

# **ELECTRIC WINCH**

**(Series Wound Motor)**

## **Manual Instruction**

- **Winch 5000lbs**
- **Winch 6000lbs**
- **Winch 8000lbs**
- **Winch 9500lbs**
- **Winch 10000lbs**
- **Winch 12000lbs**



**Easy Off-Roading Adventure Starts from Our Winch**

## 4X4 OFF-ROADING & VEHICLE RECOVERY ELECTRIC WINCH

Thank you for purchasing **5000lbs/6000lbs/8000lbs/9500lbs/10000lbs/12000lbs** electric winch from us.  
Please read and understand this winch manual instruction before installing and using your winch.

### General Description

Each winch is equipped with a series wound motor and is designed for intermittent duty general use. Please be noted your winch are not designing to be used in industrial or hoisting applications, winch manufacturer goes not warrant it to be suitable for such usage. Free spool clutch is operated by a sliding ring gear winch disengages the gear box to allow the steel cable be pulled out without using electric power. Two pieces of suspension bars could reduce backlash and snarling when pulling out the wire rope.

### SAFETY PRECAUTIONS

Warning! Observe safety precautions for personal safety and the safety of others. Improper equipment operation may cause personal injury and equipment damage.

Read the following carefully before attempting to operate your winch and keep the instructions for future reference.

#### Dress Properly:

1. Don't wear loose clothing or jewellery. They can be caught in moving parts. Wear leather gloves when handling winch cable. Do not handle cable with bare hands as broken wires can cause injuries. Non-skid footwear is recommended. Protective hair covering to contain long hair.

#### Keep a Safe Distance:

2. Ensure that all persons stand well clear of winch cable and load during winch operation, 1.5 times the cable length recommended. If a cable pulls loose or breaks under load it can lash back and cause serious personal injury or death. Don't step over the cable. All visitors and onlookers should be kept away from the work area. Keep proper footing and balance at all times.

#### Don't Abuse the Cord:

3. Never carry your winch by the cord or yank it to disconnect it from the receptacle. Keep cord from heat, oil and sharp edges.

#### Don't Overwork the Winch:

4. If the motor becomes uncomfortably hot to touch, stop and let it cool down for a few minutes. Don't maintain power to the winch if the motor stalls. Don't exceed maximum line pull ratings shown in tables. Shock loads must exceed these ratings.

#### Avoid Unintentional Starting:

5. Winch clutch should be disengaged when not in use and fully engaged when in usage.

#### Check Damaged Parts:

6. Before using the winch, you should check your winch and its spare parts carefully. Any part that is damaged should be properly repaired or replaced by an authorized service center.

#### Repair Your Winch:

When repairing, using only identical replacement parts or it may cause considerable danger for the user.

#### Re-spool the Cable

Leather gloves must be worn while re-spooling. To re-spool correctly, it is necessary to keep a slight load on the cable. Hold the cable with one hand and the remote control switch with the other. Start as far back and in the centre as you can. Walk up keeping load on the cable as the winch is powered in. Do not allow the cable to lop through your hand and do not approach the winch too closely. Turn off the winch and repeat the procedure until all the cable except 1m is in. Disconnect the remote control switch and finish spooling in cable by rotating the drum by hand with clutch disengaged. On hidden winches, spool in cable under power but keep hands clear. Warning: The use of any other accessory or attachment other than those recommended in the instruction manual may present a risk of personal injury.

#### WINCH OPERATION WARNINGS

Read the following carefully before attempting to operate your winch and keep the instructions for future reference. The uneven spooling of cable, while pulling a load, is not a problem, unless there is a cable pile up on the end of the drum. If this happens reverse the winch to relieve the load and move your anchor point further to the centre to the centre of the vehicle. After the job is done you can un-spool and rewind for a neat lay of the cable. Store the remote control switch inside your vehicle where it will not become damaged, inspect it before you plug it in. When ready to begin spooling in, plug in remote control switch with clutch disengaged, do not engage clutch with motor running. Never connect the hook back to the cable. This causes cable damage. Always use a sling or chain of suitable strength. Observe your winch while winching, if possible while standing at a safe distance. Stop the winching process every meter or so to assure the cable is not pulling up in one corner. Jamming the cable can break your winch. Do not attach tow hooks to winch mounting apparatus. They must be attached to vehicle frame. The usage of a snatch block will aid recovery operations by providing a doubling of the winch capacity and a halving of the winching speed, and the means to, maintain a direct line pull to the centre of rollers. When double loading during stationary winching, the winch hook should be attached to the chassis of the vehicle. Ensure rated "D" or bow shackles are used in conjunction with an approved tree trunk protector to provide a safe anchor point. When extending winch cable, ensure that at least five wraps of cable remain on drum at all times. Failure to do this could result in the cable parting from the drum under load. Serious personal injury or property damage may result. All winches are provided with a red cable marking to identify that 5 cable wraps remain on the winch drum when this mark

For further information please contact the nearest winch distributor.

## 4X4 OFF-ROADING & VEHICLE RECOVERY ELECTRIC WINCH

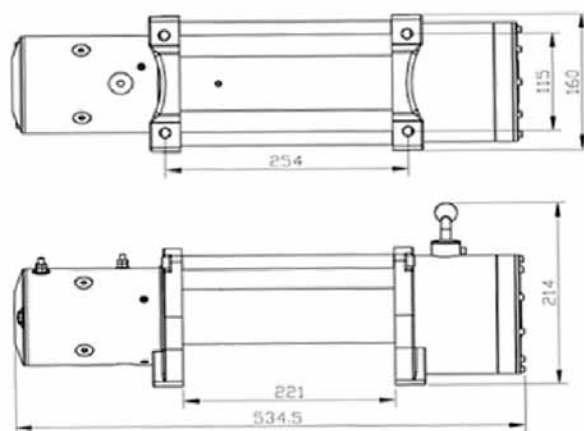
appears at the rollers. No recovery should be attempted beyond this marking. Since the greatest pulling power is achieved on the innermost layer of your winch, it is desirable to pull off as much line as you can for heavy pulls (you must leave at least 5 wraps minimum on the drum-red cable). If this is not practical use a snatch block and double line arrangement. Draping a heavy blanket or similar object over the extended winch cable is recommended as it will dampen any back lash should a failure occur. Neat, tight spooling avoids cable binding, which is caused when a load is applied and the cable is pinched between the others. If this happens, alternatively power the winch in and out. Do not attempt to work bound cable under load, free by hand. Apply blocks to wheels when vehicles are on incline. Battery: Be sure that the battery is in good condition. Avoid contact with battery acid or other contaminants. Always wear eye protection when around a battery. Have the engines running when using the winch, to avoid flattening the battery. Winch Cable: Be sure that the cable is in good condition and is attached properly. Do not use the winch if cable is frayed. Do not move the vehicle to pull a load. Do not replace the cable with a cable of lesser strength. The life of the cable is directly reared to the usage and care it receives. Following its first and subsequent uses, a cable must be wound on to the drum under a load of at least 500lbs/226kgs or the wraps will draw into the inner wraps and severely damage the cable during winching. The first winch use should be a familiarization runs while in a relaxed, non-recovery situation. Spool out the cable until the red cable mark appears about five wraps on the drum, then rewind the cable on to the drum under a load of 500lbs/226kgs or more. This will slightly tension and stretch the new cable and create a tight cable wrap around the drum. Failure to do so may result in cable damage and reduced cable life. When the cable is replaced, be sure to apply loctite, or an equal compound, to the cable clamp thread. Tighten the clamp screw properly but do not over tighten. The loctite will prevent loosening of the screw in arduous conditions. Loctite 7471 primer and 222 thread locker are recommended. Do not attempt to exceed the pulling limits of this winch. Do not drive your vehicle to assist the winch in any way. Vehicle movement in combination with winch operation may overload the cable, the winch itself will cause damaging shock loads. Shock loads while winching is dangerous! A shock load occurs when an increased force is suddenly applied to the cable. A vehicle rolling back on a slack cable may induce a damaging shock load. The winches shown in this manual are solely for vehicle and boat mounted, non-industrial applications. Do not use winch in hoisting applications due to required hoist safety factors and features. Do not use the winch to lift, support and transport personnel. Note: When the steel cable turns to be rusty, we hereby suggest you stop using that. When one of the steel cable is broken, we also advise you quit this steel cable.

### WINCH INSTALLATION

#### MOUNTING YOUR WINCH

How to Mount Electric Winch on Your Vehicles?

- The winch is to be mounted into a suitable steel mounting frame using the 4 point foot mounting system in either a horizontal or vertical plane.
- It's very important that the winch shall be mounted on a flat surface so that the three sections (motor, drum and gear housing) are properly aligned.
- Before commencing installation, you should ensure the mounting facility being used is capable of withstanding the winches rated capacity. The fitment of winches and a frontal protection system may affect the triggering of SRS air bags. Check that the mounting system has been tested and approved for winch fitment in airbag equipped vehicle. Winch mounting frames and frontal protection systems are suggested to suit most popular vehicles. Winch frames are packaged with detailed fitting instructions. Should you wish to manufacture your own mounting plate the dimensions below will assist. A steel mount plate 6mm thick is recommended. Fasteners should be steel high tensile grade 5 or better. A poorly designed mount may void warranty. The winch should be secured to the mounting with 3/8" UNC X 1-14/" stainless steel bolts and spring washers provided. The roller fairlead is to be mounted so as to guide the rope onto the drum evenly.



For further information please contact the nearest winch distributor.

**LUBRICATION INSTALLATION**

All moving parts in the winch are permanently lubricated with temperature lithium grease at the time of assembly. Under normal conditions factory lubrication will surface. Lubricate cable periodically using light penetrating oil. Inspect for broken strands and replace if necessary. If the cable becomes worn or damaged it must be replaced.

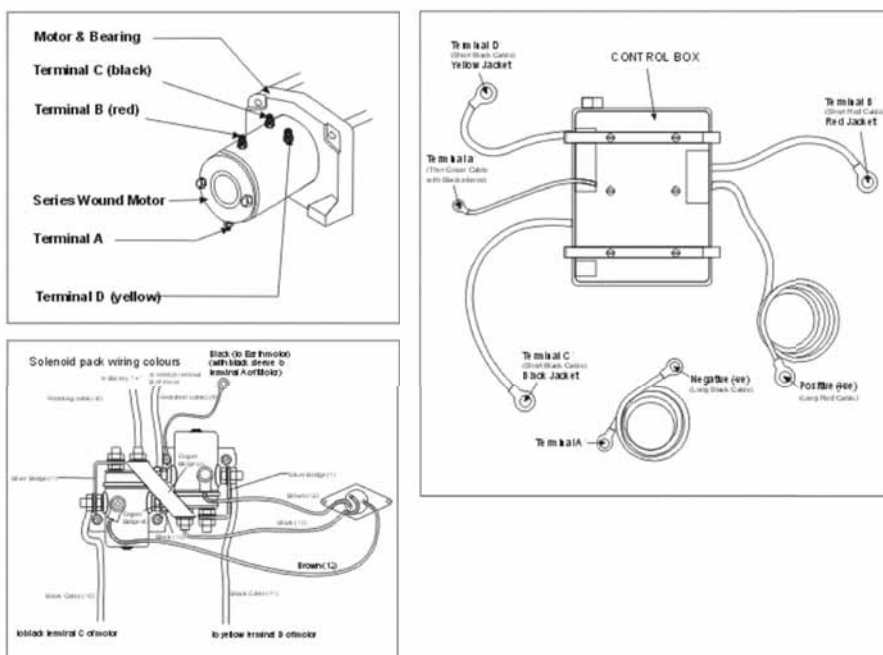
**CABLE INSTALLATION**

Unwind the cable by rolling it along the ground, to prevent kinking. Remove old cable and observe the manner in which it is attached to the cable drum flange.

**ELECTRICAL CONNECTION**

For normal self-recovery work, your existing electrical system is adequate. A fully charged battery and proper connections are essential. Run the vehicle engine during winching operations to keep battery charged.

Pay close attention to proper electrical cable connection as follows (refer to diagram 1) Short red cable (B') connecting to the red terminal (B) of the motor. Short black cable with yellow jacket (C') connecting to the yellow terminal (C) of the motor. Short black cable with yellow jacket (D') connecting to the black terminal (D) of the motor. Thin black cable (A') connecting to bottom terminal (A) of the motor. Long black cable (1.8m), one terminal (A') connecting to the bottom terminal (A) of the motor, and the other terminal negative (-) connecting to negative (-) terminal of battery. Long red cable positive (+) to positive (+) terminal of battery.



**Note:**

Your battery must be kept in good condition. Be sure battery cables are not drawn taut across any surfaces, which could possibly damage them. Corrosion on electrical connections will reduce performance or may cause a short. Clean all connections especially in remote control switch and receptacle. In salty environments use a silicone sealer to protect from corrosion. Index the heads of the plate studs into the keyhole slots on the back of the winch. Attach the winch/adaptor plate assembly to your trailer hitch, by inserting the trailer hitch ball through the shaped hole in the adaptor plate. WINCH OPERATION

**SUGGESTION:**

The best way to get acquainted with how your winch operates is to make a few test runs before you actually need to use it. Plan your test in advance. Remember you can hear your winch as well as you can see it operate. Get to recognize the sound of light steady pull, a heavy pull, and sounds caused by load jerking or shifting. Soon you will gain confidence in operating your winch and its use will become second nature to you.

For further information please contact the nearest winch distributor.

## 4X4 OFF-ROADING & VEHICLE RECOVERY ELECTRIC WINCH

### OPERATING:

Ensure the vehicle is secure by applying the parking brake or chocking the wheels. Pull out the inch cable the desired length and connect to an anchor point. The winch clutch allows rapid uncoiling of the cable for hooking into the load or anchor point. The shifter tab located on the gear housing of the winch operates the clutch as follows:

- a. To disengage the clutch, move the clutch shifter tab to the "OUT" position. Cable may not be free spooled off the drum.
- b. To engage the clutch, move the clutch shifter tab into the "IN" position. The winch is now ready for pulling. Recheck all cable rigging before proceeding. Plug in the winch hand control. It is recommended that the winching operation takes place from the driver's position to ensure safe operation. To commence winching operation, start vehicle engine, select neutral in transmission, maintain engine speed at idle. Operate the remote control switch to IN or OUT until the vehicle has been retrieved. Regularly check the winch to ensure cable is winding onto the drum evenly.

### Note:

Never winch with your vehicle in gear or in park, which would damage your vehicle's transmission. Never wrap the cable around the object and hook onto the cable itself. This can cause damage to the object being pulled, and kink or fray the cable. Keep hands, clothing, hair and jewellery clear of the drum area and cable when winching. Never use the winch if the cable frayed, kinked or damaged. Never allow anyone to stand near the cable, or in line with the cable behind the winch while it is under power. If the cable should slip or brake, it can suddenly whip back towards the winch, causing a hazard for anyone in the area. Always stand well to the side while winching. Don't leave the switch plugged in when winch is not in use. Check the winch carefully and thoroughly before operating.

### MAINTENANCE

It is highly recommended that the winch be used regularly (once a month). Simply power the cable out 15m, free spool 5m and then power back in. This will keep all components in good working condition so that the winch can be relied on when needed. Contact your authorized outlet for technical assistance and repairs.

### SPARE PARTS:

A comprehensive range of spare parts is available. Please kindly contact the distributor on the end cover or the local retailer.

### WINCH CAPACITY

This winch has capacity of **5000lbs/6000lbs/8000lbs/9500lbs/10000lbs/12000lbs** Pulling capacity is reduced as the increases. Recommended safe loads for various inclines are listed in the table below:

Rated Line Pull	10%	20%	40%	60%	80%	100%
5000lbs	17588	11905	7543	5824	4979	4499
6000lbs	30151	20408	12931	9983	8535	7712
8000lbs	42670	28900	18275	14110	12070	10880
9500lbs	47690	32300	20425	15770	13490	12160
10000lbs	47739	32313	20474	15833	13515	12211
12000lbs	60240	40800	25800	19920	17040	15360

### Note:

1. This guide is recommended for average vehicle rolling loads. Some applications may require a larger winch than indicated.
2. The weight of winch could pull perpendicular to the ground with a single on the first layer of cable on the drum
3. A 10% grade is a rise of one meter in ten meter.
4. Winch is not intended as a load securing device.

NOTE: THE SAFETY PRECAUTIONS AND INSTRUCTIONS DISCUSSED IN THIS MANUAL CAN'T COVER ALL POSSIBLE CONDITIONS AND SITUATIONS THAT MAY OCCUR. IT MUST BE UNDERSTOOD BY THE OPERATOR THAT COMMON SENSE AND CAUTION ARE FACTORS, WHICH CANNOT BE BUILT INTO THIS PRODUCT, BUT MUST BE APPLIED BY THE OPERATOR.

For further information please contact the nearest winch distributor.





### 5000LBS Winch Features and Specifications

Performance Voltage	DC 12V / 24V
Rated Pull ( Single Line)	5000lbs(2268kgs)
Motor	1.6KW, Permanent Magnet
Gear Reduction Ratio	160:1
Gear Train	3 Stage Planetary
Remote Control Cable	3m
Clutch	Sliding Ring Gear
Breaking Action	Automatic In-The Drum
Drum Size	∅ 64mm*133mm
Steel Wire Rope	∅ 7.2mm*24m
Fairlead	4-way Roller Fairlead
Battery Leads	1.8m
Overall dimensions	435*160*163mm
Wireless Remote Control	Optional
N.W / G.W	28/30kgs(1PCS)
Shipping Carton Size	61*35*27cm(1CTN)

### 5000LBS Winch Line Speed and AMP Draw (First Layer)

<b>Line Pull</b>	<b>LBS</b>	<b>NO.</b>	<b>2000</b>	<b>3000</b>	<b>5000</b>
	<b>KGS</b>	<b>LADE</b>	<b>907</b>	<b>1361</b>	<b>2268</b>
<b>Line Speed</b>	<b>FT/MIN</b>	<b>24.2</b>	<b>12.4</b>	<b>9.5</b>	<b>7.2</b>
	<b>M/MIN</b>	<b>6.6</b>	<b>4.7</b>	<b>3.5</b>	<b>2.4</b>
<b>Motor Current</b>	<b>AMP</b>	<b>50</b>	<b>120</b>	<b>180</b>	<b>220</b>

### 5000LBS Winch Line Pull and Cable Capacity

<b>Layer of Cable</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>Rated Line Pull per Layer</b>	<b>LBS</b>	<b>5000</b>	<b>3900</b>	<b>2450</b>	<b>1200</b>
	<b>KGS</b>	<b>2268</b>	<b>1769</b>	<b>1111</b>	<b>544</b>
<b>Cumulative Cable Capacity</b>	<b>LBS</b>	<b>12</b>	<b>32</b>	<b>62</b>	<b>84</b>
	<b>AMP</b>	<b>3</b>	<b>9</b>	<b>18</b>	<b>24</b>

For further information please contact the nearest winch distributor.

## 6000LBS Winch Features and Specifications

Performance Voltage	DC 12V / 24V
Rated Pull ( Single Line)	6000lbs(2722kgs)
Motor	1.68KW, Permanent Magnet
Gear Reduction Ratio	160:1
Gear Train	3 Stage Planetary
Remote Control Cable	3m
Clutch	Sliding Ring Gear
Breaking Action	Automatic In-The Drum
Drum Size	∅ 64mm*133mm
Steel Wire Rope	∅ 7.2mm*24m
Fairlead	4-way Roller Fairlead
Battery Leads	1.8m
Overall dimensions	435*160*163mm
Wireless Remote Control	Optional
N.W / G.W	28/30kgs(1PCS)
Shipping Carton Size	61*35*27cm(1CTN)

## 6000LBS Winch Line Speed and AMP Draw (First Layer)

Line Pull	LBS	NO.	2000	4000	6000
	KGS	LADE	907	1814	2722
Line Speed	FT/MIN	24.2	12.4	9.5	7.2
	M/MIN	6.6	4.7	3.5	2.4
Motor Current	AMP	60	130	190	230

## 6000LBS Winch Line Pull and Cable Capacity

Layer of Cable		1	2	3	4
Rated Line Pull per Layer	LBS	6000	4900	3845	2100
	KGS	2722	2223	1744	952
Cumulative Cable Capacity	LBS	12	32	62	84
	AMP	4	10	19	25

For further information please contact the nearest winch distributor.



## 8000LBS Winch Features and Specifications

Performance Voltage	DC 12V / 24V
Rated Pull ( Single Line)	8000lbs(3629kgs)
Motor	2.8KW, Series Wound
Gear Reduction Ratio	265:1
Gear Train	3 Stage Planetary
Remote Control Cable	3m
Clutch	Sliding Ring Gear
Breaking Action	Automatic In-The Drum
Drum Size	∅ 64mm*222.5mm
Steel Wire Rope	∅ 8.3mm*26m
Fairlead	4-way Roller Fairlead
Battery Leads	1.8m
Overall dimensions	560*160*218mm
Wireless Remote Control	Optional
N.W / G.W	36/38kgs(1PCS)
Shipping Carton Size	61*35*27cm(1CTN)

## 8000LBS Winch Line Speed and AMP Draw (First Layer)

Line Pull	LBS	NO.	2000	4000	6000	8000
	KGS	LADE	907	1814	2722	3629
Line Speed	FT/MIN	28.2	15.4	11.5	9.2	7.7
	M/MIN	8.6	4.7	3.5	2.8	2.35
Motor Current	AMP	70	160	240	310	390

## 8000LBS Winch Line Pull and Cable Capacity

Layer of Cable		1	2	3	4
	LBS	8000	6900	5845	5100
Rated Line Pull per Layer	KGS	3629	3130	2650	2310
	LBS	16	42	72	94
Cumulative Cable Capacity	AMP	5	12	21	28

For further information please contact the nearest winch distributor.

## 9500LBS Winch Features and Specifications

Performance Voltage	DC 12V / 24V
Rated Pull ( Single Line)	9500lbs(4310kgs)
Motor	3.2KW, Series Wound
Gear Reduction Ratio	265:1
Gear Train	3 Stage Planetary
Remote Control Cable	3m
Clutch	Sliding Ring Gear
Breaking Action	Automatic In-The Drum
Drum Size	∅ 64mm*222.5mm
Steel Wire Rope	∅ 8.3mm*26m
Fairlead	4-way Roller Fairlead
Battery Leads	1.8m
Overall dimensions	560*160*218mm
Wireless Remote Control	Optional
N.W / G.W	37/39kgs(1PCS)
Shipping Carton Size	61*35*27cm(1CTN)

## 9500LBS Winch Line Speed and AMP Draw (First Layer)

Line Pull	LBS	NO.	4000	6000	8000	9500
	KGS	LADE	1814	2722	3629	4300
Line Speed	FT/MIN	27	11.7	9.36	7.7	7
	M/MIN	7.5	3.25	2.6	2.15	1.95
Motor Current	AMP	70	210	280	350	415

## 9500LBS Winch Line Pull and Cable Capacity

Layer of Cable		1	2	3	4
Rated Line Pull per Layer	LBS	9500	7700	6500	5700
	KGS	4300	3480	2940	2580
Cumulative Cable Capacity	LBS	16	42	72	94
	AMP	5	12	21	28

For further information please contact the nearest winch distributor.

## 10000LBS Winch Features and Specifications

Performance Voltage	DC 12V / 24V
Rated Pull ( Single Line)	10000lbs(4537kgs)
Motor	3.5KW, Series Wound
Gear Reduction Ratio	202:1
Gear Train	3 Stage Planetary
Remote Control Cable	3m
Clutch	Sliding Ring Gear
Breaking Action	Automatic In-The Drum
Drum Size	∅ 64mm*222.5mm
Steel Wire Rope	∅ 8.8mm*24m
Fairlead	4-way Roller Fairlead
Battery Leads	1.8m
Overall dimensions	560*160*218mm
Wireless Remote Control	Optional
N.W / G.W	38/40kgs(1PCS)
Shipping Carton Size	61*35*27cm(1CTN)

## 10000LBS Winch Line Speed and AMP Draw (First Layer)

Line Pull	LBS	NO.	4000	6000	8000	10000
	KGS	LADE	1814	2722	3629	4532
Line Speed	FT/MIN	25.5	11.1	8.8	7	5.9
	M/MIN	7.75	3.36	2.7	2.15	1.8
Motor Current	AMP	70	217	285	365	435

## 10000LBS Winch Line Pull and Cable Capacity

Layer of Cable		1	2	3	4
Rated Line Pull per Layer	10000	10000	7964	6591	5632
	4532	4532	3601	2987	2552
Cumulative Cable Capacity	16	16	42	72	94
	5	5	12	21	28

For further information please contact the nearest winch distributor.

## 12000LBS Winch Features and Specifications

Performance Voltage	DC 12V / 24V
Rated Pull ( Single Line)	12000lbs(5444kgs)
Motor	4.5KW, Series Wound
Gear Reduction Ratio	265:1
Gear Train	3 Stage Planetary
Remote Control Cable	3m
Clutch	Sliding Ring Gear
Breaking Action	Automatic In-The Drum
Drum Size	∅ 64mm*222.5mm
Steel Wire Rope	∅ 9.5mm*24m
Fairlead	4-way Roller Fairlead
Battery Leads	1.8m
Overall dimensions	560*160*218mm
Wireless Remote Control	Optional
N.W / G.W	40/42kgs(1PCS)
Shipping Carton Size	61*35*27cm(1CTN)

## 12000LBS Winch Line Speed and AMP Draw (First Layer)

Line Pull	LBS	NO.	6000	8000	10000	12000
	KGS	LADE	2722	3629	4532	5440
Line Speed	FT/MIN	21.3	7.9	6.5	5.8	4.4
	M/MIN	6.5	2.4	2	1.75	1.35
Motor Current	AMP	65	230	280	355	400

## 12000LBS Winch Line Pull and Cable Capacity

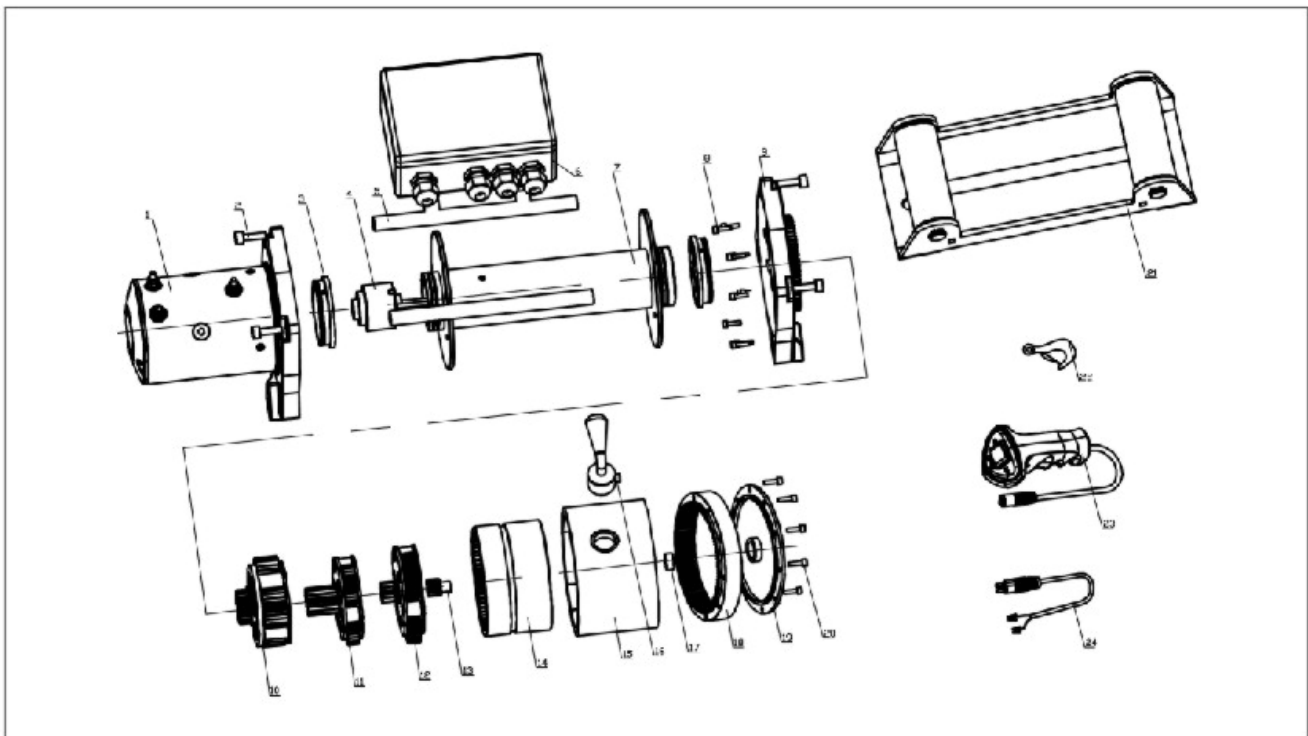
Layer of Cable		1	2	3	4
Rated Line Pull per Layer	LBS	12000	9210	8030	6894
	KGS	5440	4170	3640	3125
Cumulative Cable Capacity	LBS	17	41	71	82
	AMP	4.8	12	21	25

For further information please contact the nearest winch distributor.

## Winch Exploded Drawing and Pat List

Part #	Description	Qty
1	Tandem motor	1
2	Screws with six angles inside m8*25	4
3	Winch bearing	2
4	Brake equipment	1
5	Fixed connected pole	2
6	Electrical control box	1
7	Winch	1
8	Screws with six angles inside m4*15	10
9	Gear box	1
10	Planet gear 1 general equipment	1
11	Planet gear 2 general equipment	1
12	Planet gear 3 general equipment	1

Part #	Description	Qty
13	Connected gear 4	1
14	Inside gear	1
15	Packing of gear box	1
16	Handle equipment	1
17	Oiled bearing	1
18	Steel cap	1
19	Flat behind the gear box	1
20	Screws with six angles inside m4*30	10
21	Block-rope stent of genreal equipment	1
22	Sheep hook	1
23	Switch equipment	1
24	Power line	1



For further information please contact the nearest winch distributor.