

Throughout this manual, you will find notations with the following headings:



DANGER

Indicates an imminently hazardous situation 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. This notation is also used to alert against unsafe practices.

The following symbols on the product and in the Owner's manual are used:



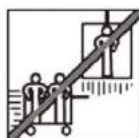
Read Owner's Manual



Always Use Handsaver



Keep clear of winch, wire rope and hook while operating



Never use winch to lift or move people



Never use winch to hold loads in place

Note: Indicates additional information in the installation and operation procedures of your winch.

Correct installation of your winch is a requirement for proper operation.

Please Note: Winch is designed primarily for intermittent applications. This winch is not designed to be used in industrial or hoisting applications and Superwinch does not warrant it to be suitable for such use.

GENERAL SAFETY INFORMATION

Your winch is a very powerful machine. If used unsafely or improperly, there is a possibility that property damage or personal injury could result.



WARNING

The responsibility for safe installation and operation of the winch and prevention of personal injury and property damage ultimately rests with you, the operator. There is no substitute for the use of good judgement and caution in operating a winch.



WARNING

The wire rope may break before the winch stalls. For heavy loads, use a pulley block to reduce the load on the wire rope.

1. Maximum working load capacity is on the wire rope layer closest to the drum. **DO NOT OVERLOAD. DO NOT ATTEMPT PROLONGED PULLS AT HEAVY LOADS.** Overloads can damage the winch and/or the wire rope and create unsafe operating conditions. **FOR LOADS OVER 1/2 RATED CAPACITY, WE RECOMMEND THE USE OF THE OPTIONAL PULLEY BLOCK TO DOUBLE LINE THE WIRE ROPE (Figure2).** This reduces the load on the winch and the strain on the wire rope by approximately 50%. Attach hook to load bearing part. **The vehicle engine should be running during winch operation.** If considerable winching is performed with the engine off, the battery may be too weak to restart the engine.

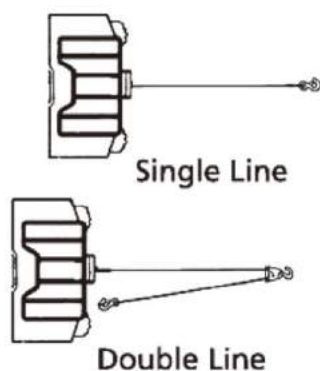


Figure 2

2. AFTER READING AND UNDERSTANDING THIS MANUAL, LEARN TO USE YOUR WINCH.

After installing the winch, practice using it so you will be familiar with it when the need arises.



3. DO NOT "move" your vehicle to assist the winch in pulling the load. The combination of the winch and vehicle pulling together could overload the wire rope and the winch.
4. ALWAYS STAND CLEAR OF WIRE ROPE, HOOK AND WINCH. IN THE UNLIKELY EVENT OF ANY COMPONENT FAILURE IT'S BEST TO BE OUT OF HARM'S WAY.
5. INSPECT WIRE ROPE AND EQUIPMENT FREQUENTLY. **A FRAYED WIRE ROPE WITH BROKEN STRANDS SHOULD BE REPLACED IMMEDIATELY.** Always replace wire rope with the manufacturer's identical replacement part (see Replacement Parts List). Periodically check the winch installation to ensure that all bolts are tight.
6. USE HEAVY LEATHER GLOVES when handling wire rope. DO NOT LET WIRE ROPE SLIDE THROUGH YOUR HANDS.
7. NEVER WINCH WITH LESS THAN 5 TURNS of wire rope AROUND THE WINCH DRUM since the wire rope end fastener may NOT withstand full load.

8. KEEP CLEAR OF WINCH, TAUT WIRE ROPE AND HOOK WHEN OPERATING

WINCH. Never put your finger through the hook. If your finger should become trapped in the hook, you could lose your finger.



ALWAYS USE THE HANDSAVER when guiding the wire rope in or out (See Figure 3).

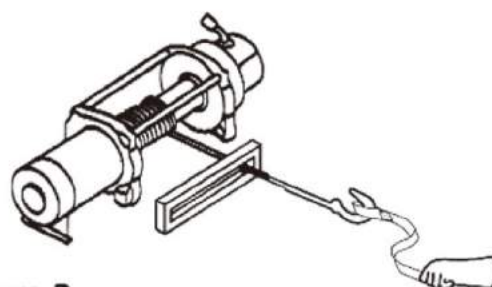


Figure 3

9. NEVER HOOK THE WIRE ROPE BACK ONTO ITSELF because you could damage the wire rope. Use a nylon sling (Figure 4).

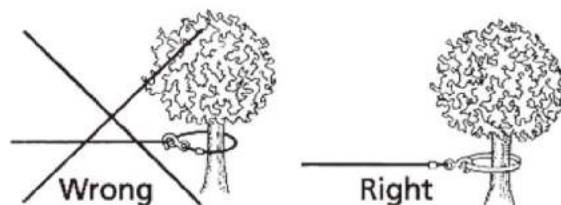


Figure 4

10. It is a good idea to lay a heavy blanket or jacket over the wire rope near the hook end when pulling heavy loads (Figure 5). If a wire rope failure should occur, the cloth will act as a damper and help prevent the rope from whipping. Raise hood of vehicle for added protection.

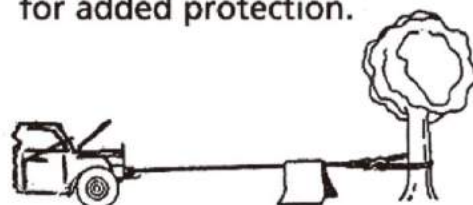
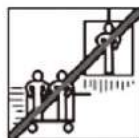


Figure 5

11. NEVER USE YOUR WINCH FOR LIFTING OR MOVING PEOPLE.



12. Your winch is not intended for overhead hoisting operations.

13. AVOID CONTINUOUS PULLS FROM EXTREME ANGLES as this will cause the wire rope to pile up on one end of the drum (Figure 6). This can jam the wire rope in the winch, causing damage to the rope or the winch.

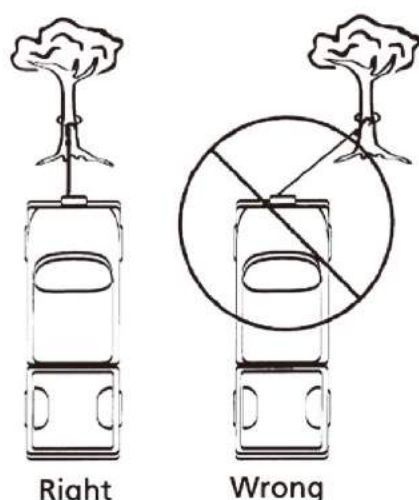


Figure 6

14. NEVER OBSCURE THE WARNING INSTRUCTION LABELS.

15. Always operate winch with an unobstructed view of the winching operation.

16. Equipment such as tackle, hooks, pulley blocks, straps, etc. should be sized to the winching task and should be periodically inspected for damage that could reduce their strength.

17. NEVER RELEASE FREESPOOL CLUTCH WHEN THERE IS A LOAD ON THE WINCH.

18. NEVER WORK ON OR AROUND THE WINCH DRUM WHEN WINCH IS UNDER LOAD.

19. DO NOT OPERATE WINCH WHEN UNDER THE INFLUENCE OF DRUGS, ALCOHOL OR MEDICATION.

20. ALWAYS DISCONNECT WINCH POWER LEADS TO BATTERY BEFORE WORKING IN OR AROUND THE WINCH DRUM so that the winch cannot be turned on accidentally.

21. When moving a load, slowly take up the wire rope slack until it becomes taut. Stop, recheck all winching connections. Be sure the hook is properly seated. If a nylon sling is used, check the attachment to the load.

22. When using your winch to move a load, place the vehicle transmission in neutral, set vehicle brake, and chock all wheels.

23. DO NOT USE THE WINCH TO HOLD LOADS IN PLACE. Use other means of securing loads such as tie down straps.



24. USE ONLY FACTORY APPROVED SWITCHES, REMOTE CONTROLS AND ACCESSORIES. Use of non-factory approved components may cause injury or property damage and could void your warranty.

25. DO NOT MACHINE OR WELD ANY PART OF THE WINCH. Such alterations may weaken the structural integrity of the winch and could void your warranty.

26. DO NOT CONNECT WINCH TO EITHER 110V AC HOUSE CURRENT OR 220V MAINS AS WINCH BURNOUT OR FATAL SHOCK MAY OCCUR.

27. Never allow shock loads to be applied to winch or wire rope.

28. Use caution when pulling or lowering a load up and down a ramp or incline. Keep people, pets and property clear of the path of the load.

INSTALLATION

Correct installation of your winch is required for proper operation.

⚠ WARNING

This winch MUST be mounted with the wire rope in the under-wind direction. Improper mounting could damage your winch and void your warranty.

Step (1)

Install mounting kit or structural support for winch.

Step (2)

Attach fairlead to mounting plate using 2 bolts, nuts, flat and lock washers provided. Attach winch to mounting plate. Place square nuts inside slots on feet of winch. Thread 4 bolts with flat and lock washers provided into nuts in winch.

The mounting plate must be flat and a minimum of 1/4" thick. The ends of the mounting bolts must not bottom out in the winch body, and must fully engage the threads in the nuts.

⚠ WARNING

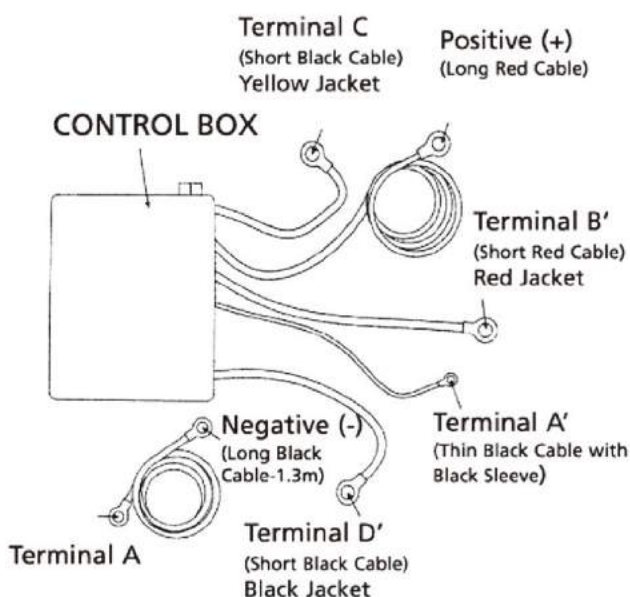
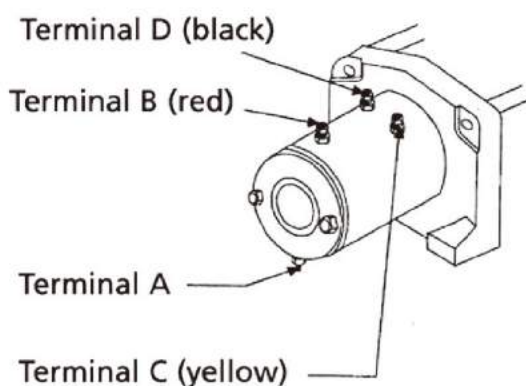
Do not substitute any strength grade weaker than ISO grade 8.8

Step (3)

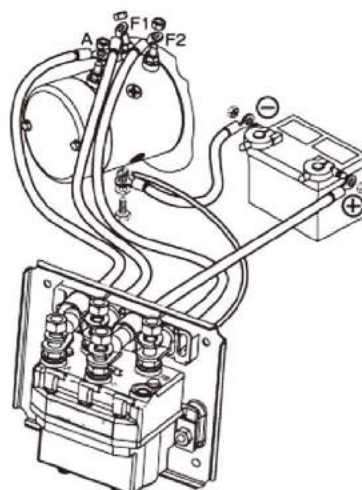
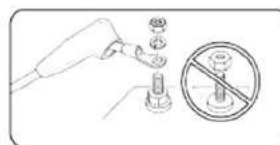
Disconnect the vehicle battery leads.

⚠ WARNING

Batteries contain gasses which are flammable and explosive. Wear eye protection during installation and remove all metal jewelry. Do not lean over battery while making connections.



Electrical Diagrams:



Step (4)

Refer to Figure 7 for wiring diagram. Apply several layers of electrical tape where wiring may come into contact with sharp metal parts of the vehicle to prevent insulation abrasion or cutting.

Route end of wire rope through fairlead and attach clevis hook. Use clevis pin and cotter pin to secure.

If unit control box is not pre-wired from factory, wire as directed. Route negative (black) and positive (red) wires from battery to winch. Install circuit breaker directly to battery when connecting red wire.

Step (5)

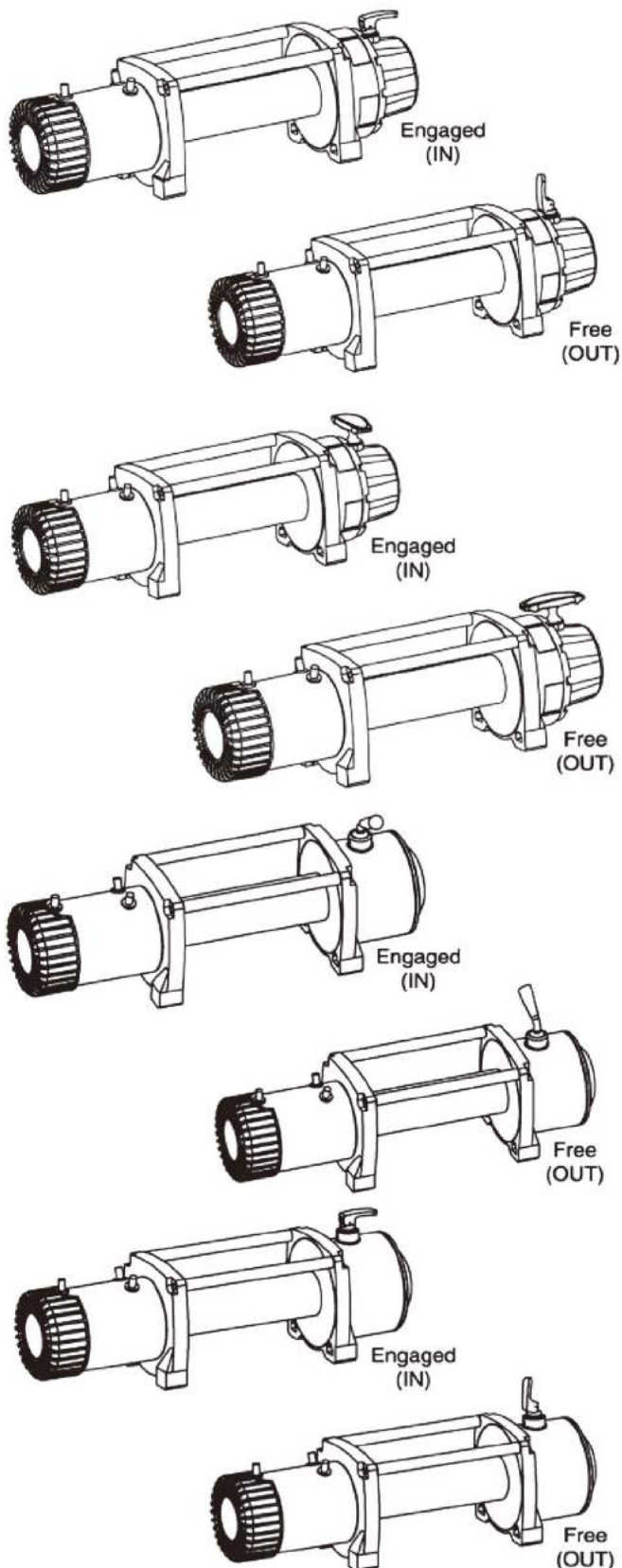
Set (see Figure 8) the freespool clutch knob to the "Free" position. Pull several feet of wire rope off the drum. Return the clutch knob back to the "Engaged" position. Activate the winch in Cable Out momentarily to check drum rotation direction. If the drum rotates in the wrong direction, recheck your wiring.

FREESPOOL OPERATION

Rotate the clutch knob to the "Free" position as shown in Figure 8. If there is a load on the wire rope, the clutch knob may not pull out easily. **DO NOT FORCE THE CLUTCH KNOB.** Release tension on the clutch by jogging out some of the wire rope. Release the clutch and pull out the wire rope and secure to anchor or load. Check that there are at least five (5) turns of wire rope left on the drum. Re-engage the drum by returning the clutch knob to the "Engaged" position. (See Figure 8).



CAUTION *Clutch must be fully engaged before winching. Never engage clutch knob while drum is turning.*



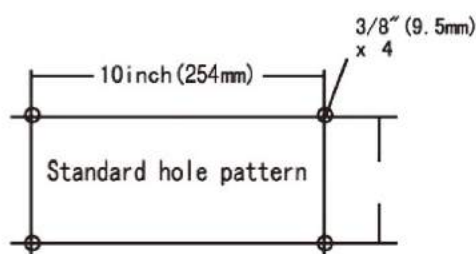
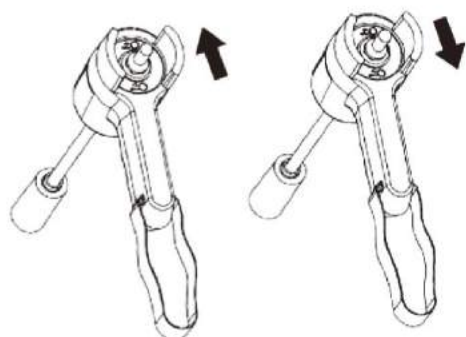
INTERMITTENT DUTY

An electric winch is like any other motor driven power tool such as an electric drill or saw. The electric motor should not be allowed to become excessively hot. Normal precautions will extend the life of your motor. Keep the duration of pulls as short as possible. **If the end of the motor becomes uncomfortably hot to touch**, stop winching and allow the motor to cool down.

PENDANT OPERATION

Rope Out

Rope In



The handheld pendant switch activates a solenoid that activates power to the winch motor.

To connect the pendant control, remove the cover on the plug receptacle and insert the plug end of remote switch. The plug on the pendant control cord is keyed and will fit into the socket only one way.

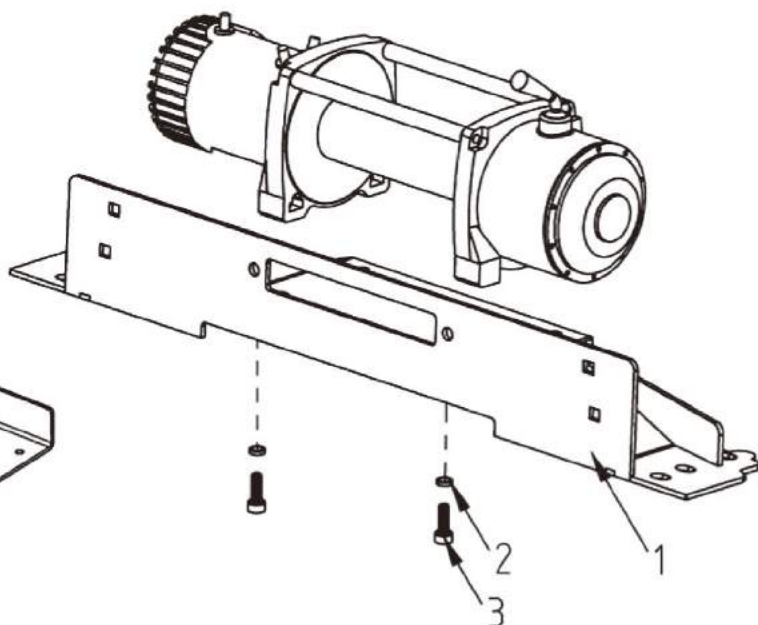
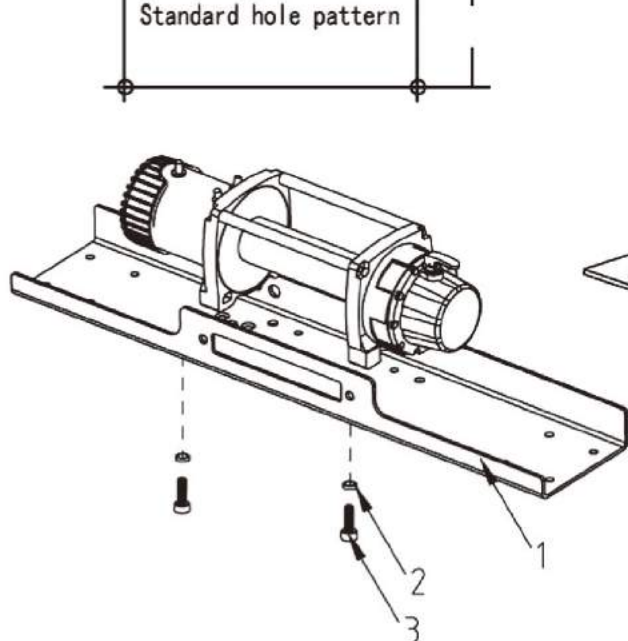
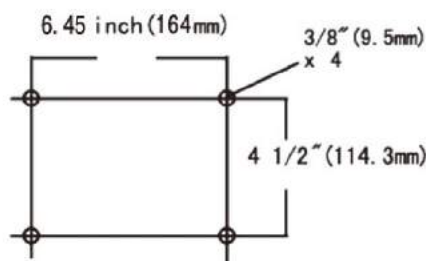
The switch trigger returns to the "Off" position when released.

To change direction, move the toggle in the other direction.

Mounting Bolt Pattern:

Standard: 10" x 4.5"
254mm x 114.3mm

ShortDrun: 6.45" x 4.5"
164mm x 114.3mm



INTERMITTENT DUTY

An electric winch is like any other motor driven power tool such as an electric drill or saw. The electric motor should not be allowed to become excessively hot. Normal precautions will extend the life of your motor. Keep the duration of pulls as short as possible. **If the end of the motor becomes uncomfortably hot to touch**, stop winching and allow the motor to cool down.

►Maintenance Schedule

Carry out all inspections listed below on schedule and inspections are divided into Daily, Monthly and 3 Monthly. Clean all connections because corrosion on electrical connections will reduce performance or may cause a short.

Classification of check			Item		Checking method	Checking reference
Daily	Periodical					
	One month	Three month				
		*	Complete winch		Operate the winch in and out	Minimum corrosion of the internal motor components
*			Installation	Mounting bolts & alignment.	Bolts tension & wear.	Tightened and aligned
*			Remote control	Working	Manual	Reasonable actuation
		*		Wearing in contact points	Visual.	Free of wear or damage.
*			Wire rope	Broken strands	Visual, measuring (monthly)	Less than 10%
*	*			Decrease in rope diameter	Visual, measuring (monthly)	7% of nominal diameter max
*				Deforming or corrosion and fastening condition of end	Visual	No existence of abnormalities
		*	Freespool	Wear in spring	Visual evidence of wear	Free of wear or damage.
		*	Motor	Staining, damage	Visual evidence of wear	No existence of abnormalities
		*	Brake	Wearing of lining	Visual evidence of wear	Free of wear or damage
*				Performance	Visual	Reasonable actuation
		*	Gear train	Damage, wearing	Visual evidence of wear	Free of wear or damage and distortion.

► Trouble Shooting

When the winch fails to operate after several attempts, or if there is any fault operation while winching, check followings.

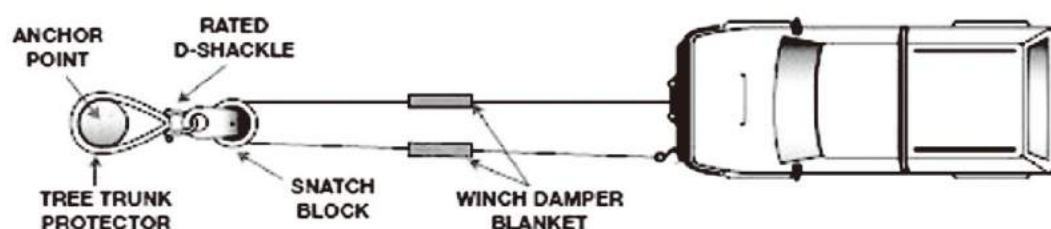
	Possible Cause	Remedy
Winch will not operate	Cut circuit or loosing	Check battery cable.
	Weak battery or insufficient power	Recharge or replace battery
	Damaged over load protector	Replace over load protector
	Loose connection of wirings	Checking all wirings
	Damaged or stuck solenoid	Replace solenoid
	Defective remote control	Check winch operation with an auxiliary switch
	Damaged motor or worn carbon brush	Replace motor or carbon brush
Motor runs in one direction.	Broken wiring or bad connection	Reconnect or replace wiring
	Damaged or stuck solenoid	Replace solenoid
	Switch inoperative	Replace switch
	Dropt or lost wiring	Replace wiring and tighten.
Drum will not freespool.	Freespool not disengaged	Engaged freespool
	Damaged brake or freespool ass'y	Replace brake or freespool ass'y
	Damaged drum bushing	Replace drum bushing
	Damaged gear box	Replace gear box
No brake	Damaged or inoperative pressed spring	Replace pressed spring
	Disengaged freespool	Engaged
	Damaged output shaft	Replace output shaft
	Damaged 1st shaft	Replace 1st shaft
Brake distance is too long	Worn or damaged brake	Replace or adjust brake
Winch runs opposite direction	Motor leads crossed	Reverse electrical connections to motor
	Solenoid control crossed	Reverse black and red wires on the solenoid
	Remote control or trigger switch crossed	Reverse electrical connections
Motor runs extremely hot	Long period of operation	Stop operation to have it cooled
	Over-load	Reduce load
	Damaged or inoperative brake	Replace or repair brake

Double & Triple Line Pull

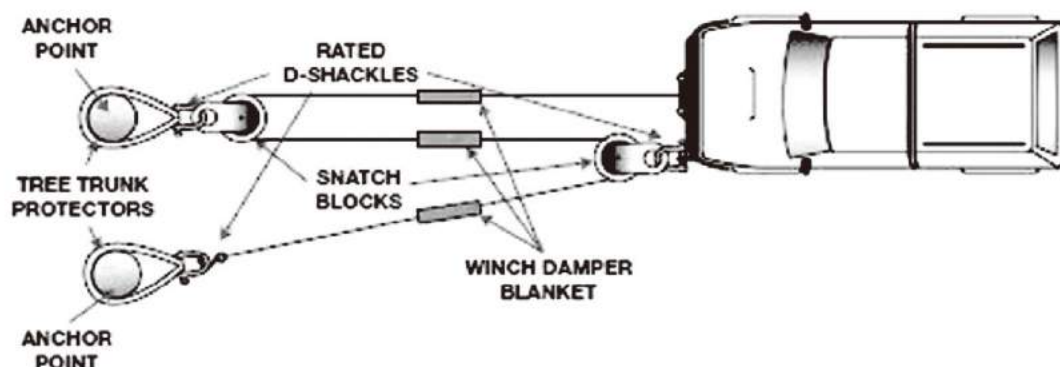
The pulling power of your winch increases with less winds of cable on the drum. If the only anchor point available is too close to your winch you can loop the cable through a snatch block and attach the hook end of your cable back to the rated recovery hook on your vehicle. This uses more cable off the drum and the snatch block also increases the mechanical advantage of the winch, and therefore decreases the effort required.

Two snatch blocks can be used to further reduce the effort required by your winch, this is called a triple line pull.

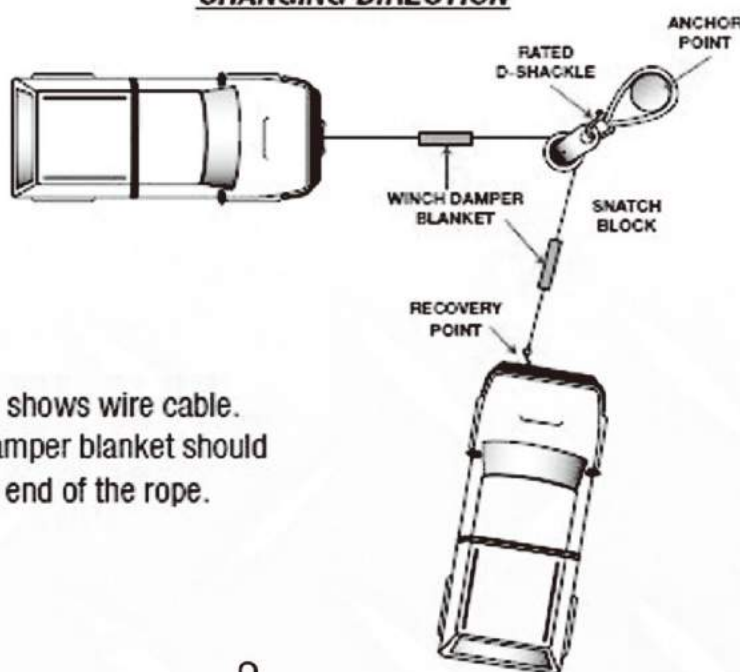
DOUBLE LINE PULL



TRIPLE LINE PULL

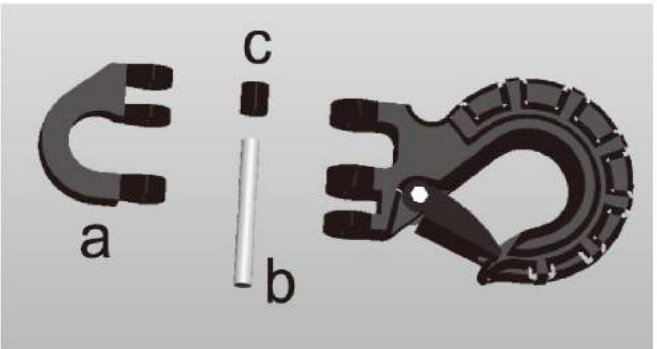


CHANGING DIRECTION

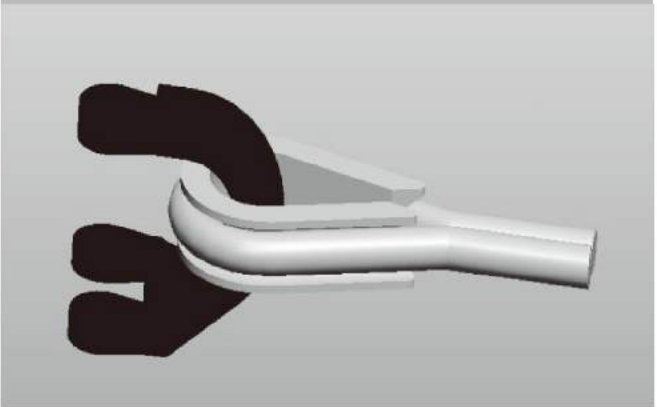


NOTE: This diagram shows wire cable. For synthetic rope damper blanket should be draped over hook end of the rope.

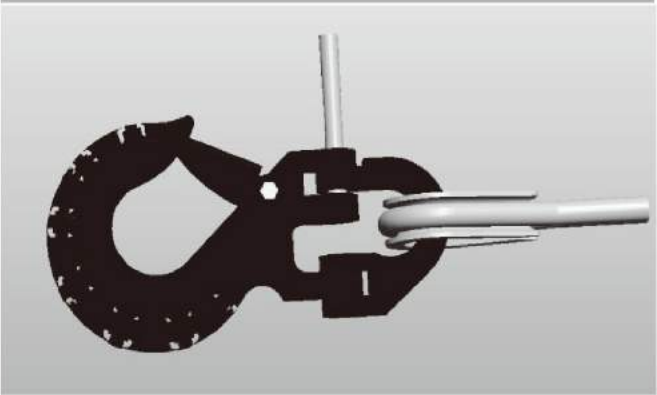
- a) Hook-Loop
- b) Pin
- c) Ferrel



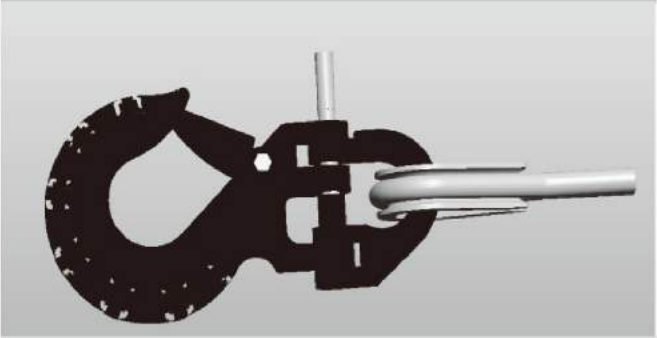
2.Thread hood-loop through cable eye.



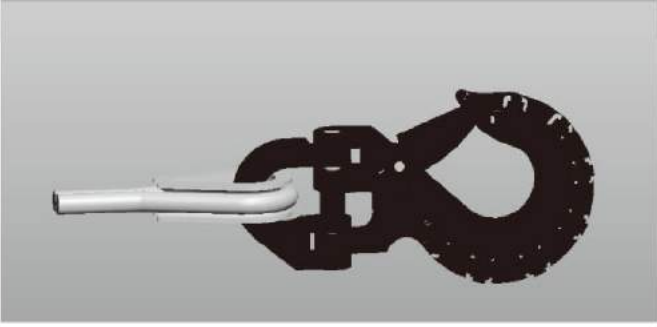
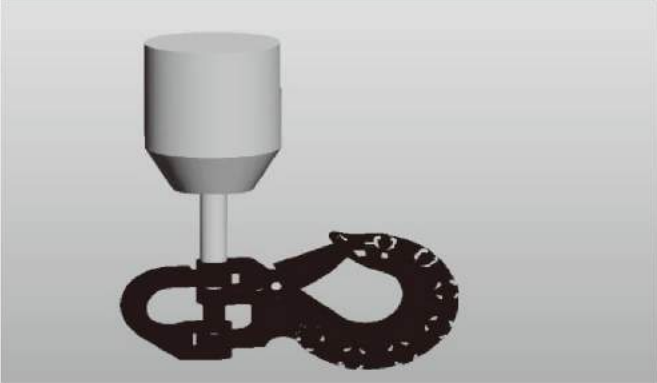
3.Place hook and pin in position on hook-loop as shown.



4.Place ferrel in position as shown.



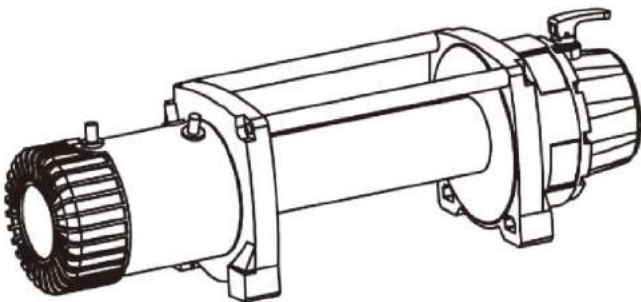
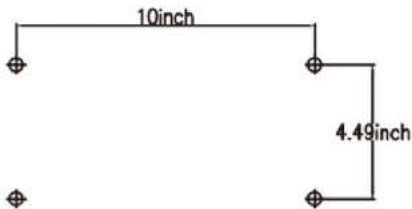
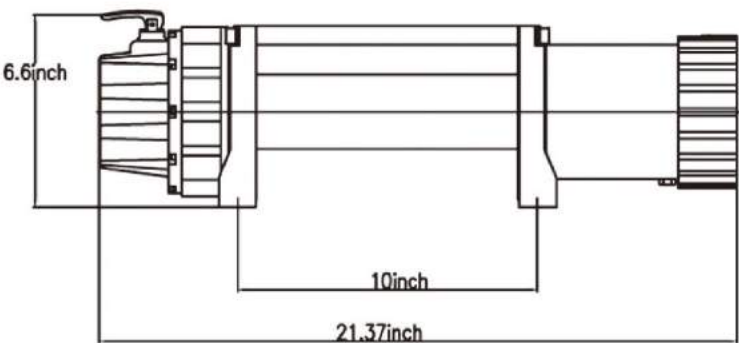
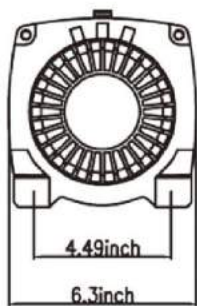
5.Hammer pin into posiion.

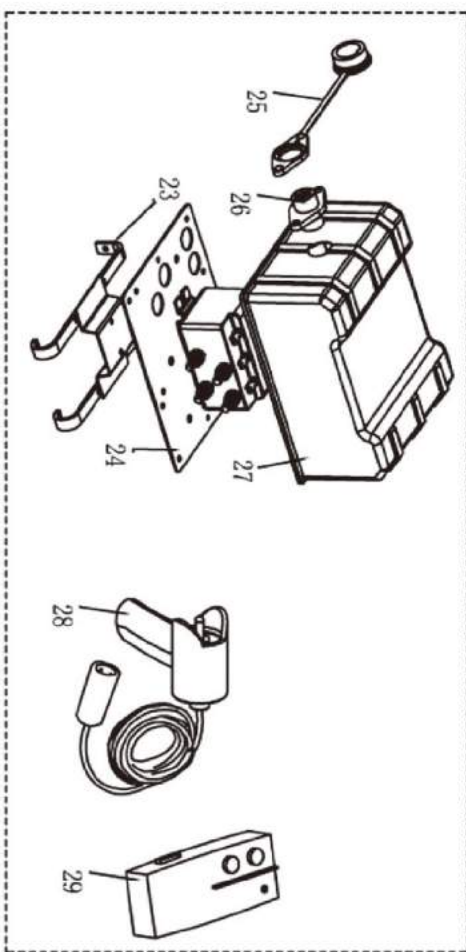
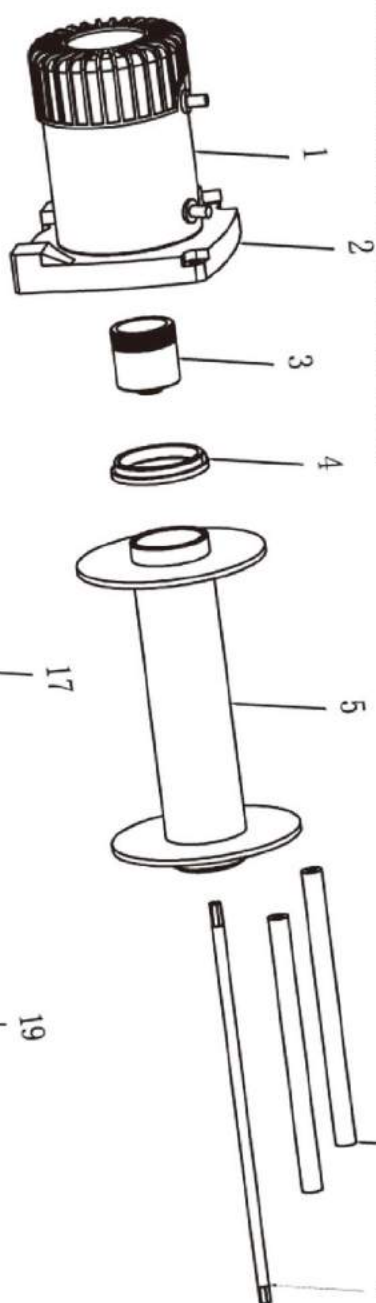
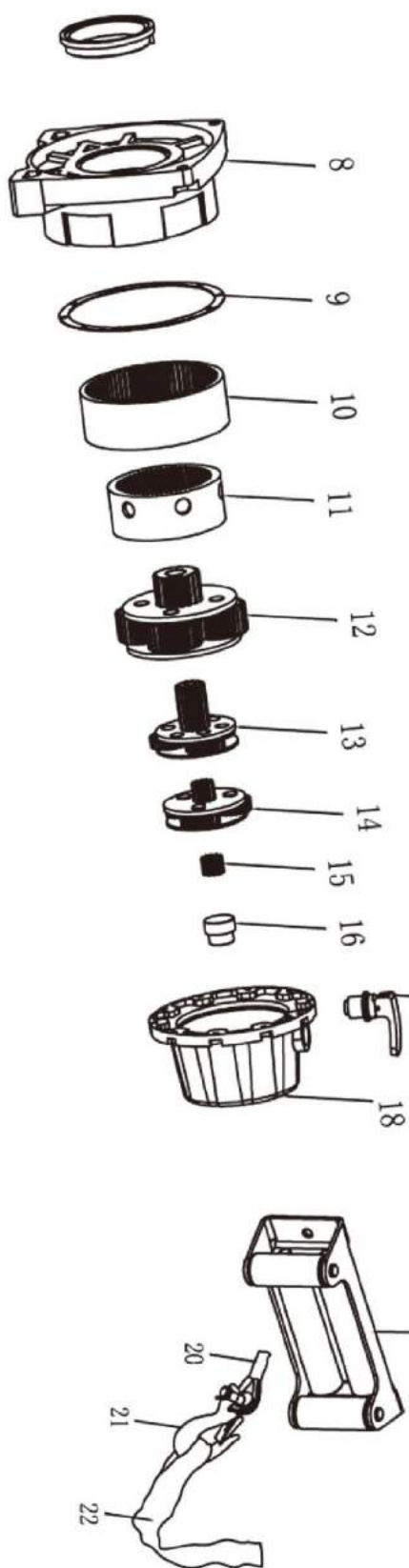


PARTS LIST&ASSEMBLY DIAGRAM

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

Part	Description	Quality
16	Steel plate for sun gear	1
17	Clutch lever assy	1
18	Gear house	1
19	4-way roller fairlead	1
20	Steel cable	1
21	HOOK	1
22	Strap	1
23	Fix strip	1
24	Contator adn solnoid plate	1
25	Waterproof cover	1
26	Wire plug	1
27	Solenoid box	1
28	Wire romote assy	1
29	Sealing ring	1
30		

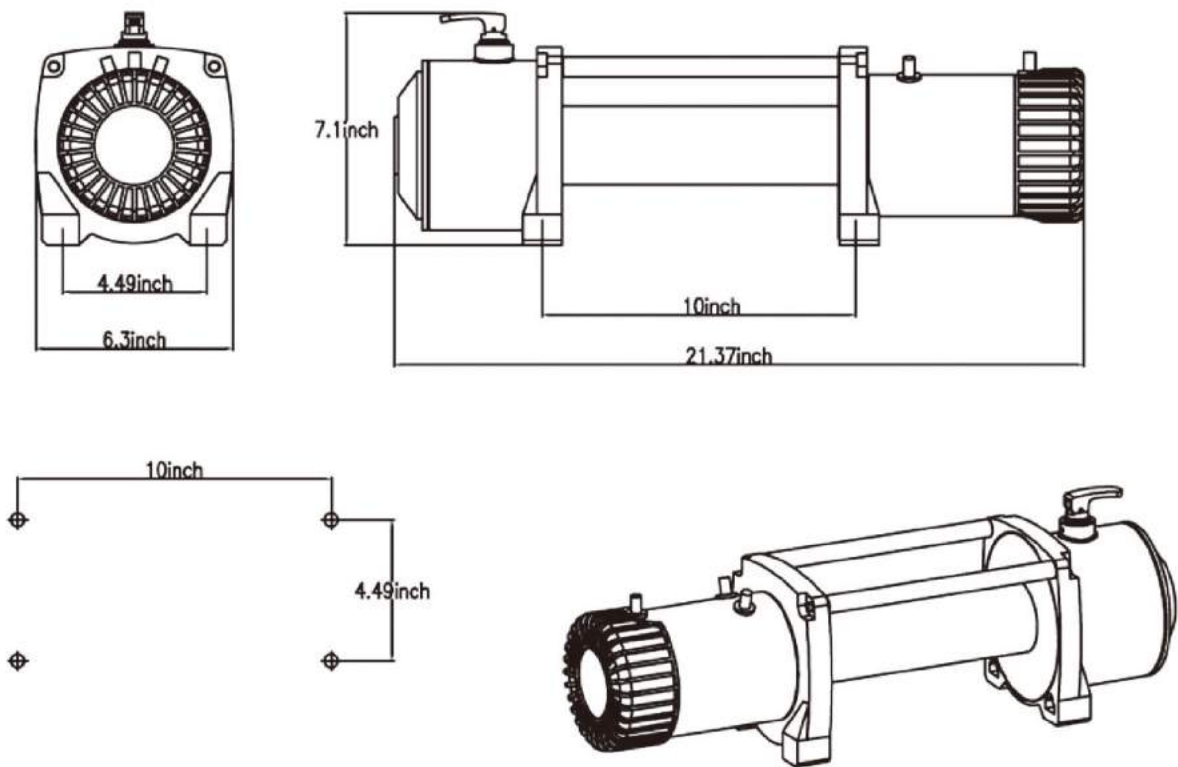


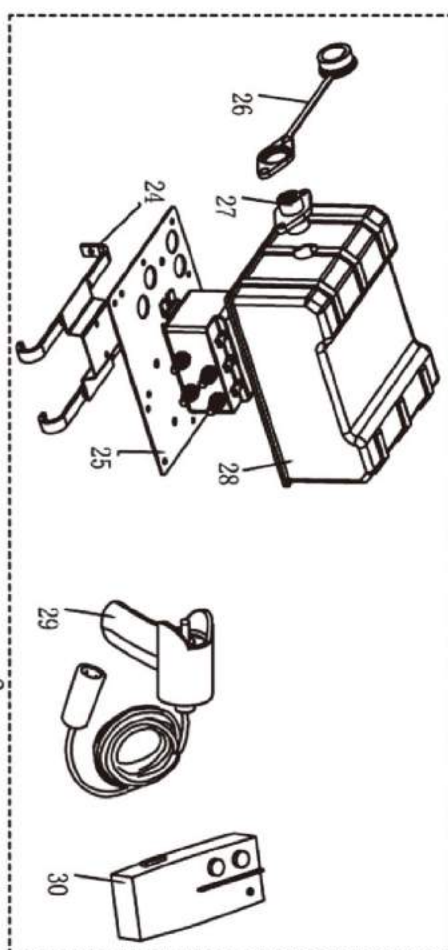
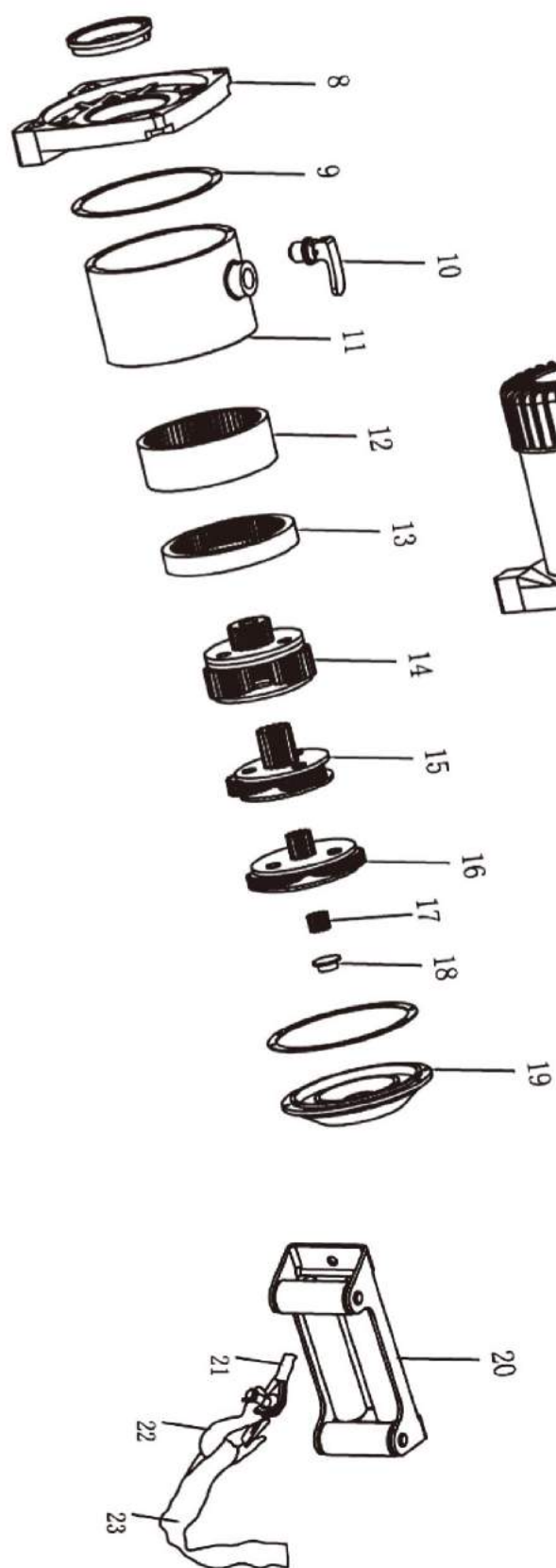


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9	Paper washer	2
10	Clutch lever assy	1
11	Outer cylinder	1
12	Drive gear	1
13	Drive gear ring	1
14	The third stage planetary gear assy	1
15	The second stage planetary gear assy	1

Part	Description	Quality
16	The first stage planetary gear assy	1
17	Sun gear	1
18	Steel plate for sun gear	1
19	End cover	1
20	4-way roller fairlead	1
21	Steel cable	1
22	HOOK	1
23	Strap	1
24	Fix strip	1
25	Contator adn solnoid plate	1
26	Waterproof cover	1
27	Wire plug	1
28	Solenoid box	1
29	Wire romote assy	1
30	Sealing ring	1

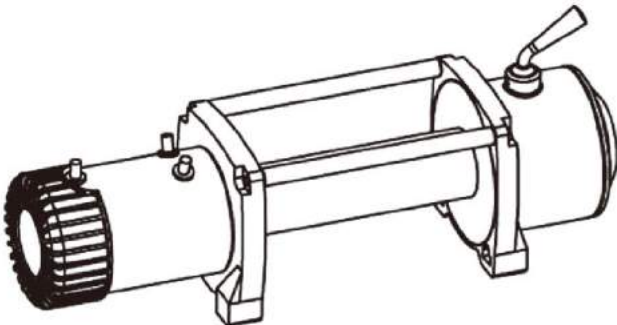
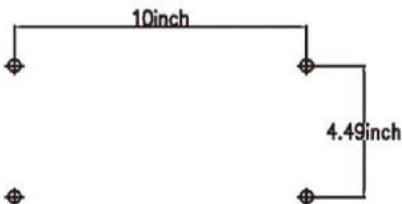
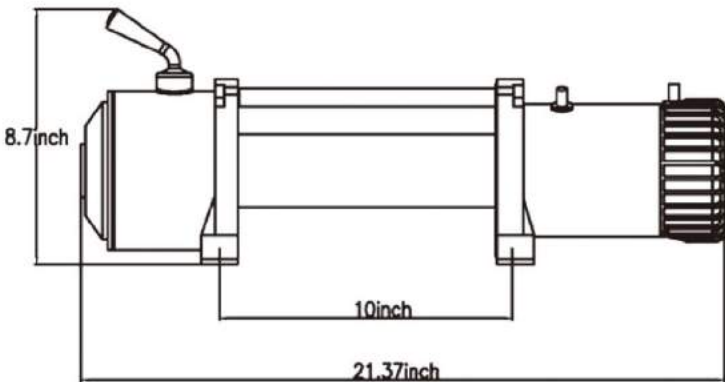
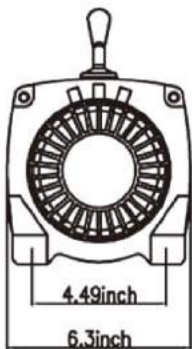


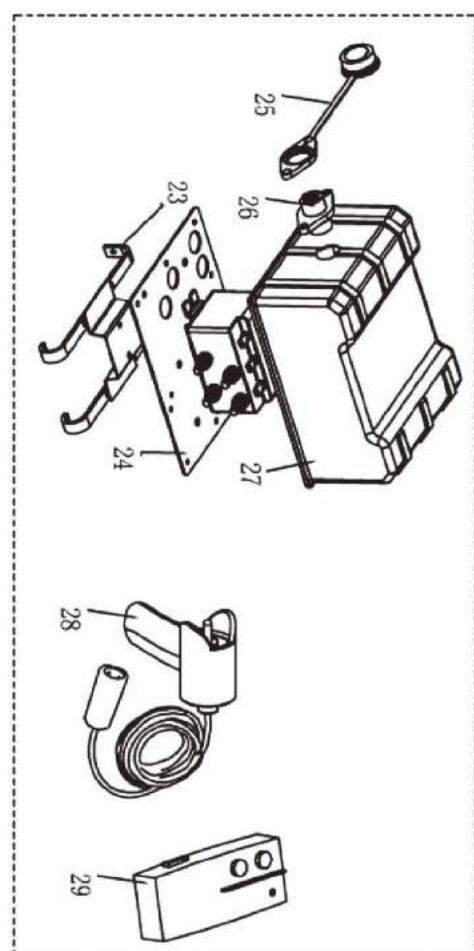
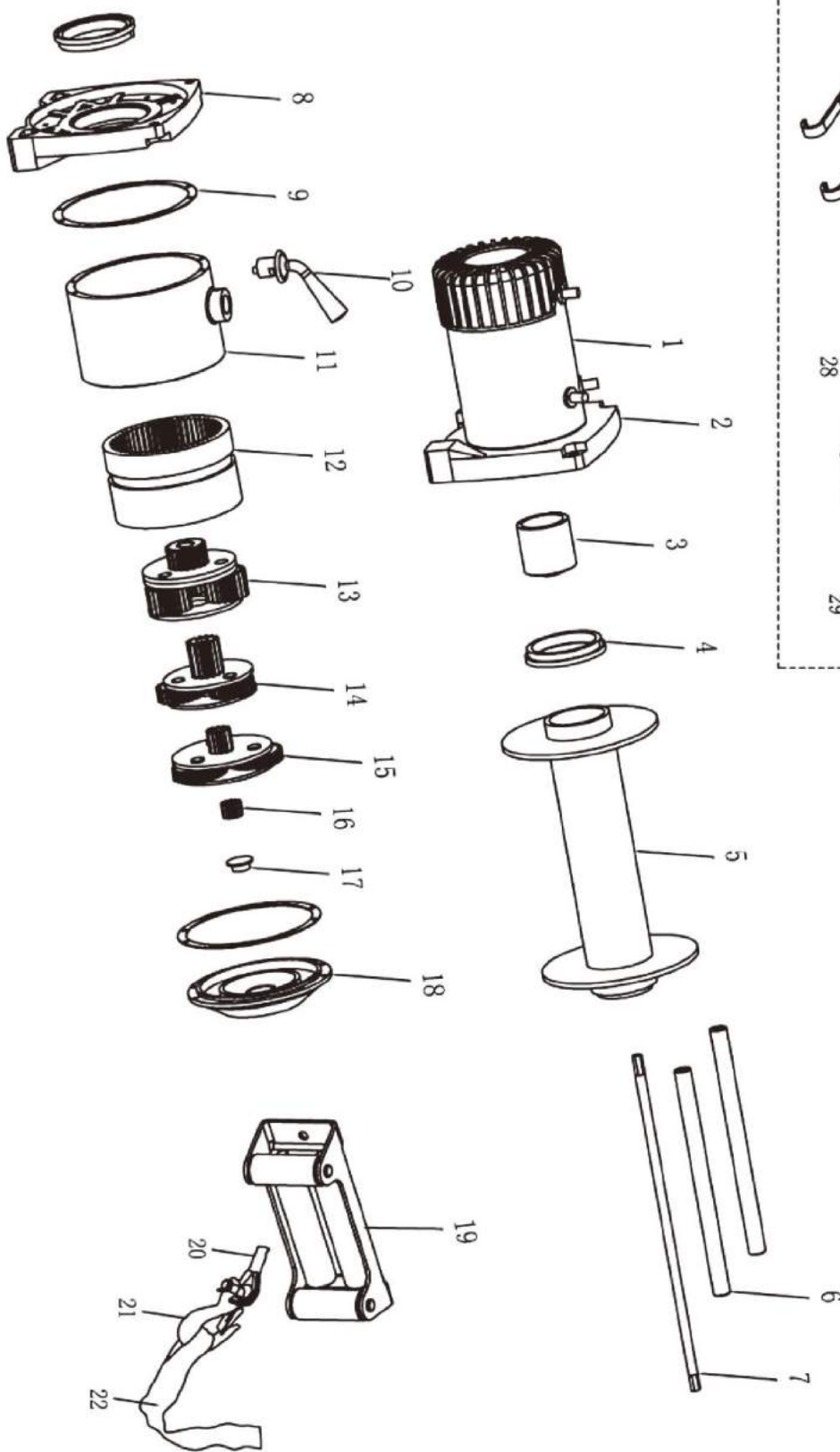


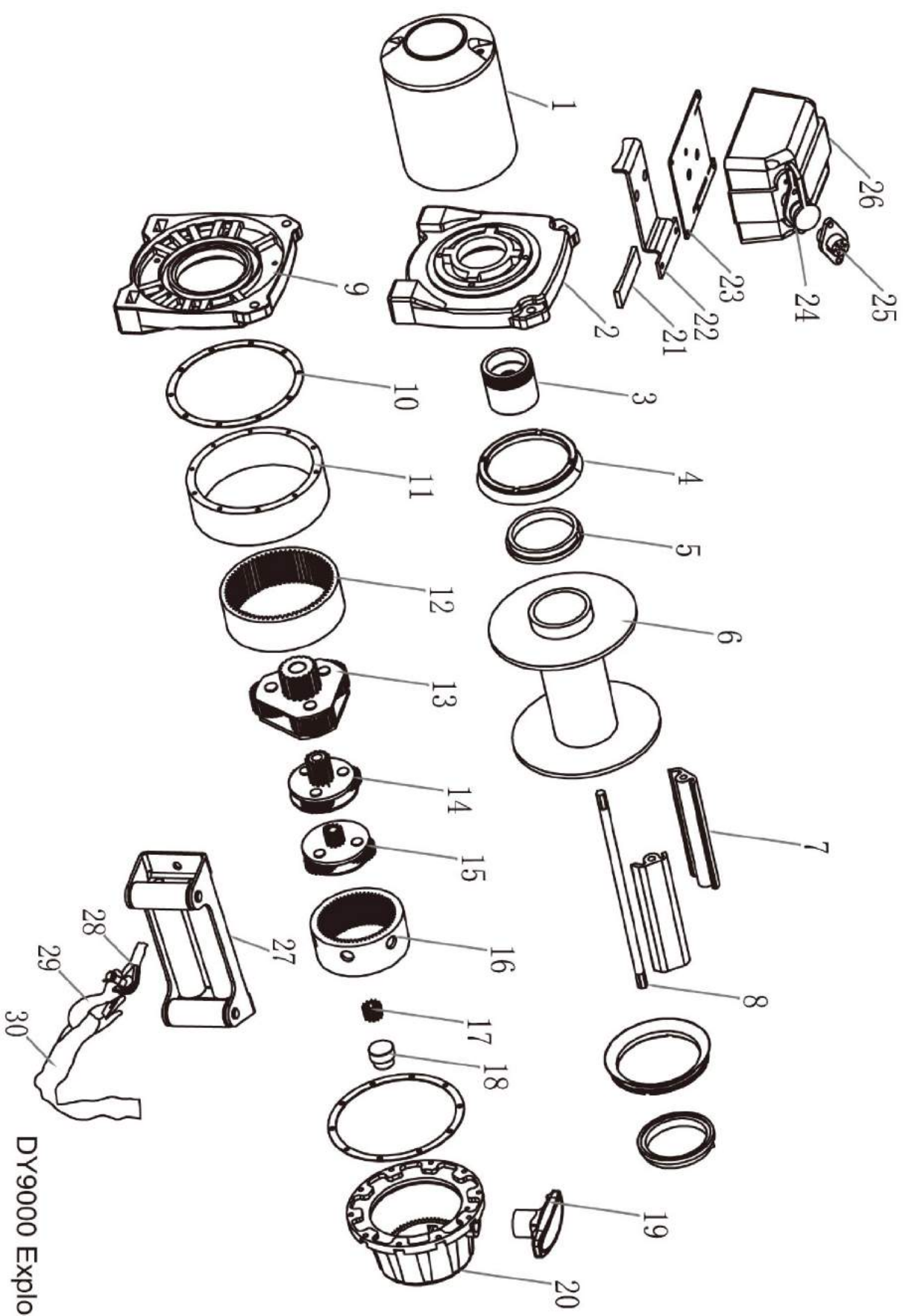
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15	The first stage planetary gear assy	1

Part	Description	Quality
16	Sun gear	1
17	Steel plate for sun gear	1
18	End cover	1
19	4-way roller fairlead	1
20	Steel cable	1
21	HOOK	1
22	Strap	1
23	Fix strip	1
24	Contator adn solnoid plate	1
25	Waterproof cover	1
26	Wire plug	1
27	Solenoid box	1
28	Wire romote assy	1
29	Sealing ring	1
30		





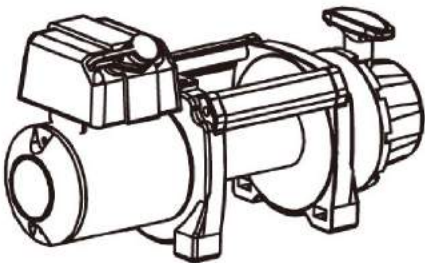
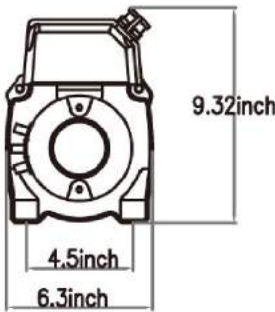
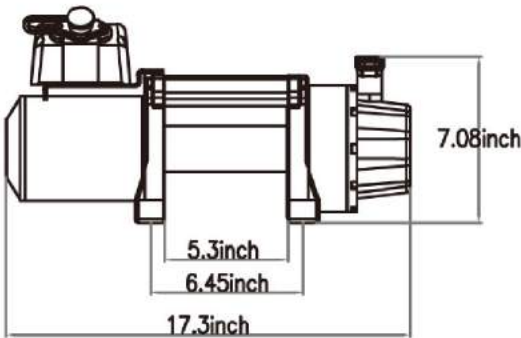


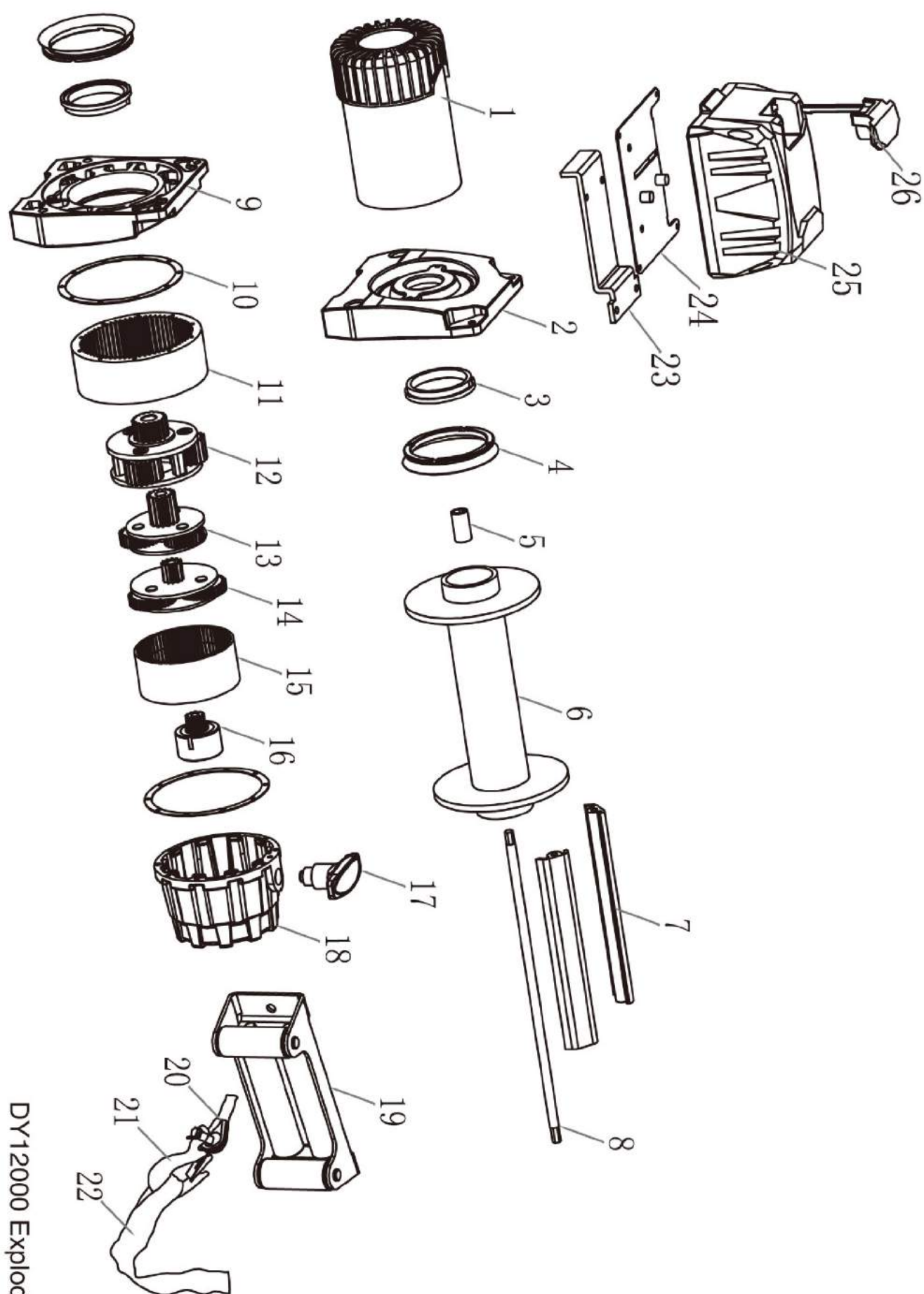
DY9000 Exploded View

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	Pad	1
22	Connecting plate	1
23	Mounting plate	1
24	Waterproof cover	1
25	Wire plug	1
26	Solenoid box	1
27	4-way roller fairlead	1
28	Steel cable	1
29	HOOK	1
30	Strap	1



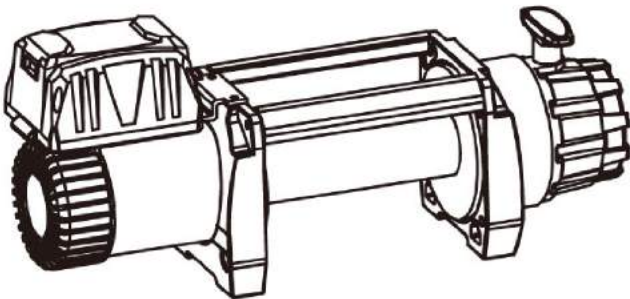
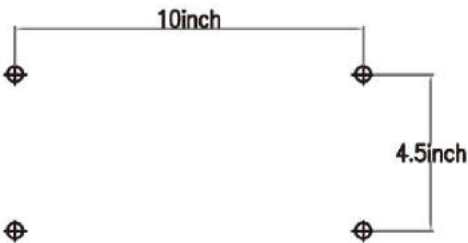
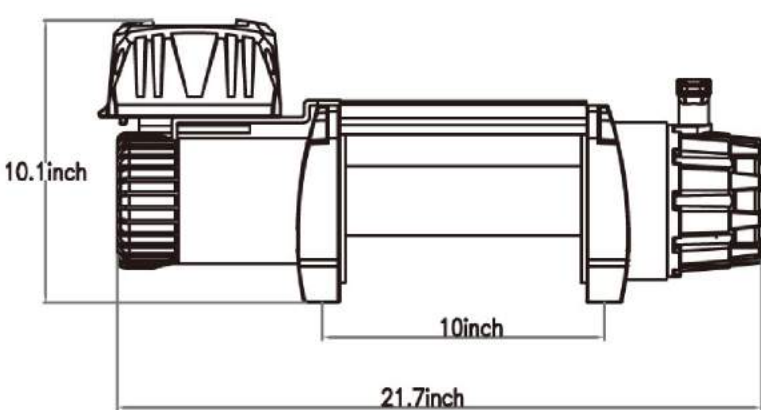


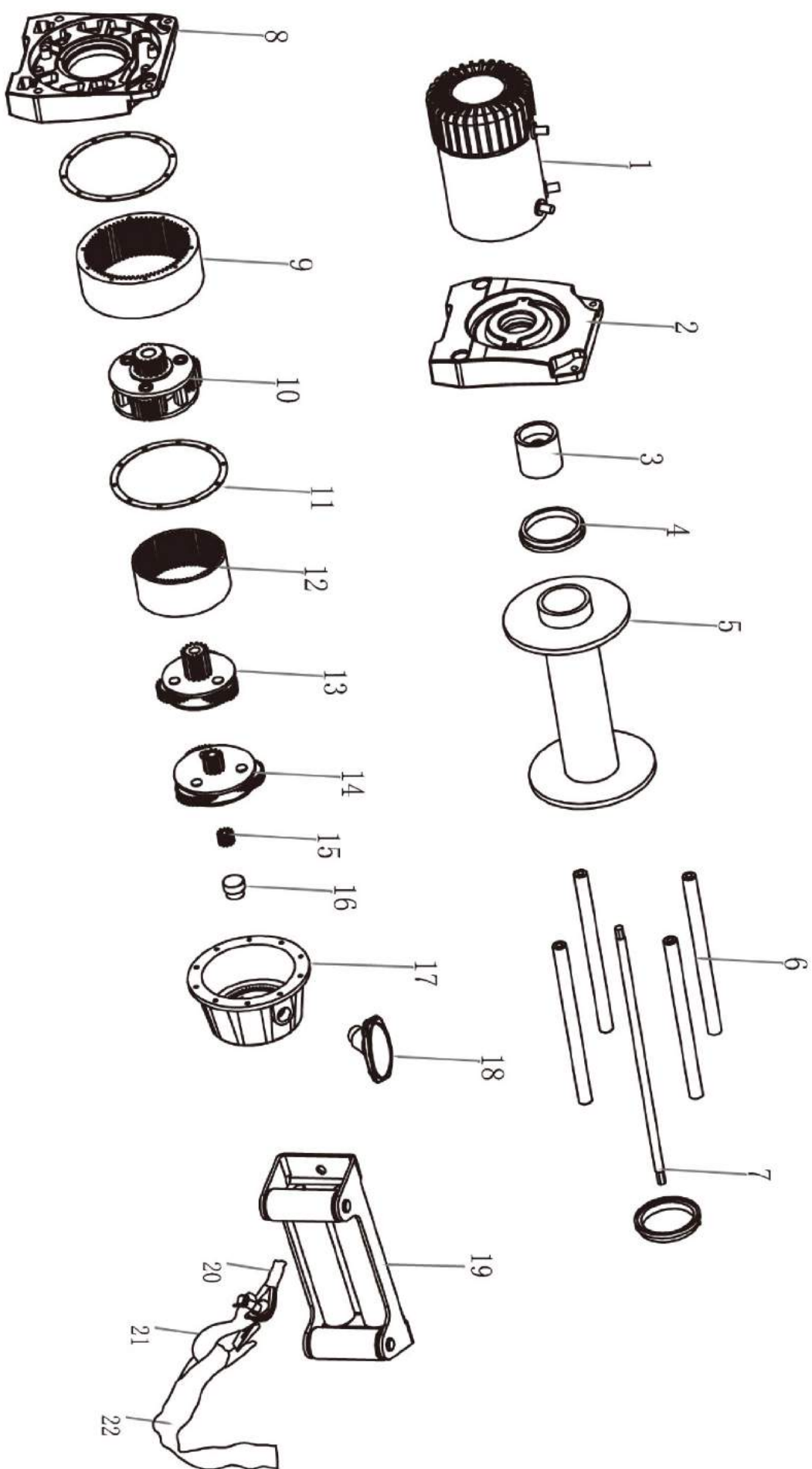
DY12000 Exploded View

PARTS LIST&ASSEMBLY DIAGRAM

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

Part	Description	Quality
16	Braking assy	1
17	Clutch assy	1
18	Gear house	1
19	4-way roller fairlead	1
20	Steel cable	1
21	HOOK	1
22	Strap	1
23	Connecting plate	1
24	Mounting plate	1
25	Solenoid box	1
26	Waterproof boot	1
27		
28		
29		
30		





DY15000 Exploded View

PARTS LIST&ASSEMBLY DIAGRAM

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

Part	Description	Quality
16	Steel plate for sun gear	1
17	Clutch lever assy	1
18	Gear house	1
19	4-way roller fairlead	1
20	Steel cable	1
21	HOOK	1
22	Strap	1

