Always use a sling as an anchor point.

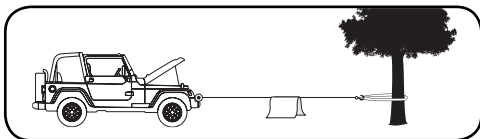


Your winch is equipped with a roller fairlead to help guide the wire rope and to reduce binding on short side pulls. Do not winch from an acute angle as the wire rope will pile up on one side of the drum causing damage to wire rope and the winch.

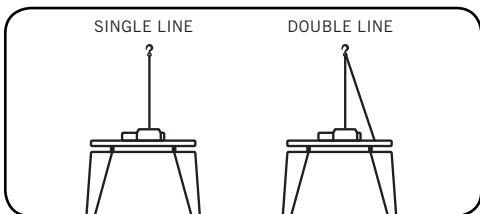


Short pulls from an angle can be used to straighten the vehicle. Long pulls should be done with the wire rope at a 90° angle to the winch/vehicle.

When pulling a heavy load, place a blanket or jacket over the wire rope 1.5 m - 1.8 m (5 ft. - 6 ft.) from the hook.



In the event of a broken cable it will dampen the snap back. For additional protection open the hood of the vehicle. For loads over 50% winch rating when spooling on first rope layer, we recommend the use of a snatch block/pulley block to double line the wire rope.



This reduces the load on the winch and the strain on the rope by approximately 50%.

Winching Techniques A-Z

- (a) Take time to assess your situation and plan your pull.
- (b) Put on gloves to protect your hands.
- (c) Disengage the clutch to allow free-spooling and also save battery power.
- (d) Attach the hook strap to the clevis hook.
- (e) Pull out the wire rope to your desired anchor point using the hook strap.
- (f) Secure the clevis hook to the anchor point: sling, chain or snatch block. Do not attach the hook back onto the wire rope.
- (g) Engage the clutch.
- (h) Connect the remote control to the winch. If you are going to control the winch from inside your vehicle, then pass the remote through an open window to avoid the wires being pinched in the door.
- (i) Start your engine to ensure power is being replenished to the battery.
- (j) Drape a blanket or jacket over the wire rope approximately 1.5 m - 1.8 m (5 ft. - 6 ft.) from the hook. Open the hood for added protection.
- (k) Power in the wire rope guiding the wire under tension to draw up the slack in the wire. Once the wire is under tension, stand clear. Never step over the wire rope.
- (l) Double check your anchors and make sure all connections are secure.
- (m) Inspect the wire rope. Make sure there are at least 5 wraps of wire rope around the winch drum.
- (n) Clear the area. Make sure all spectators stand clear and that no one is directly in front or behind the vehicle or anchor point.
- (o) Begin winching. Be sure that the wire rope is winding evenly and tightly around the drum. The vehicle that is being winched can be slowly driven to add assistance to the winching process. Avoid shock loads; keep the wire rope under tension.

Winching Techniques A-Z Cont'd.

- (p) The vehicle to be winched should be placed in neutral and the emergency brake released. Only release the brake pedal when under full tension. Avoid shock loads to the winch. This can damage the winch, rope and vehicle.
- (q) The winch is meant for intermittent use. Under full load with a single-line rig, do not power in for more than a minute without letting the motor cool down for a few minutes and then resume the winching operation.
- (r) The winching operation is complete once the vehicle is on stable ground and is able to drive under its own power.
- (s) Secure the vehicle. Be sure to set the brakes and place the vehicle in park.
- (t) Release the tension on the wire rope. The winch is not meant to hold the vehicle for long periods of time.
- (u) Disconnect the wire rope from the anchor.
- (v) Rewind the wire rope. Make sure that any wire already on the drum has spooled tightly and neatly. If not, draw out the wire and re-spool from the point where the rope is tight.
- (w) Keep your hands clear of the winch drum and fairlead as the wire rope is being drawn in.
- (x) Secure the hook and hook strap.
- (y) Disconnect the remote control and store in a clean, dry place.
- (z) Clean and inspect connections and mounting hardware for next winching operation.

MAINTENANCE

The owner/operator is responsible for all periodic maintenance.

WARNING

Never operate a damaged or defective winch.

WARNING

Improper maintenance will void your warranty.

Complete all scheduled maintenance in a timely manner. Correct any issue before operating the winch.

NOTE

For service or parts assistance, contact our help line at **1-877-338-0999**.

Lubrication

All moving parts within the electric winch have been lubricated using high-temperature lithium grease at the factory. No internal lubrication is required. Lubricate cable assembly periodically using a light penetrating oil.

Cable assembly replacement

It is recommended that any modifications be performed by a manufacturer's authorized repair facility, and that only manufacturer-supplied parts be used.

1. Move the clutch to the "Out" position.
2. Extend cable assembly to its full length. Note how the existing cable is connected vto the inside of the drum.
3. Remove old cable assembly and attach new one.
4. Retract cable assembly onto drum, being careful not to allow kinking.

Performance Specifications

- Rated Pull	1,588 kg (3,500 lb.)
- Gear Reduction Ratio	171:1
- Motor	Permanent Magnet 1.4 HP/1 kW (12V DC)
- Duty Cycle	Intermittent
- Drum Size	38 mm(D) x 80 mm(L) [1.5 in. (D) x 3.2 in. (L)]
- Cable	4.8 mm(D) x 15 m(L) [3/16 in. (D) x 49 ft. (L)]
- Gross Weight	10.6 kg (23.4 lb.)
- Net Weight	9.6 kg (21.2 lb.)
- Height	10.7 cm (4.2 in.)
- Width	10.3 cm (4.1 in.)
- Length	32.9 cm (13 in.)
- Bolt Pattern	12.4 cm x 7.6 cm (4.9 in. x 3 in.)

Line Speed and Motor Current (First Layer)							
Line Pull	LB	0	1000	1500	2000	2500	3500
	KG	0	454	680	907	1134	1588
Line Speed (12V DC)	FPM	9.8	8.5	7.2	6.2	5.9	3.3
	MPM	3.0	2.6	2.2	1.9	1.8	1.0
Motor Current (12V DC)	A	18	70	100	130	165	230
Running Time*	Minutes	1	1	1	1	1	1
Cooling Time**	Minutes	5	5	5	5	5	5

*If the motor becomes uncomfortably hot to the touch, stop winching immediately and let it cool down for 5 minutes. Do not pull for more than one minute at or near the rated load.

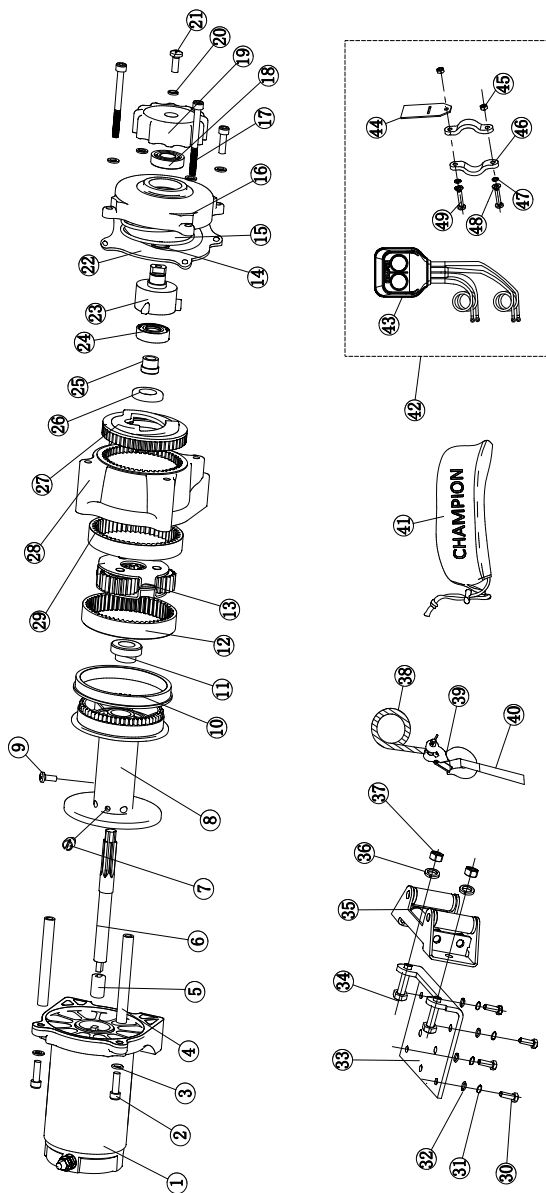
**Electric winches are designed and made for intermittent use and should not be used in constant duty applications.

Line Pull and Cable Capacity Per Layer						
Line of Cable		1	2	3	4	5
Rated Line Pull	LB	3500	2858	2415	2092	1844
	KG	1588	1296	1095	949	836
Cable Capacity	FT	7.2	15.4	24.7	34.5	49
	M	2.2	4.7	7.5	10.5	15

It is recommended to use double line and snatch block for pulling loads over 50%.

SPECIFICATIONS

Parts Diagram



#	Part Number	Description	Qty
1	350100-BF	Motor Assembly - Black Flat	1
2	250001	Hexagon Socket Head Screw M6 x 20	4
3	250002	Flat Washer Ø6	6
4	250003	Tie Bar	2
5	250004	Bushing Shaft	1
6	340001	Coupling Shaft	1
7	250006	Screw M5 x 6	1
8	250007	Drum Assembly	1
9	250083	Cross Recess Pan Head Screw M5 x 8	1
10	250008	Rear Drum Bushing	1
11	250009	Front Thrust Washer	1
12	340002	Gear Ring Output	1
13	340003	Gear Carrier Assembly	1
14	250011	Retaining Ring Clip	1
15	250012	Spring	1
16	250013-BF	Cover Clutch Housing - Black Flat	1
17	250014	Hexagon Socket Head Screw M6 x 70	2
18	GB2760BB16002-SS	Radial Ball Bearing 16002 Sealed	1
19	250016-BF	Clutch Cap - Black Flat	1
20	250017	Lock Washer Ø6	1
21	250018	Cross Recessed Pan Head Screw M6 x 16	1
22	250072	Gasket	1
23	250019	Axis Support Bushing	1
24	GB2760BB06002-SS	Radial Ball Bearing 6002 Sealed	1
25	250021	Clutch Bushing	1
26	250022	Above Clutch Axes Washer	1
27	250023	Cam Clutch Gear	1
28	250024-BF	Gear Housing/End Bearing - Black Flat	1
29	340004	Gear Ring	1

#	Part Number	Description	Qty
30	450021	Hexagon Head Bolt M8 x 25	4
31	300020	Lock Washer Ø8	4
32	300019	Flat Washer Ø8	4
33	250059-BF	Mounting Plate - Black Flat	1
34	400009	Bolt M10 x 20	2
35	250029-BF	Roller Fairlead - Black Flat	1
36	250035	Lock Washer ø10	2
37	250036	Lock Nut M10	2
38	350200	Cable Assembly - 3/16 in (D) x 49 ft (L)	1
39	C20002	1/4 in Clevis Hook	1
40	410022	Yellow Strap	1
41	18030	Winch Cover	1
42	451500	Switch Assembly	1
43	450500A	Control Switch - Black	1
44	300037-BF	Control Switch Mounting Plate - Black Flat	1
45	400025	Nut M5	2
46	400026-BF	Handlebar Switch Clamp - Black Flat	2
47	400024	Lock Washer Ø5	2
48	400023	Flat Washer Ø5	2
49	400022	Hexagon Socket Head Screw M5 x 25	2

TROUBLESHOOTING

Problem	Cause	Solution
Motor does not turn on	Loose battery cable connections	Tighten nuts on all cable connections
	Defective switch assembly	Replace switch assembly
	Defective motor	Check for voltage at armature port with switch pressed. If voltage is present, replace motor
	Water has entered motor	Allow to drain and dry. Run in short bursts without load until completely dry
Motor runs but cable drum does not turn	Clutch not engaged	Move clutch to the "In" position. If problem persists, a qualified technician needs to check and repair
Motor runs slowly or without normal power	Insufficient current or voltage	The battery is weak, recharge. Run winch with vehicle motor running (battery should have a strong charge)
	Loose or corroded battery cable connections.	Clean, tighten, or replace
Motor overheating	Winch running time too long	Allow winch to cool down periodically
Motor runs in one direction only	Defective switch assembly	Replace switch assembly

For further technical support:

Technical Service

Mon – Fri 8:30 AM – 5:00 PM (PST/PDT)

Toll Free: 1-877-338-0999

tech@championpowerequipment.com