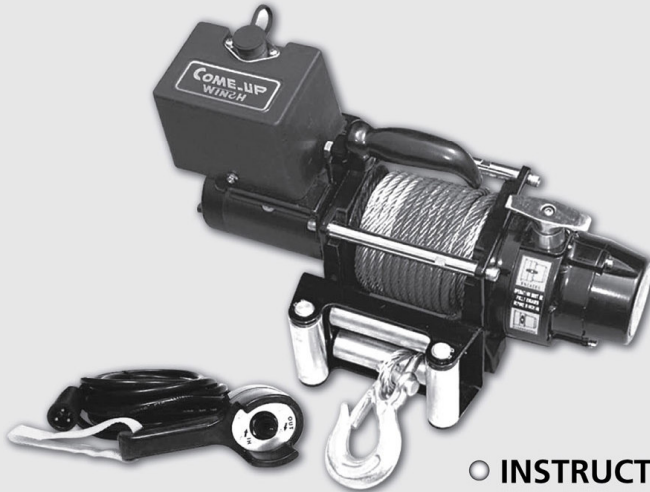




Model: DV-6000S
DV-6000L
DV-6000SL

You First Winching Solution



○ INSTRUCTION
MANUAL

**Self-Recovery
Winch**





Self-Recovery Winch

Thank you for purchasing a **COME-UP Winch**. This manual covers operation and maintenance of the winch. All information in this publication is based on the latest production information available at the time of printing

General Safety Precautions

A **COME-UP** Winch is designed to give safe and dependable service if operated according to the instructions. Read and understand this manual before installation and operation of winch.

Follow these general safety precautions:

- Don't use unsuitable pulleys or accessories.
- Don't use unsuitable rope in construction, strength or having any defects.
- Check the winch for smooth operation without load before winching operation.
- Make sure the wire rope is wound evenly on the first layer on the drum, rewind it if not evenly wound.

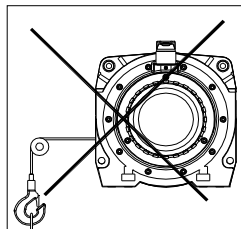


1. The winch is rated for intermittent-periodic duty.
2. The winch is not to be used to lift, support or otherwise transport personnel.
3. A minimum of five (5) wraps of rope around the drum are necessary to support the rated load.
4. When choosing the right winch, you need to consider the vehicle size and weight.
As a general guide, you need a winch with a maximum load rating of at least one and a half times greater than the gross vehicle weight.
5. The rated line pull of the winch must be powerful enough to overcome the added resistance caused by whatever the vehicle is stuck in.
6. Operate the winch cable in and cable out at no load if a winch has had any ingress of water.

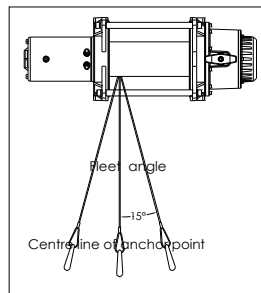
I. Safety Precautions

Please read and understand this Instruction Manual before installing your winch.

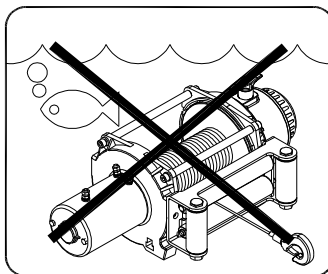
- ⚠ Don't use unsuitable wire rope in construction, strength or having any defects.
- ⚠ Don't use an unsuitable hook or snatch block for wire rope.
- ⚠ The operator of a winch in some cases, is required to have qualifications according to applicable laws and ordinances.
- ⚠ Do not use the winch as a lifting device or a hoist for vertical lifting (Fig1).
- ⚠ Do not use winch to move people.
- ⚠ Do not exceed maximum line pull ratings shown in tables. Shock load must not exceed these ratings.
- ⚠ Keep hands clear of wire rope and fairlead opening.
- ⚠ Pull from an angle below 15° to straighten up the vehicle or load. (Fig2)
- ⚠ Use leather gloves or a heavy rag when handling the wire rope.
- ⚠ When winching a heavy load lay a heavy blanket or jacket over the wire rope near the hook end.
- ⚠ Do not operate the winch under the water.



(Fig1)



(Fig2)



II. Performance Data

► Performance

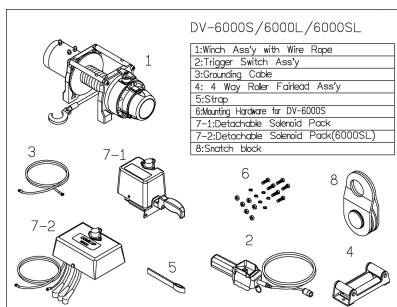
Model		DV-6000S	DV-6000L / DV-6000SL
1 st layer	Line pull (kg / lb)	2,722 / 6,000	2,722 / 6,000
	Line speed (mpm / fpm)	2.0 / 6.5	2.0 / 6.5
	Rope cap (m / ft)	3.6 / 11.8	6.7 / 22
2 nd layer	Line pull (kg / lb)	2,264 / 4,991	2,264 / 4,991
	Line speed (mpm / fpm)	2.4 / 7.8	2.4 / 7.8
	Rope cap (m / ft)	7.8 / 25.6	14.7 / 48.2
3 rd layer	Line pull (kg / lb)	1,938 / 4,273	1,938 / 4,273
	Line speed (mpm / fpm)	3.1 / 10.1	3.1 / 10.1
	Rope cap (m / ft)	12.8 / 42	24 / 78.7
4 th layer	Line pull (kg / lb)	1,694 / 3,735	1,694 / 3,735
	Line speed (mpm / fpm)	3.7 / 12.1	3.7 / 12.1
	Rope cap (m / ft)	18.5 / 60.7	30 / 100
5 th layer	Line pull (kg / lb)	1,505 / 3,318	
	Line speed (mpm / fpm)	4.2 / 13.7	
	Rope cap (m / ft)	24.4 / 80	

► Line speed and Amp. Draw

At the first layer of wire rope on the drum

Line Pull		Line Speed		Amp	
Kg	lb	mpm	fpm	12v	24v
0	0	8.0	26.2	60	35
907	2,000	5.2	17	150	90
1,814	4,000	3.1	10.2	240	140
2,722	6,000	2.0	6.5	300	200

► Main Components

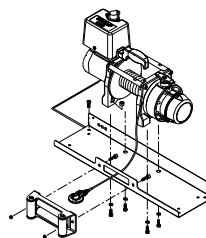


III. Installation

Before using the winch, make sure all electrical components have no corrosion or damaged; the environment should be clean and dry. The voltage drop from the battery connections to the winch must not exceed 10% of the nominal voltage under normal operating condition.

► Mounting

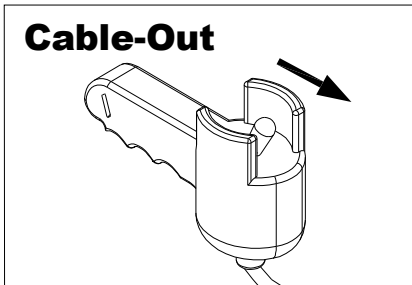
1. It is very important that the winch shall be mounted on a flat and hard surface in order to make sure the motor, drum and gearbox housing are aligned correctly.
2. It is recommended that you use a mounting channel to prevent from damaging winch or vehicle.
3. Four (4) M10 x 1.50 pitch 8.8 Grade High Tensile Steel Bolts must be used in order to sustain the loads imposed on the winch mounting.
4. Two(2) M12x1.75 pitch 8.8 Grade High Tensile Steel Bolts must be used for fastening the roller fairlead into the mounting channel.



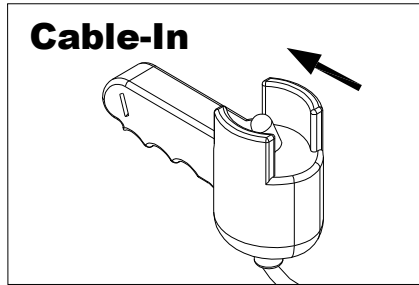
► Cable-in/ Cable-out Operation

- 1). To determine “Cable - Out”, trigger → out (fig.4)
- 2). To determine “Cable - In”, trigger ← in (fig.5)

To stop winching, release the trigger



(Fig4)



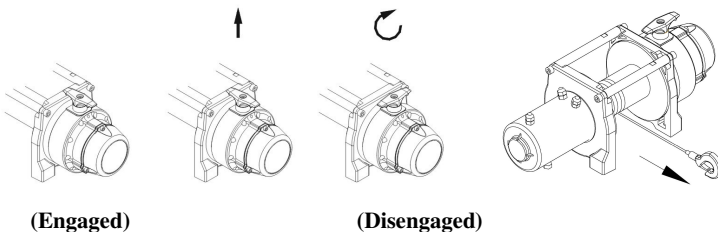
(Fig5)

► Freespool Function

The freespool allows rapid pay-out of the wire rope for hooking onto a load or anchor points and is operated by a freespool knob.

The freespool knob must be in the “Engaged” position before winching.

- 1). To disengage the freespool lift the freespool knob up and turn it at 90° clockwise rotation to the “Disengaged” position, wire rope can now be freespoiled off the drum.
- 2). To engage the freespool lift the freespool knob up and turn it at 90° counter-clockwise rotation to the “Engaged” position.
- 3). If a freespool knob can't be properly locked in the “Engaged” position, rotate the drum to make the freespool device coupled to the gear train.
- 4). Wear leather gloves and use a strap when guiding the wire rope off the drum.

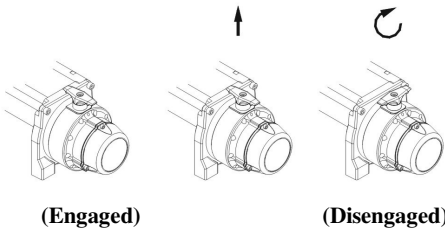


V. Maintenance

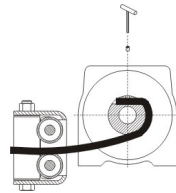
► Wire Rope Replacement

- Never use a wire rope of a different size or material and only use genuine replacement parts.
- If the winch is subjected to a high duty or excess load, the rope may require frequent replacement.

- 1). Disengage the freespool. (Fig6)
- 2). Spool the entire wire rope, and then remove it from the drum.
- 3). Place the replacement wire rope through the fairlead opening, pass below the drum, and insert it into the hole on the drum core. (Fig7)
- 4). Tighten the screw downwards to secure the wire rope. (Fig7).



(Fig 6)

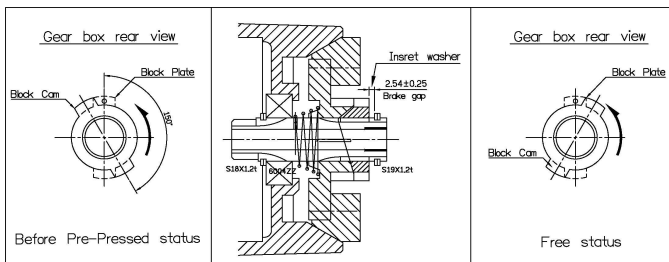


(Fig 7)

► Brake adjustment

Over time, the load-holding brake in your winch will wear. Should you find the load beginning to slip, adjustments can be made to the brake mechanism as follows:

- 1). Loosen the 3 retaining bolts and remove the brake cover.
- 2). Remove the two retaining rings.
- 3). Insert washers to maintain a spacing of 2.54 ± 0.25 mm ($.1'' \pm .01''$) between the ring grooves and the brake actuating cam.
- 4). Re-install the two rings and brake cover.



► Lubrication

All moving parts in the winch are permanently lubricated at the time of assembly. Under normal conditions factory lubrication will suffice. If re-lubrication of gear box is necessary after repair or disassembly use Shell EP2 or equivalent grease with 0.15 litre. Freespool knob lubricates regularly with light oil. It is not allowed to have brake ass'y lubricated.

► Maintenance Schedule

- Ensure that a responsible person carries out all inspections as per schedule.
- Inspections are divided into Daily, Monthly and 3 Monthly.

Classification of check			Item	Checking method	Checking reference	
Daily	Periodical					
	One month	Three month				
○			Installation	Mounting bolts & alignment.	Bolt tension & wear.	Existence of abnormalities
○			Remote control	Working	Manual	Reasonable actuation
		○		Wearing in contact points	Visual.	Free of wear or damage.
○			Wire rope	Broken strands	Visual, measuring	Less than 10%
○	○			Decrease in rope diameter	Visual, measuring	7% of nominal diameter max
○				Deforming or corrosion	Visual	Existence of abnormalities
○				Fastening condition of end	Visual	Existence of abnormalities
		○	Freespool	Wear in spring	Visual evidence of wear	Free of wear or damage.
		○	Motor	Staining, damage	Visual evidence of wear	Existence of abnormalities
		○	Brake	Wearing of brake disc	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.

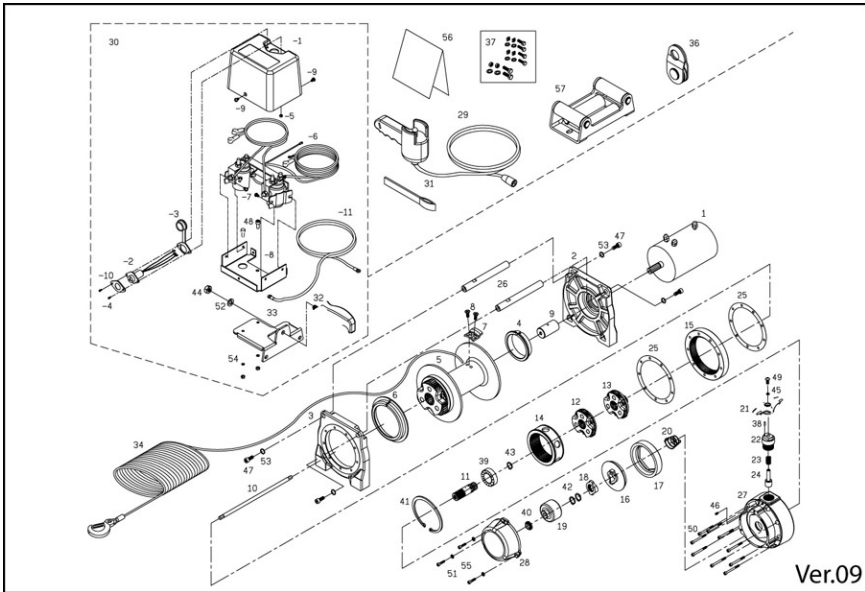
VII. Trouble Shooting

When the winch fails to operate after several attempts, or if there is any fault while

Symptom	Possible Cause	Remedy
Winch will not operate	Cut circuit	Check battery lead.
	Weak battery	Recharge or replace battery (at least 650CCA)
	Damaged over-load protector(option)	Replace over-load protector(option)
	Bad connection of wirings	Reconnect tightly
	Damaged solenoid	Replace solenoid
	Cut circuit on switch	Replace switch
	Damaged motor or worn carbon brush.	Replace motor or carbon brush
	Dropt or lost motor wirings.	Replace wirings or tight it.
Motor runs in one direction.	Broken wirings or bad connections	Reconnect or replace wirings
	Damaged or stuck solenoid	Replace solenoid
	Switch inoperative	Replace switch
	Dropt or lost wirings.	Replace wirings and tighten.
Drum will not freely spool.	Freespool not disengaged	Engaged freespool
	Damaged 1 st shaft	Replace 1 st shaft
	Damaged brake cam and disc	Replace brake cam and disc
	Damaged output shaft	Replace output shaft
No brake	Damaged brake cam and disc	Replace brake cam and disc
	Damaged gear box	Replace gear box
	Dropt retaining ring	Replace retaining ring
	Oil leakage at brake	Clean oil leakage
	Damaged or inoperative spiral spring	Replace and position spiral spring
Brake distance is too long	Worn or damaged brake	Replace or adjust brake
	Oil leakage at brake.	Clean oil leakage
Brake will be locked	Too much brake powder	Clean brake ass'y
	Over pre-pressed spiral spring	Adjust pre-pressed spiral spring
	Stuck between brake lining and gear box	Replace a new winch
Damaged gear box	Hit by certain exterior force.	Replace the damaged components
	Damaged gear train.	Replace the damaged components
	Over load operation.	Replace a new winch
Motor runs extremely hot	Long period of operation	Allow to cool
	Damaged motor	Replace or repair motor
	Damaged or inoperative brake	Replace or repair brake

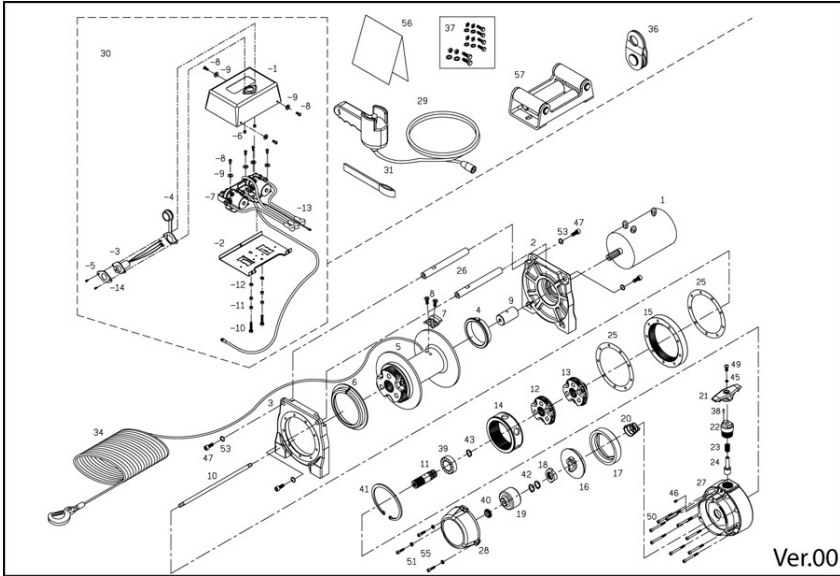
VII. Replacement parts List

▶DV-6000S、DV-6000L



No	Description	Q	ty	No	Description	Q	ty	No	Description	Q	ty
1	Motor	1	24	25	Freespool lever	1	37	Mounting hardware	1		
2	Motor support rack	1	25	26	Gasket	2	38	Spring pin	1		
3	Gearbox support rack	1	26	27	Tie bar	2	39	Bearing	1		
4	Drum bushing	1	27	28	Gear box	1	40	Bearing	1		
5	Drum	1	28	29	Brake cover	1	41	Retaining ring	1		
6	Drum bushing A	1	29	30	Remote control	1	42	Retaining ring	2		
7	Cable tensioner	1	30	31	Solenoid pack	1	43	Retaining ring	1		
8	Hex bolt	2	-1	32	Upper solenoid box	1	44	Hex nut	1		
9	Motor coupling	1	-2	33	Remote switch socket	1	45	Hex nut	2		
10	1st shaft	1	-3	34	Socket gland	1	46	Hex bolt	1		
11	1st pinion	1	-4	35	Cross screw	2	47	Hex bolt	4		
12	1st stage carrier	1	-5	36	Nut	2	48	Hex bolt	2		
13	2nd stage carrier	1	-6	37	Solenoid ass'y	1	49	Hex bolt	1		
14	1st & 2nd ring gear	1	-7	38	Cross screw	4	50	Hex bolt	9		
15	3rd ring gear	1	-8	39	Lower solenoid plate	1	51	Hex bolt	3		
16	Brake cam B	1	-9	40	Hex bolt	3	52	Spring washer	1		
17	Cone brake disc	1	-10	41	Socket packing	1	53	Spring washer	4		
18	Brake cam A	1	-11	42	Battery lead	1	54	Spring washer	2		
19	Brake freespool base	1	31	43	Handsaver strap	1	55	Spring washer	3		
20	Spiral spring	1	32	44	Handle	1	56	Foot print	1		
21	Freespool knob	1	33	45	Handle plate	1	57	Roller fairlead	1		
22	Freespool sleeve	1	34	46	Wire rope w/hook	1					
23	Pressed spring	1	36	47	Snatch block	1					

►DV-6000SL



No.	Description	Q'ty	No.	Description	Q'ty	No.	Description	Q'ty
1	Motor	1	25	Gasket	2	36	Snatch block	1
2	Motor support rack	1	26	Tie bar	2	37	Mounting hardware	1
3	Gearbox support rack	1	27	Gear box	1	38	Spring pin	1
4	Drum bushing	1	28	Brake cover	1	39	Bearing	1
5	Drum	1	29	Remote control	1	40	Bearing	1
6	Drum bushing A	1	30	Solenoid pack	1	41	Retaining ring	1
7	Cable tensioner	1	-1	Solenoid upper plate	1	42	Retaining ring	2
8	Hex bolt	2	-2	Solenoid lower plate	1	43	Retaining ring	1
9	Motor coupling	1	-3	Remote switch socket	1	44	Hex nut	1
10	1st shaft	1	-4	Socket gland	1	45	Hex nut	2
11	1st pinion	1	-5	Screw	2	46	Hex bolt	1
12	1st stage carrier	1	-6	Nut	2	47	Hex bolt	4
13	2nd stage carrier	1	-7	Solenoid	1	48	Hex bolt	2
14	1st & 2nd ring gear	1	-8	Hex bolt	5	49	Hex bolt	1
15	3rd ring gear	1	-9	Toothed washer	5	50	Hex bolt	9
16	Brake cam B	1	-10	Hex bolt	2	51	Hex bolt	3
17	Cone brake disc	1	-11	Nut	4	52	Spring washer	1
18	Brake cam A	1	-12	Spring	2	53	Spring washer	4
19	Brake freespool base	1	-13	Lead gland	3	54	Spring washer	2
20	Spiral spring	1	-14	Socket plate	1	55	Spring washer	3
21	Freespool knob	1	31	Handsaver strap	1	56	Foot print	1
22	Freespool sleeve	1	32	Handle	1	57	Roller fairlead	1
23	Pressed spring	1	33	Handle plate	1			
24	Freespool lever	1	34	Wire rope w/hook	1			

Limited Warranty

This Limited Warranty is given by the COMEUP INDUSTRIES INC (the “Seller”) to the original purchaser (the “Purchaser”) of a **COMEUP Winch** specified in this manual. This Limited Warranty is not transferable to any other party.

The Seller takes the responsibility for all parts and components, with the exception of the wire rope, to be free from defects in materials and workmanship appearing under normal use for as long as the said Purchaser owns the vehicle that the winch was originally mounted on. Electrical components are warranted for 1 Year from date of purchase under the same conditions. Any **COMEUP Winch**, which is defective, will be repaired or replaced without charge to the Purchaser.

Upon discovering any defect, the Purchaser under this Limited Warranty is requested to return the complete winch and inform the seller or their authorised distributors of any claims. The Purchaser must provide a copy of the proof of purchase bearing the winch serial number, date of purchase, owners name and address, vehicle details and registration number.

The Limited Warranty does not cover any failure that results from improper installation, operation or the Purchaser’s modification in design. The winch is designed for vehicle self-recovery use only and should not be used in industrial applications or for moving people. The Seller does not warrant them to be suitable for such use.