Congratulations on your purchase of a Champion Power Equipment winch. CPE designs and builds winches to strict specifications and with proper use and maintenance will bring you years of satisfying service.

**WARNING** Read, study, and follow all instructions before operating this device.

Your winch can develop tremendous pulling forces and if used unsafely or improperly could result in property damage, serious injury or death. Throughout this manual you will find the following symbols for caution, warning and danger. Pay particular attention to the notes preceded by these symbols as they are written for your safety. Ultimately, safe operation of this device rests with you, the operator.

DANGER

Indicates a hazard which, if not avoided, will result in death or serious injury.

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

**CAUTION** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury or equipment damage. This notation is also used to alert against unsafe practices.

#### SAFETY INSTRUCTIONS



Failure to follow these instructions and warnings may result in death, personal injury, or property damage.

<u>**MARNING**</u> READ, STUDY AND FOLLOW ALL INSTRUCTIONS BEFORE OPERATING THIS DEVICE.

**MARNING** DO NOT EXCEED RATED CAPACITY.

**⚠** WARNING

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

**⚠** WARNING

A minimum of 5 wraps of cable around the drum barrel is necessary for pulling and holding the rated load. The cable clamp is not designed to hold the load without 5 wraps of cable around the barrel.

⚠ WARNING

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

**⚠** 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** 

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

**⚠ WARNING** 

Don't move the vehicle to pull a load (towing) on the winch cable. This could result in cable breakage.

**⚠ 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.

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 not allowing the cable to slide through your hands. Do not let your hands get within 12" of the winch while re-spooling. Turn off the winch and repeat the procedure until a few feet of cable is 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 |

Don't wrap cable around any object and hook back onto itself.

**⚠** CAUTION |

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

**⚠** CAUTION

No modifications, alterations, or deviation to the winch are authorized by the manufacturer and should not be made.

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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**

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

#### **⚠** CAUTION

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

#### **⚠** CAUTION

The C10585 is rated at 10,000 lbs. capacity in first layer (Max) when spooling the first rope layer on the drum. Overloads can damage the winch/motor/ or wire rope. For loads over 8,000 lbs. (3629 kg) we recommend the use of the pulley block/snatch block to double the wire rope line. This will aid in two ways: a) reduce the number or rope layers on the drum, as well as, b) reduce the load on the wire rope by as much as 50%. When doubling the line back to the vehicle, attach to the frame or other load bearing part.

#### **⚠** CAUTION

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 engine.

#### **CAUTION**

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.

#### **⚠** CAUTION

Inspect the wire rope and equipment before each use. A frayed or damaged rope shall be replaced immediately. Use only manufacturer's identical replacement rope with the exact specifications.

#### **⚠** CAUTION

Inspect the winch installation and bolts to ensure that all bolts are tight before each operation.

#### **⚠** CAUTION

Never connect the cable back to itself. This will cause cable damage. Always use a snatch block, sling or chain of suitable strength as shown in the illustrations.

#### **⚠** CAUTION |

Store the remote control inside your vehicle in a place that it will not be damaged.

#### **⚠** CAUTION

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.

#### **⚠** CAUTION

Pull only on areas of the vehicle as specified by the vehicle manufacturer.

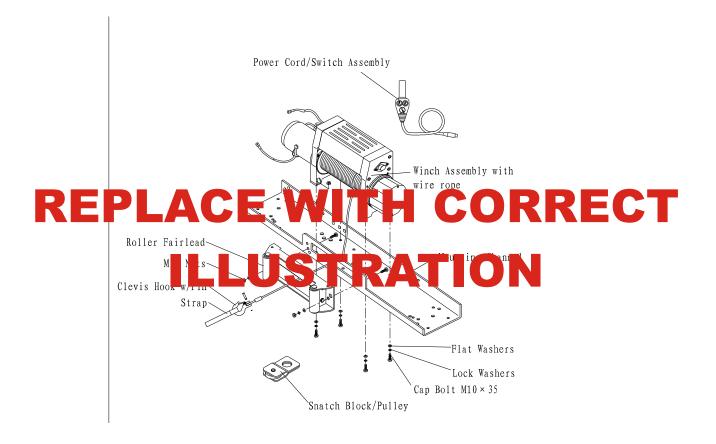
#### **⚠** CAUTION |

Only attachments and/or adapters supplied by the manufacturer are to be used.

#### **CONTENTS**

This carton contains the following items, please unpack carefully.

DESCRIPTION	QUANTITY
Winch assembly with wire rope	1
Cap bolt M10x35	6
Lock washers	6
Flat washers	6
M10 nuts	6
Speed Mount™ Hitch Adapter	1
Roller fairlead	1
Snatch block/pulley	1
Clevis hook w/pin	1
Power cord/switch assembly	1



#### **MOUNTING YOUR WINCH**

- 1. After removing from box expand mount handles. See figure 1.
- 2. Insert the 4 bolts (7mm x 15mm) included in designated holes and tighten included nuts to keep handles from any movement. See figure 2.
- 3. Place roller fairlead on the front of the mount and insert the 2 bolts (10mm x 35mm) with flat washer and lock washer, tighten down 2 included nuts. See figure 3.

Note: When installing make sure nuts are facing out on the roller fairlead side

- 4. Place mount and winch on side and insert the 4 bolts (10mm x 35mm) in designated holes with lock washers and tighten down the nuts provided to attach the winch to the mount. See figure 4.
- 5. After winch is properly bolted on to the mount, place right side up, place cable through roller fairlead and attach clevis hook. Be sure to bend the end of the cotter pin once in place. See figure 5.
- 6. When installed on your vehicle, slide mount in to receiver and secure the winch by sliding the included pin through the receiver and attach the pin clip to the other end of the pin. See figure 6.
- 7. Connect the battery leads. NOTICE: BATTERY SHOULD BE A MINIMUM OF 650CCA FOR WINCH TO FUNCTION PROPERLY. Connect the red (positive) lead from the solenoid to the positive (+) terminal of the vehicles 12 volt battery. Connect the black (negative) lead from the motor to the Negative (-) terminal of the battery. Caution Battery cables should not be drawn taut. Leave some slack for cable movement.
- 8. Attach the hand held remote lead to the winch and test for proper operation. (See Fig. 9)
- 9. 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 power 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.



Fig. 1



Fig. 3



Fig. 2



Fig. 4



Fig. 5

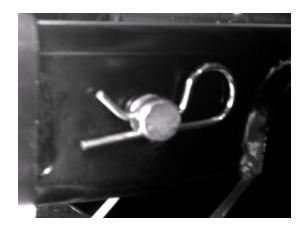


Fig. 6



Fig. 7



Fig. 8



Fig. 9

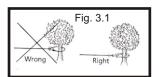
#### **GETTING TO KNOW YOUR WINCH**

Your 10,000lb Champion Power Equipment winch is a powerful piece of machinery. It is important that you understand the basics of its operation and specifications so that when you need to use it, you can use it with confidence and safety. Below is a list of the components of your winch and their uses. Practice using your winch before you are in a situation to need to use it.



- Motor: Your 3.6HP motor require a 650CCA 12 volt battery for operation and provides power to the gear mechanism which turns the drum and winds the wire rope.
- **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.
- **Wire Rope:** Your winch has a 3/8 in. x 85 ft. galvanized aircraft cable designed specifically for load capacity of 10,000lbs. The wire rope feeds onto the drum in the "under wind" position through the roller fairlead and is looped at the end to accept the clevis hook pin.
- 4 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.
- **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.
- **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. The braking action is applied by a separate mechanical brake.
- **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.
- **Solenoid:** Power from the vehicle battery flows through the weather sealed solenoid switch before being directed to the winch motor.
- **Remote Switch:** Power switch with 12' cord has a dual switch for powering the rope in or out your winch drum. The 12' cord allows you to stand clear of the wire rope when the winch is under load.
- (1) Clevis Hook: Connect the wire rope to the pulled staff, also add to the adaptability of your winch.
- Snatch Block: Your winch has been supplied with a snatch block that, used properly, can double the pulling power of winch, or change your pulling direction without damaging the wire rope. We recommend you to use a snatch block and double your line for pulling over 8,000 lbs (3629 kg)

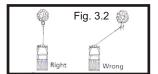
#### **RIGGING TECHNIQUES**



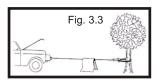
Locate a suitable anchor such as a strong tree trunk or boulder.

Always use a sling as an anchor point. CAUTION- Do not attach the clevis hook back onto the cable as this could cause damage to the cable.

As shown in Fig 3.1

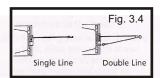


Your winch is equipped with a roller fairlead to help guide the wire rope and to reduce binding on short side pulls. Do not winch from an acute angle as the wire rope will pile up on one side of the drum causing damage to wire rope and the winch. Fig 3.2



Short pulls from an angle can be used to straighten the vehicle. Long pulls should be done with the wire rope at a  $90^{\circ}$  angle to the winch/vehicle.

When pulling a heavy load, place a blanket or jacket over the wire rope five or six feet 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 as shown in Fig 3.3.



For pulls over 8,000lbs. (3629 kg), we recommend the use of the snatch block/pulley block to double line the wire rope. Fig 3.4.

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



WARNING - Never use your winch for overhead hoisting or for lifting people or moving people.

#### **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. 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 well clear. Never step over the wire rope.
- k. Double check your anchors and make sure all connections are secure.
- I. Inspect the wire rope. Make sure there are at least 5 wraps of wire rope around the winch drum.
- m. Drape a blanket or jacket over the wire rope approximately 5 to 6 feet from the hook. Open the hood for added protection.

- Clear the area. Make sure all spectators all well back and that no one is directly in front or behind the vehicle or anchor point.
- 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.
- 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**

#### Lubrication

- 1. All moving parts within the electric winch having been lubricated using high temperature lithium grease at the factory. No internal lubrication is required.
- 2. Lubricate Cable Assembly (4) periodically using a light penetrating oil.

#### **Cable Assembly Replacement**

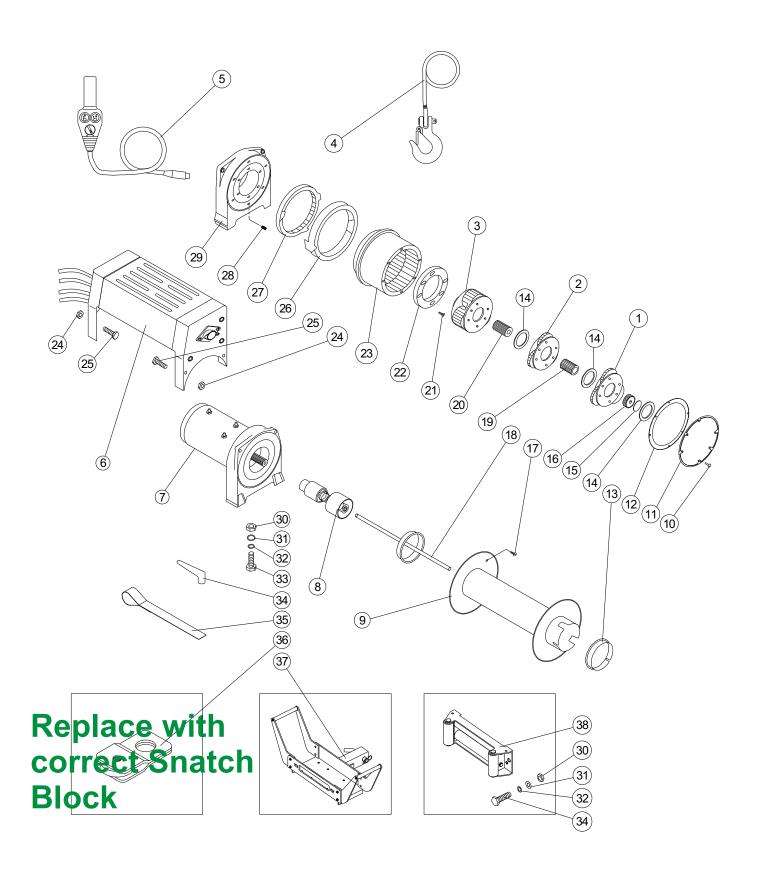
It is recommended that any such modifications be performed by a manufacturer's authorized repair facility, and that only manufacturer-supplied parts be used.

- 1. Move Cam Ring to the "Out" position.
- 2. Extend Cable Assembly to its full length. Note how the existing cable is connected to 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.

## **TROUBLE SHOOTING**

SYMPTOM	POSSIBLE CAUSE	SUGGESTED ACTION
Motor does not turn on	-Switch Assembly not connected properly -Loose battery cable connections -Solenoid malfunctioning	-Insert Switch Assembly all the way into the connectorTighten nuts on all cable connectionsBattery should minimum 650CCATap solenoid to loosen contacts. Apply 12 volts to coil terminals directly. A clicking indicates proper activationReplace Switch Assembly.
	-Defective 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	-Cam Ring (clutch) not engaged	-Move Cam Ring 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	-Battery weak, recharge. Run winch with vehicle motor runningLoose 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 or stuck solenoid -Defective Switch Assembly	-Tap solenoid to loosen contacts. -Repair or replace solenoid. -Replace Switch Assembly.

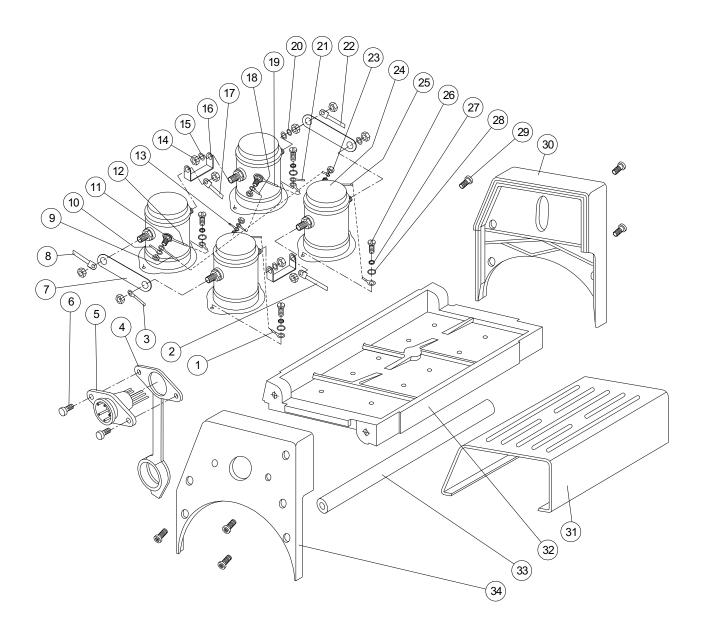
#### WINCH ASSEMBLY DRAWING



## **PARTS LIST**

		I AIX I O EIO I	
No	Part#	Description	Qty
1	1010100	Gear Carrier Assembly - Input	1
2	1010200	Gear Carrier Assembly - Intermediate	1
3	1010300	Gear Carrier Assembly - Output	1
4	1010400	Cable Assembly	1
5	1010800	Switch Assembly	1
6	1010700	Up-setting Solenoid Assembly	1
7	1010500	Motor/End Bearing Assembly	1
8	1010600	Brake/Shaft Assembly	1
9	1010900	Drum Assembly	1
10	1010001	Screw M4 x 12	6
11	1010002	Cover - Gear Housing	1
12	1010003	Gasket	1
13	1010008	Bushing - Drum	1
14	1010004	Thrust Washer	2
15	1010005	Thrust Disc	1
16	1010006	Gear-Input, Sun	1
17	1010012	Cap Screw M6 x 10	1
18	1010013	Hexagonal Shaft	1
19	1010009	Gear - Intermediate, Sun	1
20	1010011	Gear - Output Sun	1
21	1010014	Cap Screw M6 x 20	6
22	1010015	Retainer - Ring	1
23	1010016	Gear - Ring	1
24	1010026	Nut M6	4
25	1010027	Cap Screw M6 x 25	4
26	1010017	Cam Ring	1
27	1010018	Locking Ring	1
28	1010019	Spring	6
29	1010020	End Bearing	1
30	1010024	Nut M10	6
31	1010023	Flat Washer ø 10	6
32	1010022	Lock Washer ø 10	6
33	1010021	Cap Screw M10 x 35	6
34	1010025	Terminal Protector	1
35	1010029	Strap	1
36	1011100	Snatch Block	1
37	1011200	Speed Mount™ Hitch Adapter	1
38	1011000	Roller Fairlead	1

#### **SOLENOID ASSEMBLY DRAWING**



## **SOLENOID PARTS LIST**

No	Part #	Description	Qty					
1	1010701	Connect Wire (I)	1					
2	1010702	Wire Assembly-Motor Black F2	1					
3	1010703	Connect Wire (II)	1					
4	1010704	Cover Female Connector	1					
5	1010705	Connector Female-Molded	1					
6	1010706	Screw M5 x 14	2					
7	1010707	Strap Copper (I)	2					
8	1010708	Wire Assembly-Battery Red	1					
9	1010709	Connect Wire (III)	1					
10	1010710	Connect Wire (IV)	1					
11	1010711	Washer-Flat Φ5	4					
12	1010712	Connect Wire (V)	1					
13	1010713	Connect Wire (VI)	1					
14	1010714	Nut M8	16					
15	1010715	Washer-Flat Φ8	11					
16	1010716	Strap Copper (II)	2					
17	1010717	Wire Assembly-Motor Black F1	1					
18	1010718	Connect Wire (VII)	1					
19	1010719	Connect Wire (VIII)	1					
20	1010720	Lock Washer Φ8	8					
21	1010721	Connect Wire (IX)	1					
22	1010722	Wire Assembly-Motor Black A	1					
23	1010723	Nut M5	8					
24	1010724	Solenoid	4					
25	1010725	Connect Wire (X)	1					
26	1010726	Screw M5 x 10	8					
27	1010727	Lock Washer Φ5	12					
28	1010728	Washer-Flat Φ5	8					
29	1010729	Screw M6 x 16	6					
30	1010730	Left Underlay	1					
31	1010731	Cover Solenoid	1					
32	1010732	Bracket	1					
33	1010733	Tie Bar	1					
34	1010734	Right Underlay	1					
			_					

#### WINCH SPECIFICATIONS

#### **Performance Specifications**

Drum Size

Rated Pull 9,500 lbs (4,309 kg) Gear Reduction Ratio 210:1 (DC 12V)

Motor Series Wound Motor

3.6 HP / 2.7 KW (DC 12V) Ø2.48in. (D) x 9in. (L)

Ø63 mm (D) x 228 mm (L)
Cable Ø5/16in. (D) x 95ft. (L)
Ø8 mm (D) x 29 m (L)

(Over 90ft. useable length with 5 wraps on the winch drum)

Winch Dimensions 22.4in. (L) x 7.1in. (W) x 10.63in. (H)

568.96 mm (L) x 180.34 mm (W) x 270 mm (H)

Winch with Mount 26in. (L) x 17.5in. (W) x 12in. (H)

660.4 mm (L) x 444.5 mm (W) x 304.8 mm (H)

Weight 80.5 lbs (36.51 kg)
Weight with Mount 112.1 lbs (50.85 kg)
Mounting Bolt Pattern 10in. x 4.5in.

254 mm x 114.3 mm

# **Cable and Line Pull Capacity**

Use double line and snatch block for pulling loads over 8000lbs / 3629kg

Layer of cable		1	2	3	4
Rated line pull	lb.	10,000	8000	6600	5600
per layer	kg.	4540	3600	2994	2540
Cable capacity	ft.	18	39.4	64	85
per layer	M	5.5	12	19.5	26

## **Line Speed and Motor Current (first layer)**

(Pull, Speed, Volts & AMPS)

Line pull max	lb.	0	2000	4000	6000	8000	10,000
	kg.	0	906	1818	2727	3629	4536
Line speed (DC 12V)	FPM	24	13	9	7	5.6	4.6
	MPM	7.3	3.8	2.7	2.1	1.7	1.4
Current (AMPS) max		80	150	170	210	250	300

## Model C10585 10,000 LB 12 Volt Winch

# CHAMPION POWER EQUIPMENT 1 YEAR LIMITED WARRANTY

#### **Warranty Qualifications**

Champion Power Equipment (CPE) will register this warranty upon receipt of your Warranty Registration Card and a copy of your sales receipt from one of CPE's retail locations as proof of purchase.

Please submit your warranty registration and your receipt within ten (10) days of the date of purchase.

#### **Champion Power Equipment Repair/Replacement Warranty**

CPE warrants to the original purchaser that the mechanical and electrical components will be free of defects in material and workmanship for a period of one (1) year from the original date of purchase (90 days for commercial & industrial use). This warranty only applies to the original purchaser and is not transferable.

#### Do not return the unit to the place of purchase

Contact CPE's Technical Service and CPE will troubleshoot any issue via phone or e-mail. If the problem is not corrected by this method, CPE will, at its option, authorize evaluation, repair or replacement of the defective part or component at a CPE Service Center. CPE will provide you with a case number for warranty service. Please keep it for future reference. Repairs or replacements without prior authorization, or at an unauthorized repair facility, will not be covered by this warranty.

#### **Warranty Exclusions**

This warranty will not apply to parts and/or labor if this winch is deemed to have been misused, neglected, involved in an accident, abused, modified, installed improperly or connected incorrectly to any accessory. The wire rope/cable and cosmetic defects such as paint, decals, etc., are excluded from this warranty. \*Warranty is Limited to 90-days from purchase for Commercial use, including Rentals.

#### **Limits of Implied Warranty and Consequential Damage**

Champion Power Equipment disclaims any obligation to cover any loss of time, use of this product, freight, or any incidental or consequential claim by anyone from using this winch. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE

A unit provided as an exchange will be subject to the warranty of the original unit. The length of the warranty governing the exchanged unit will remain calculated by reference to the purchase date of the original unit.

This warranty gives you certain legal rights which may change from state to state. Your state may also have other rights you may be entitled to that are not listed within this warranty.

Champion Power Equipment, Inc. Customer Service 10006 Santa Fe Springs Rd. Santa Fe Springs, CA 90670

Customer Service: Mon Fri 8:30 AM - 5:00 PM (PST/PDT)
Toll Free: 1-877-338-0999
Fax no.: 1-562-236-9429

Technical Service: Mon Fri 8:30 AM - 5:00 PM (PST/PDT) Toll Free: 1-877-338-0999

24 hr. Voicemail: 1-626-230-5248 or email: tech@championpowerequipment.com