

OPERATING AND ASSEMBLY INSTRUCTION



WINCH

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**PRESKOWINCH
PEW12000 12V**

MANUAL

FOR HEAVY DUTY ELECTRIC WINCH



Every winching situation has the potential for personal injury. In order to minimize that risk, it is important that you read this basic guide carefully, familiarize yourself with the operation of your winch before using it, and be constantly safety oriented. In this guide, we will set forth many of the basic rules of safe winch operation. However, because every winching situation is different, your constant good judgment and consistent focus on safety are of great importance.

Note: The winches are not designed for and should not be used in industrial applications (car haulers/carriers, wreckers, hoisting, etc.), and we do not warrant them to be suitable for such use.

Caution: Read and understand this guide before installation and operation of winch carefully.

SAFETY PRECAUTION :

Read and understand the following instructions before attempting to operate your winch. Keep these instructions for future reference .

WARNING!

Improper equipment operation and failure to follow the safety precautions may result in personal injury and/or equipment damage.

1. DRESS APPROPRIATELY:

- Do not wear loose clothing or jewelry when operation the winch, as they can get caught in moving parts.
- Wear leather gloves when handling the winch cable .Do not handle the cable with bare hands as broken wires can cause injuries .
- Non-skid safety boots are recommended when using the winch.
- Persons with long hairs should tie their hair back and use a hair net when using the winch.

2.KEEP A SAFE DISTANCE :

- Ensure that all persons stand clear of the winch cable and load during the winching operation .1 1/2 times the cable length is recommended .If the cable comes loose or breaks under load .,it can cause serious personal injury or death. Use a damper (heavy piece of material) places over the center of the cable to minimize cable back –lash in the event of cable failure
- Do not step over the cable .
- All visitors and onlookers should be kept well away from the work area.

3.DO NOT ABUSE THE REMOTE CONTROL CORD :

- Never carry your winch by the cord or pull on the cord to disconnect it from the socket.
- Keep the cord away from heat ,oil and sharp edges .

4.DO NOT OVERWORK THE WINCH :

- If the motor becomes uncomfortable(hot-to-the-touch),stop the winch and let it cool down.
- Do not maintain power to winch if electric motor stops .
- Do not exceed the maximum pulling rate shown in the table within these instructions
- Do not expose the winch to sudden load increase or “shock load “

5.AVOID UNINTENTIONAL STARTING :

- The winch clutch should be disengaged when not in use ,and fully engaged when in use

6.CHECK YOUR WINCH BEFORE EACH USE :

- Before using your winch inspect it carefully for any loose or damaged parts .Any parts that is loose or damaged should be properly repaired or replaced.

7.REPAIRING YOUR WINCH :

-When repairing your winch ,use identical replacement parts .Inappropriate parts may cause considerable damage to the winch and avoid warranty .

8. RESPOOLING THE CABLE

-Leather gloves MUST be worn while respooling.

-To respool the cable correctly ,it is necessary to keep a light road on the cable .Hold the cable with one hand and the remote control switch with the other .Start as far back and in the center as you can .Keep loac on the cable as it is drawn in.

-Do not allow the cable to slip through your hand .Do not get within 3 1/2 feet (1 meter) of the winch.

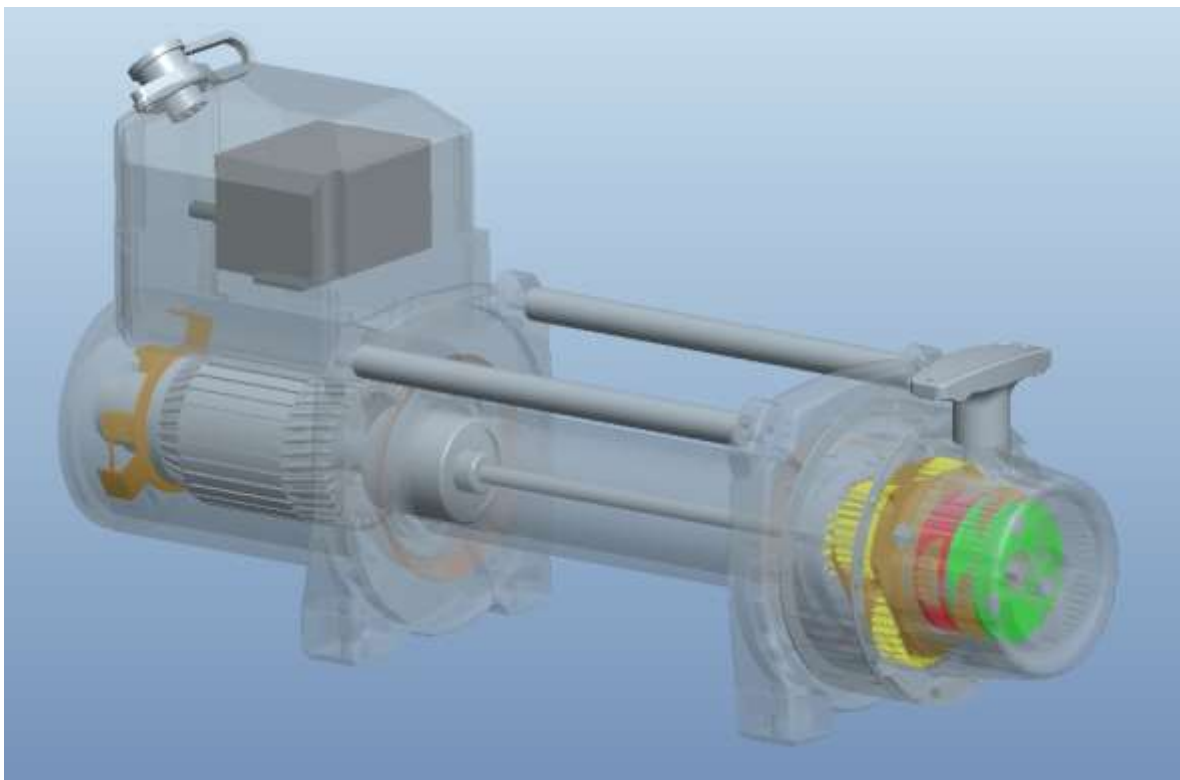
-Turn off the winch and repeat the procedure until the cable is wound in ,except the last 31/2 feet (1 meter)

-Disconnect the remote control switch and finish spooling the cable by rotating the drum by hand with the clutch disengaged .

-On hidden winches ,spool in cable under power but keep hands clear .

WARNING !

The use of accessories or attachments other then those recommended in the instruction manual may result in personal injury ,equipment ,damage and avoid warranty .



WARNINGS FOR WINCH OPERATION :

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

1. Your first use of the winch should be in a relaxed ,non –recovery situation so you can familiarize yourself with the product
2. Uneven spooling of cable while pulling a load is not a problem, unless the cable

accumulates at one end of the drum ,If this happens reverse the winch to relieve the load and move your anchor point further to the center of the vehicle .After the recovery has been completed ,un-spool and rewind the cable so that it sits correctly on the drum .

3. store the remote control switch inside your vehicle where it will not become damaged .Inspect it for damage before use
4. when ready to begin spooling in ,plug-in the remote control and engage the clutch .Do not engage the clutch with motor running.
5. Never connect the hook back onto the cable while pulling .This will damage the cable .Use sling or chain of suitable strength to attach the cable to appropriate anchor points.
6. Observe your winch while standing at the a safe distance .Stop the winching process every 3 1/2 feet (1 meter) to ensure the cable is not accumulating on the one side of drum ,Jamming the cable on the drum may break the winch and /or release the load .
7. Do not attach tow hooks to the winch or winch mount .Tow hook must be attached to the chassis of the vehicle
8. The use of a snatch block will aid recovery operation by doubling the winch's capacity ,while halving the winch's speed. Snatch block also enable the positioning of cable centrally within the rollers. When using a snatch block during stationary winching, the winch hook should be attached to the chassis of vehicle
9. To provide a safe anchor point ,ensure "rate" Bow Shackles or D-Ring are used in co-junction with an approved tree trunk protector .
10. When extending the winch cable ,ensure that at least 5 wraps of cable remain on the drum at all the time failure to do this could result in cable parting from the drum under the load ,which may result in serious personal injury and property damage .
11. All winches are provided a red cable mark to indentify 5 cable wraps remain on the drum .No recovery should be attempted when the red cable mark has been passed through the roller fairlead .
12. Since the greatest pulling power is achieved on the inner most 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 (five) wraps minimum on the drum ,red cable mark .If this I not practical, use a snatch block and double line arrangement .
13. 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.
14. Neat ,tight spooling prevents the cable binding ,which is caused when a load is applied and the cable is pinched between different layers on the roller .If this happens repeatedly ,power the winch in and out .Do not attempt to work a bound cable under load.
15. Apply chocks to the wheels of a vehicle when on an incline.
16. BATTERY
 - Ensure that the battery is in good condition and that all battery leads are securely attached .
 - Have the engine running when using the winch to avoid running the battery down.
 - Avoid contact with battery acid
 - Always wear eye protection when working around a battery.
17. Do not attempt to exceed the pulling limits of this winch

18. Do not drive your vehicle to assist the winch in any way. Vehicle movement in combination with winch operation may overload the cable, or the winch itself. Causing a shock load which may damage the winch. Shock loads when winching are dangerous! A shock load occurs when an increased force is suddenly applied to the cable. A vehicle rolling back on slack cable may induce a damaging shock load.

19. WINCH CABLE

-The life of a cable is directly related to the use and care it receives. Following its first and subsequent uses, a cable must be wound onto the drum under a load of at least 500 lbs (230kg) or the other wraps will draw into the inner wraps and severely damage the cable during winching. Spool out the cable until the red cable mark appears (about 5 wraps left on the drum), then rewind the cable onto the drum under a load of 500 lbs (230 kg) 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 reduce cable life.

-Do not use the winch when cable is frayed

- If the cable needs to be replaced it must be replaced with a cable of the same size and type. Contact your dealer for replacement cable.

-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.

20. The winch shown in this manual are solely for vehicle, trailer and boat mounted non-industrial applications.

21. Do not use the winch in hoisting applications due to the specially required safety factors and features needed for a hoist.

22. Do not use the winch to lift, support or otherwise transport personnel.

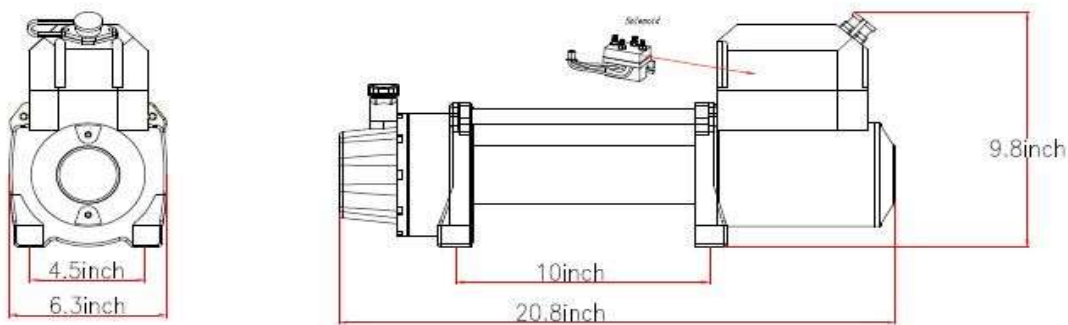
INSTALLATION

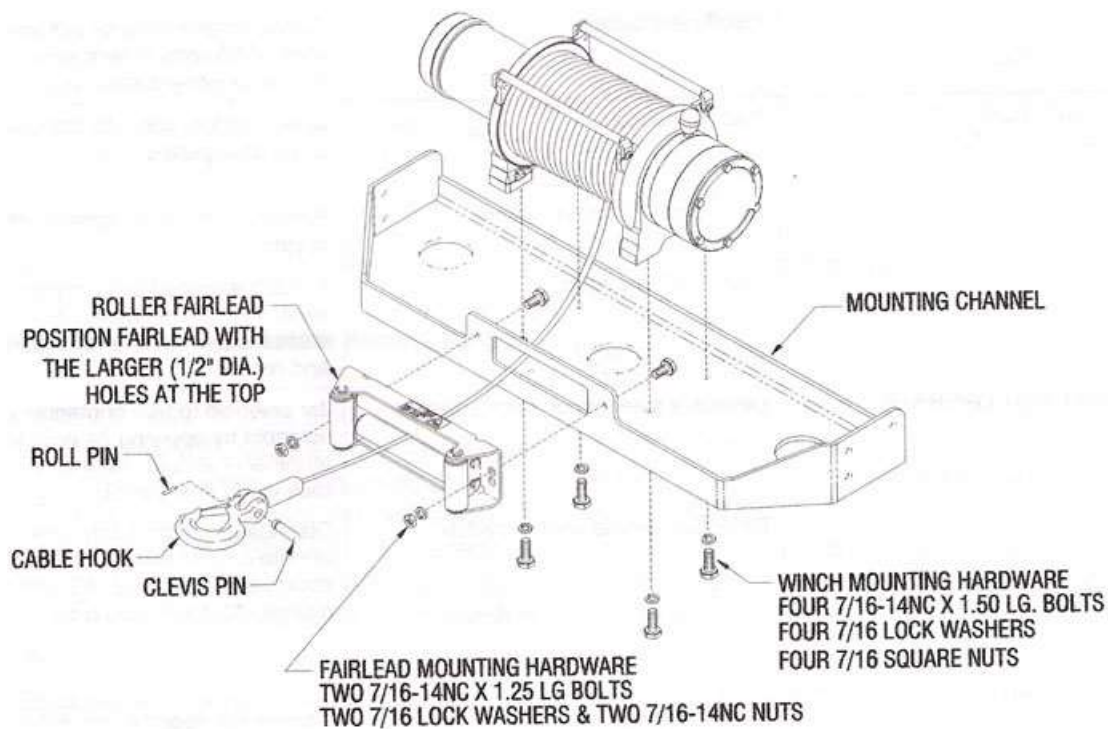
MOUNTING YOUR WINCH :

1. Key point to remember before installing your winch.
 - a. The winch is to be mounted onto a suitable steel mounting frame using the 4-point foot mounting system in either a horizontal or vertical plane.
 - b. It's very important that the winch is mounted on a flat surface so that the three sections (motor, cable drum and gear housing) are aligned properly.
 - c. Before commencing installation, ensure the mounting point being used is capable of withstanding the winch's rated capacity.
 - d. The fitment of a winch mounting frame and a winch to a vehicle with a frontal winch mounting frame that has been tested and approved for use in SRS airbag equipped vehicles is recommended.
2. The winch should be secured to the mount with the bolts and spring washers provided.
3. The roller fairlead is is to be mounted in front and independently to guide the rope onto the drum evenly.
4. Should you wish to manufacture your own mounting plate the dimensions below will assist you. A 1/4 inch (6mm) thick steel mounting plate is recommended, fasteners should be high tensile grade 5 or better. A poorly designed mount may cause injury or death and will void the warranty.

WINCH INSTALLATION TO FIXED LOCATION:

The winch can be mounted to a fixed location by utilizing the mounting hole pattern for the winch unit. First, choose a mounting location that is sufficiently strong enough to withstand the loads you intend to winch. Next, drill two holes to the dimensions to the winch bottom





To secure the winch, always use a flat, mounting location with thick enough steel. Always use flat washer, lock washer, long hex head cap screw and so on. Bolt length will be decided by the thickness of mounting location.

LUBRICATION :

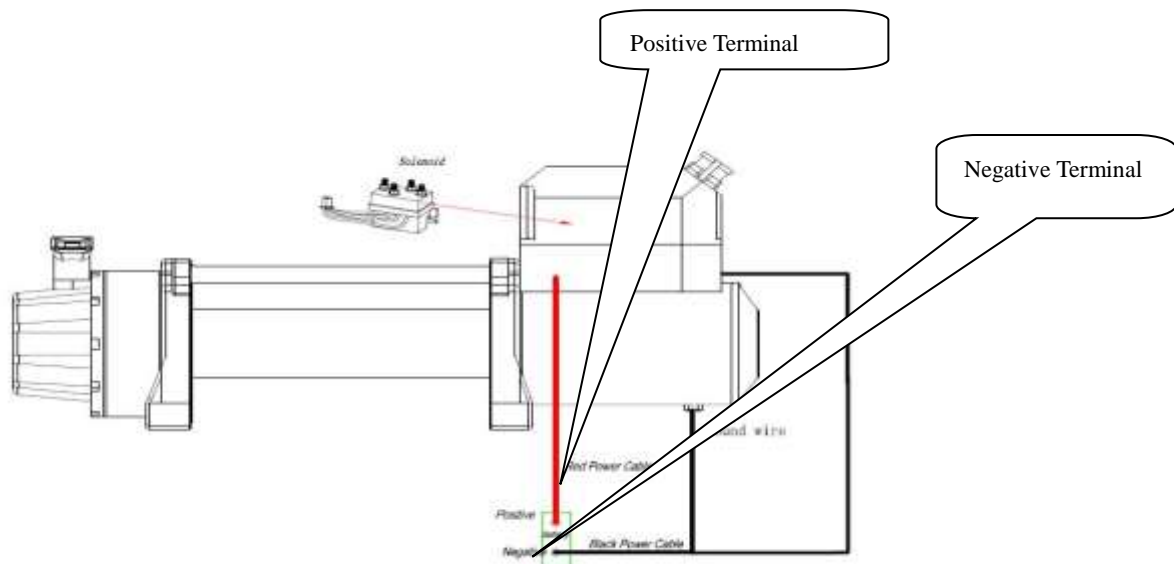
All moving parts in the winch are lubricated with high temperature lithium grease at the time of assembly. Under normal conditions ,factory lubrication will suffice. Lubricate able periodically using light penetrating oil. Inspect for broken strands and replace if necessary .If the cable becomes worn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

CABLE INSTALLATION :

To prevent kinking ,unwind the new cable by rolling it along the ground .Remove old cable and observe the manner in which it is attached to the cable drum flange and install the new cable .When installing the new cable ,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 of arduous conditio

ELECTRICAL CONNECTION :

- 1.Make sure wiring connection correct. There are only cables in different colors (**RED & BLACK**)| from the solenoid box. Please connect black battery lead to connect the negative of battery and red battery lead to connect the positive of positive .
- 2.Before starting winching ,ensure ground wire connect the ground terminal of motor tightly .



Note

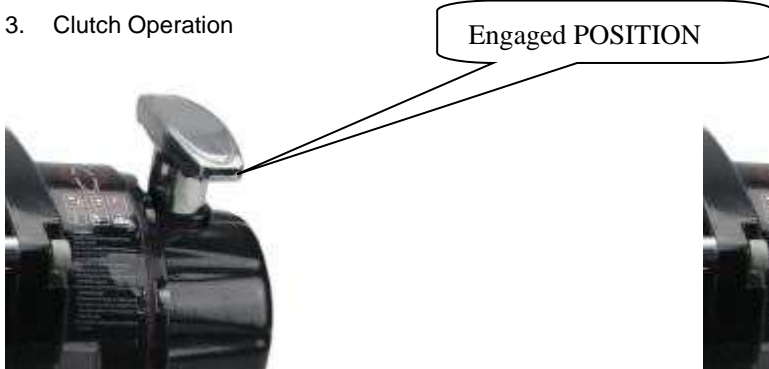
1. Your battery must be kept in good condition.
2. Be sure battery cables are not drawn taut across any surfaces, which could possibly damage them.
3. Corrosion on electrical connections will reduce performance or may cause a short.
4. Clean all connections, especially in the remote control plug and receptacle.
5. In salty or wet environments use silicon sealer to protect electrical components and cables from corrosion

OPERATING INSTRUCTIONS:

1. Check the solenoid box, correct wires connecting and prepare the remote.
2. 3.5m Wired Control Switch: Power In and Power Out (Wireless remote control >5 meters standing POWER IN /OUT)



3. Clutch Operation



3Ensure the vehicle is secured by applying the parking brake and/or chocking the wheels.

4. Pull out the winch cable to the desired length and connect it to a suitable anchor point. The winch clutch allows rapid uncoiling of the cable for hooking onto the load or an

anchor point .The shifter handle located on the gear housing of the winch operates the clutch as follow

- A) To disengage the clutch ,pull and turn shifter handle to the “disengage” position (90 degree turn) ,cable may now be free spooled off the drum.
 - B) To engage the clutch ,move the clutch handle into the” engage” position ,The winch is now ready for pulling.
5. recheck all cable rigging before proceeding
 6. Power in –out for starting you winching .

NOTE

1. Never winch your vehicle in gear or in park .This could damage your vehicle’s transmission.
2. Never wrap the cable around an anchor point or object and hook onto the cable itself. This can cause damage to the object being pulled and kind or fray the cable.
3. Keep hands ,clothing ,hair and jewelry clear of the drum area and cable when winching.
4. Never use the winch if the cable is frayed ,kinked or damaged.
5. Never allow anyone to stand near the cable ,in line with the cable or behind the winch while it is under power. If the cable should slip or break, it can suddenly whip back towards the winch, causing a hazard for anyone in the area ,always stand well to the side while winding ;a minimum of 1 1/2 times the cable length.
6. Don’t leave the switch plugged in when the winch is not use .

CHECK THE WINCH CAREFULLY AND THOROUGHLY BEFORE OPERATION

MAINTENANCE

It is highly recommended that the winch be used regularly (once a month) .Simply power the cable out 50 ft .(15 meters),free spool 20 ft (6 meters) and then power back in .This will keep all components in good working condition so that the winch can be relied on when needed)

WINCH CAPACITY

1. This winch has a capacity of 12000lbs
2. Pulling capacity is reduced as the incline increases

NOTE :

1. This guide is recommended for average vehicle rolling loads. Some applications may require a larger winch than indicated.
2. The table indicates the weight the winch could pull with a single line on the first layer of cable on the drum. The rated line pull is reduced as additional layers of cable are wound onto the drum.
3. The winch is not intended as a load securing device.

NOTE

The safety precautions and instructions discussed in this manual cannot 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.

Line Speed And Amp Draw (First Layer)

Line Pull	lb	NO	4000	6000	8000	10000	12000
	kg	LOAD	1812	2718	3624	4304	5436
Line speed	ft/ min	37.32	14.22	12.72	10.26	8.55	6.45
	m/ min	12.44	4.74	4.24	3.42	2.85	2.15
Motor current	Amps	72	136	198	266	310	360

Line Pull And Cable Capacity

Layer of cable		1	2	3	4
Rated line pull per layer	lb	12500	9927	8250	7045
	kg	5665	4497	3737	3191
Length of cable on drum	ft	17.8	38.2	64.2	72
	m	5.93	12.73	19.57	24.00

DC 12V 12000 LB WINCH SPECIFICATIONS AND FEATURES

Single line rated pull: 12,000lbs (5436kg)

Motor: 6.6hp/5.0kw series –wound

Braking action: Automatic locking with motor

Clutch: Sliding ring gear

Gear train : 3 –stage planetary

Gear ratio: 216: 1

Remote Switch: 11ft , wire remote control with black hand bar ,
wireless remote control included

Battery: Recommended: 650CCA minimum for winching

Battery Leads: 2 Gauge 72”(1.83m)

Fairlead: 4-way roller fairlead

Steel cable: Φ 9.5 x 72 ft (Φ 9.5 x 24 m)

Weight: 77 pound (35kg)

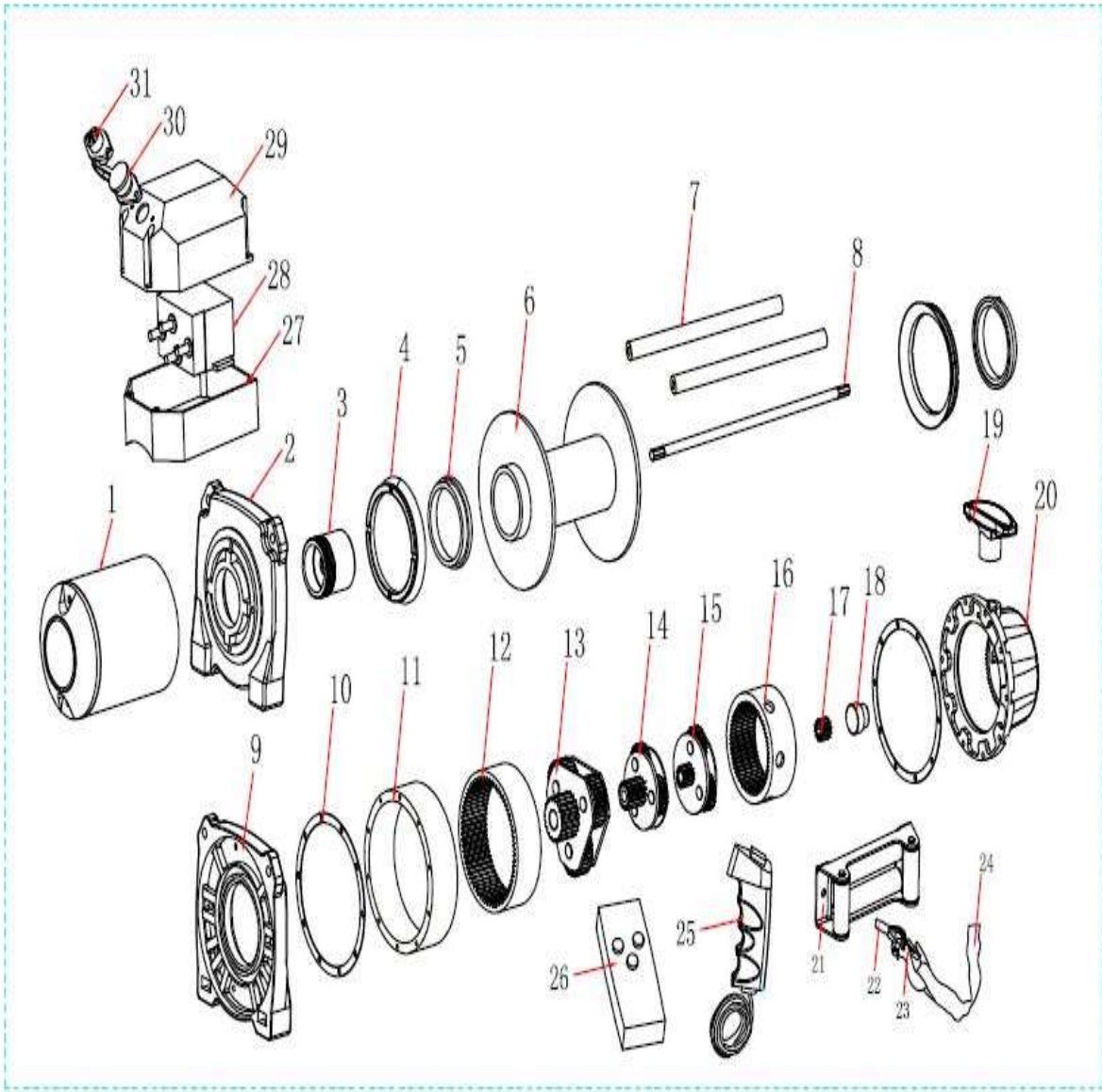
Overall dimension: 21.3” x 10.3” x 6.3” (540mm x 260mm x 160mm)

Mounting bolt pattern: 10” x 4.5” (254mm x 114.3mm)

PARTS LIST&ASSEMBLY DIAGRAM

Part	Description	Quality
1	Motor assy	1
2	Drum support breaket (left)	1
3	Braking assy	1
4	Waterproof ring	2
5	Bushing	2
6	Drum	1
7	Tie rod	2
8	Drive shaft	1
9	Drum support breaket (right)	1
10	Paper washer	2
11	Outer cylinder	1
12	Drive gear	1
13	The third stage planetary gear assy	1
14	The second stage planetary gear assy	1
15	The first stage planetary gear assy	1

Part	Description	Quality
16	Drive gear ring	1
17	Sun gear	1
18	Steel plate for sun gear	1
19	Clutch assy	1
20	Gear house	1
21	4-way roller fairlead	1
22	Steel cable	1
23	HOOK	1
24	Strap	1
25	Wire remote assy	1
26	wireless remote	1
27	Mounting plate	1
28	Solenoid	1
29	Solenoid box	1
30	Waterproof cover	1
31	Wire plug	1



TROUBLESHOOTING GUIDE:

Condition	Possible Cause	Correction
Solenoid clicks but motor does not run	Winch is not grounded correctly	Make sure that thick black cable is attached to the bottom terminal of motor together with thin black wire .Make sure that the other end of thick black cable is connected directly Negative terminals of a healthy well charged battery .
Motor runs but drum does not run	Clutch not engage	Make sure that the clutch is completely in the engage position. Never leave clutch in between two positions .
Motor runs extremely hot	1.Long period of operation 2.Overloading the winch 3.shock load	Cooling off periods are essential to prevent overheating. Check that you are not exceeding the pulling rate of this winch Don't expose this winch to sudden shock load
Motor runs, but with insufficient power or with low line speed	Bad connection	Check battery cable for corrosion; clean and grease
	Insufficient charging system	Replace with larger capacity charging system
Cable drum will not free spool or is difficult to freespool	Clutch not disengaged	Make sure that the clutch is completely in the disengage position. Never leave clutch in between two positions .
Motor will not operate	Loose connections or low battery	Tighten connections on bottom side of hood and motor. Confirm that voltage at battery terminal is 12V
	Defective or stuck solenoid	Jar solenoid to free contacts. Check each solenoid by applying 12V to coil terminal(it should make an audible click when energized)
	Defective remote control switch	Disengage winch clutch, remove Remote control switch plug from the socket and jump pins at 8 and 4 o'clock. Motor should run. Jump pins at 8 and 10 o'clock. Motor should run
	Defective motor	If switch and solenoids operate, check the voltage at motor terminals; if there is power to terminals replace motor. If there is no power to terminals, check the connections and battery.
Motor water damaged	Submerged in water or water from high pressure car wash	Allow to drain and dry thoroughly , then run motor without load in short bursts to dry windings.

This manual cannot cover all information and troubles ,for more details or an exact issue ,pls call the professional technician of local dealer . Thanks