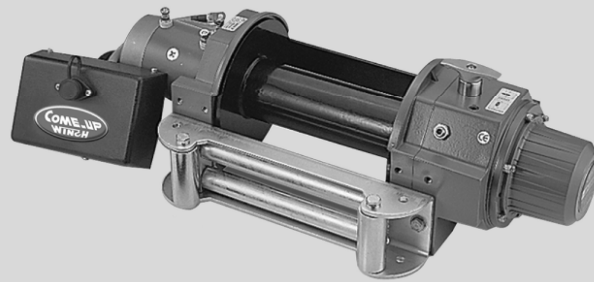




Model : DP-10000

Your First Winching Solutions



● INSTRUCTION  
MANUAL

Electric  
Recovery  
Winch





## Electric Recovery Winch

Thanks 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.

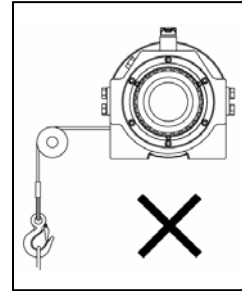


1. The winch is rated for intermittent-periodic duty.
2. The winch is not to be used to lift, support or otherwise transport personnel.
3. A minimum of five (5) wraps of rope around the drum are necessary to support the rated load.
4. When choosing the right winch, you need to consider the vehicle size and weight.  
As a general guide, you need a winch with a maximum load rating of at least one to 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.

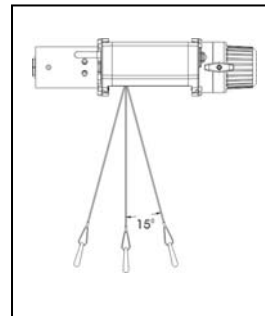
## **I. Safety Precaution**

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

- ⚠ Don't use unsuitable rope in construction, strength or having any defects.
- ⚠ Don't use unsuitable hook and pulley block for rope.
- ⚠ The operator of winch in some cases, is required to have qualifications according to applicable laws and ordinances.
- ⚠ Do not use 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 degree 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.



**(Fig1)**



**(Fig2)**

## II. Performance Data

### ► Specification

MODEL	DP-10000	
Line Pull	4,535 kg / 10,000 lb	
Motor	12V 3,430 w / 4.6 hp	24V 2,237 w / 3.0 hp
Control	Hand-held Remote Switch	
Gear Train	4 Stage Planetary	
Gear Ratio	277:1	
Clutch	Rotating Ring Gear	
Brake	Patent Cone Load-Holding Brake & Auxiliary Magnetic Brake	
Wire Rope Recommended	9.5 mm X 40 m / 3/8" X 131'	

### ► Line speed and Amp. Draw (1<sup>st</sup> layer of wire rope on the drum)

MODEL	DP-10000					
Voltage	12 V			24 V		
Line Pull	Line Speed		Amp. Draw	Line Speed		Amp. Draw
Kg / lb	mpm	fpm		mpm	fpm	
No Load	6.2	20.3	60	8.0	26.2	40
907 / 2,000	4.3	14.1	120	6.5	21.3	80
1,814 / 4,000	2.3	7.5	170	5.1	16.7	105
2,722 / 6,000	1.6	5.2	250	3.8	12.5	135
3,629 / 8,000	1.1	3.6	300	3.1	10.5	165
4,535 / 10,000	0.9	3.0	400	2.4	7.0	210

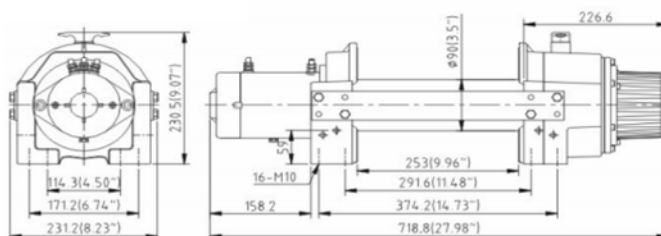
### ► Line Pull And Rope Capacity

MODEL	DP-10000	
Layer of Wire Rope	Line Pull kg / lb	Total Rope on the Drum m / ft
1 <sup>st</sup> Layer	4,535 / 10,000	7.5 / 25
2 <sup>nd</sup> Layer	3,772 / 8,315	16.4 / 54
3 <sup>rd</sup> Layer	3,230 / 7,120	26.9 / 88
4 <sup>th</sup> Layer	2,824 / 6,225	38.9 / 128
5 <sup>th</sup> Layer	2,508 / 5,530	40 / 131

### ► Standard Accessories

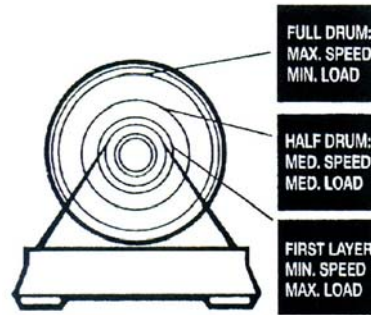
Hand-held remote switch w/5m (17') cord, 4 way roller fairlead, Handsaver bar

### ► DIMENSION



► **How the winch is rated**

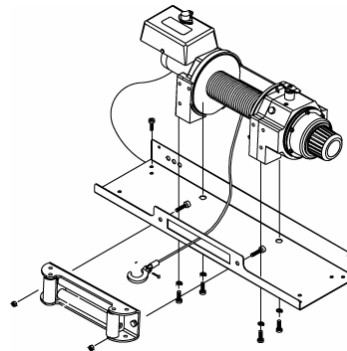
Load and speed vary according to how much wire rope is on the drum. The first layer of wire rope on the drum delivers the slowest speed and the maximum load. A full drum delivers the maximum speed and the minimum load. For this reason, winches are rated on their performance first layer of wire rope on the drum.



**III. Installation**

Before using the winch, make sure all electrical Components Have no corrosion or defect; the environment should be clear and dry.

Voltage drop from the battery connections to the winch Must not exceed 10% of the nominal voltage under normal operating condition.



► **Mounting**

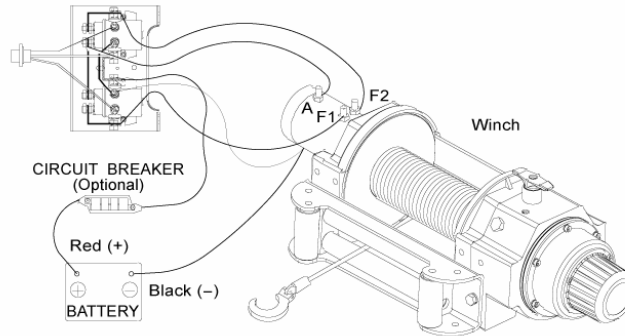
1. It is very important to the winch mounted on a flat and hard surface in order to make sure the motor, drum and gearbox housing are aligned correctly.
2. It is recommended that you use a mounting channel to prevent to the possibility of damage to the winch or vehicle.
3. It is also recommended that a roller fairlead be fitted to prevent excessive wear of the wire rope.
4. Sixteen 16) M10x1.50 pitch 8.8 grade high tensile steel bolts must be used in order to sustain the load imposed on the winch mounting.

► **Battery cable wiring diagram**

Battery cable specification:

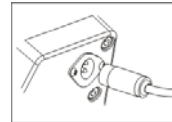
Model		DP-10000
Control Type		Detachable solenoid pack
Volt	12V or 24V	Red cable: 2 AWG x 72" (1.83 m)
		Black cable: 2 AWG x 72" (1.83 m)

1. Attach the black cable (earth) firmly to the chassis of the vehicle or to the negative(-)battery terminal.
2. Attach the red cable to the circuit breaker, connect the other end to the positive(+) battery terminal.
3. The circuit breaker can be fitted as optional.



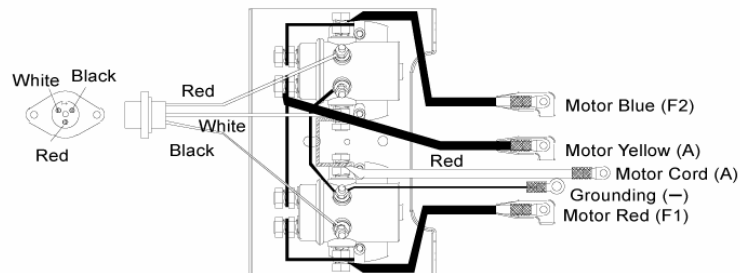
► **Switch Connection**

1. A hand-held remote switch with  $\frac{1}{12}$ " x 3c x 10' ( $\phi$  2.0 mm x 3c x 3m) Cord supplied
2. Open the dust-proof cover of the winch, then insert the switch plug into the socket (fig3).



(Fig3)

► **Detachable Solenoid Pack Wiring Diagram**



## **IV. Operation**

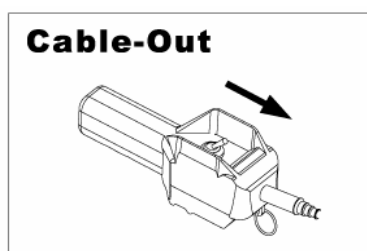
### **►Precaution**

- ⚠ Check all safety and environmental conditions prior and during use.
- ⚠ A wire rope should be replaced if it shows signs of excessive wear, broken wires, corrosion or any other defects.
- ⚠ The operator must remain with the winch when is being operated.
- ⚠ The winches duty rating is S 3 (intermittent-periodic)
- ⚠ If the winch fails in pulling a load under normal conditions, stop the operation within 30 seconds otherwise motor damage may occur.
- ⚠ Ensure that winch is connected to the correct voltage.
- ⚠ Check that the clutch lever is in the “Engaged” position during and after use .
- ⚠ Remove the pendant from the winch when not in use.
- ⚠ Do not wrap the wire rope around load and hook to it.
- ⚠ Keep hands and clothes away from the winch, wire rope, and fairlead.
- ⚠ Never unplug the pendant when winching a load.
- ⚠ Before use, ensure that you are familiar with all winch operations (winch speeds & direction).
- ⚠ To avoid insufficient power when winching a load, the vehicle should be running and in neutral.
- ⚠ Keep the pendant cord clear of the winch cable at all times.
- ⚠ If noise or vibration occurs when running, stop the winch immediately and return it for repair.

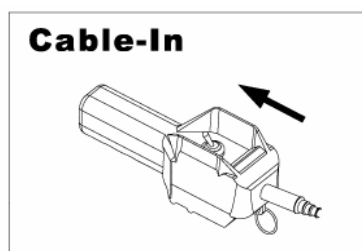
### **►Cable-in/ Cable-out Operation**

- 1). To determine “Cable - Out”, depress ↑ button (fig.4)
- 2). To determine “Cable - In” depress ↓ button (fig.5)

To stop winching, release the button



**(Fig4)**



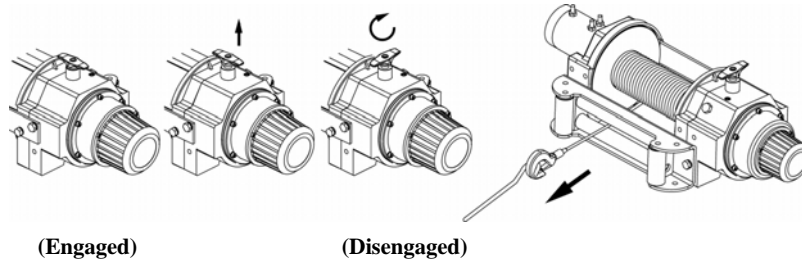
**(Fig5)**

► **Free Wheel (Clutch) Function**

The clutch allows rapid unspooling of the wire rope for hooking onto a load or anchor points and is operated by a clutch handle.

The clutch handle must be in the “Engaged” position before winching.

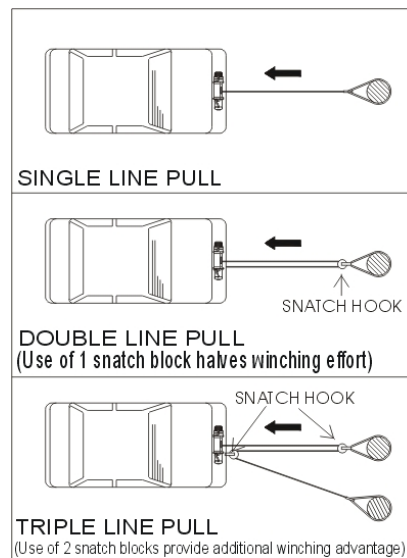
- 1).To disengage the clutch lift the clutch handle up and turn it at 90° clockwise rotation to the “Disengaged” position, wire rope can now be free spooled on the drum.
- 2).To engage the clutch lift the clutch handle up and turn it at 90° counter-clockwise rotation to the “Engaged” position.
- 3).If a clutch handle can’t be properly locked in the “Engaged” position, rotate the drum to make the clutch couple to the gear train .
- 4).Wear leather gloves and use a handsaver bar when guiding the wire rope out of the drum



► **Recovery Procedures**

Followings are some safety tips to get out of trouble during a recovery.

- 1).Using a snatch block will increase the capacity, but the speed will decrease accordingly.
- 2).Experience has shown the best wire rope service is obtained when the maximum fleet angle is not more than 15 degree. Keep the wire rope as close as possible to the center line of the anchor point
- 3).It is the best to work with the most of wire rope unreeled from the drum to get more pulling power , but a minimum of five(5) wraps of wire rope should be wound around the drum to support the rated load.



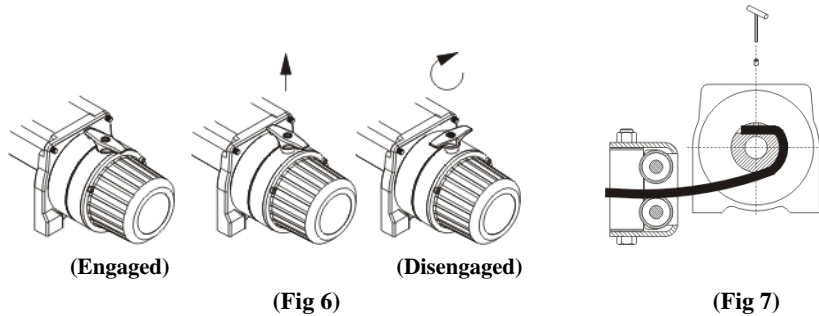


## V. Maintenance

### ► Cable Replacement

- Never use a 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.

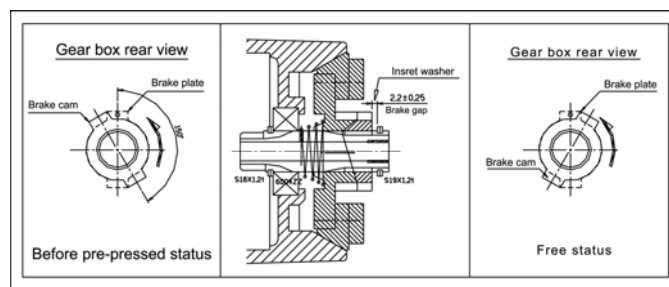
- 1). Disengage the clutch (Fig6)
- 2). Spool the entire wire rope, and then remove it from the drum.
- 3). Place the replacement wire rope through the fairlead opening, pass below the drum, and insert it into the hole on the drum core. (Fig7)
- 4). Tighten the screw downwards to secure the wire rope (Fig7).
- 5). Secure a clevis hook to the wire rope by using a clevis pin and cotter pin.



### ► Brake adjustment

When the brake wears to the point that the load begins to slip. The brake can be adjusted as follows:

- 1). Loosen the bolt on the brake cover and take out c-rings
- 2). Insert few washers to maintain the brake spacer between to be  $2.2 \pm 0.25$  mm
- 3). Make sure to keep the brake plate counter-clockwise by 150 – 180 degree



► **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 is necessary after repair or disassembly use a marine type grease.

► **Maintenance Schedule**

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

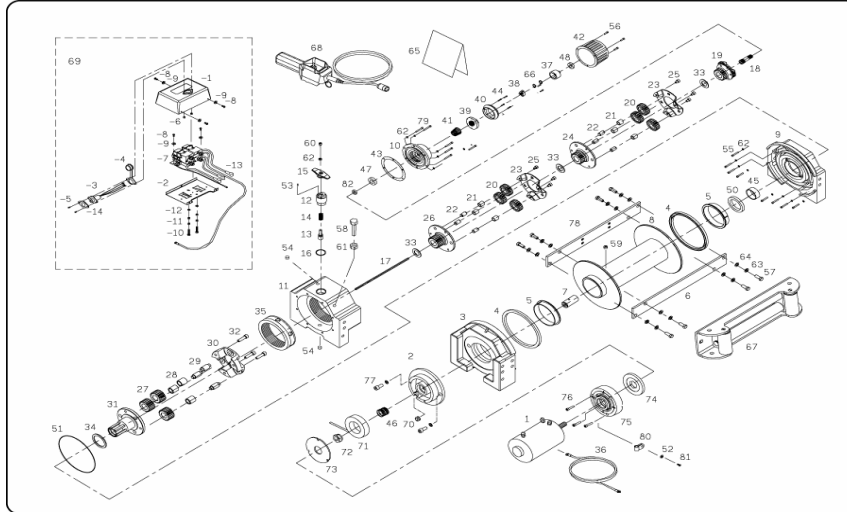
Classification of check			Checking item	Checking method	Checking reference	
Daily	Periodical					
	One month	Three month				
○			Installation	Loosening and center run-out of foundation	Checking of installing bolts	Existence of abnormalities
○			Switch	Working	Manual	Reasonable actuation
		○		Wearing of contact point	Decomposition checking	To be free from noticeable wear and damage
○			Wire rope	Breaking of base wire	Visual	Less than 10%
○	○			Decreasing of diameter	Visual, measuring(one month)	7% of nominal diameter max
○				Deforming or corrosion	Visual	To be not noticeable
○				Fastening condition of end	Visual	To be sufficient for hanging up of load
		○	Clutch	Wearing of spring	Decomposition checking	To be free from noticeable wear and damage
		○	Motor	Staining, damage	Decomposition checking	Existence of abnormalities
		○	Brake	Wearing of disc	Decomposition checking	To be free from noticeable wear and damage
○				Performance	Visual	Reasonable actuation
		○	Gear	Damage, wearing	Decomposition checking	To be free from noticeable wear and damage

## VI. Trouble Shooting

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

Symptom	Possible Cause	Remedy
Winch will not operate	Cut circuit	Check battery cable.
	Weak battery	Recharge or replace battery (at least 650CCA)
	Damaged over load protector	Replace over load protector
	Bad connection of wiring	Reconnect tightly
	Damaged solenoid	Replace solenoid
	Cut circuit on switch	Replace switch
	Damaged motor or worn carbon brush. Lost motor wiring.	Replace motor or carbon brush Secure wiring
Motor runs in one direction.	Broken wiring or bad connection	Reconnect or replace wiring
	Damaged or stuck solenoid	Replace solenoid
	Switch inoperative	Replace switch
	Lost wiring.	Secure wiring.
Drum will not free spool.	Clutch not disengaged	Disengage clutch
	Damaged 1 <sup>st</sup> shaft	Replace 1 <sup>st</sup> shaft
	Damaged output shaft	Replace output shaft
No brake	Damaged block A&B	Replace block A&B
	Damaged gear box	Replace gear box
	Missed snatch ring	Replace snatch ring
	Oil leakage at brake	Cure oil leakage
	Damaged or inoperative spiral spring	Replace and position spiral spring
	Incorrect paying-out direction of wire rope	Correct the paying-out direction
Too long brake distance	Worn or damaged brake disc	Replace or adjust brake disc
	Oil leakage at brake.	Cure oil leakage
Brake stuck	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 brake
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 gear box
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 For DP-10000



PN.	Description	Q'ty	PN.	Description	Q'ty
1	Motor 4.6HP 12V	1	50	Oil seal	1
2	Motor 3.0HP 24V	1	51	O-ring	1
3	Motor flange	1	52	O-ring	1
4	Motor base	1	53	Spring pin	1
4	Drum bushing	2	54	Cap bolt	2
5	Anti-dust ring	2	55	Hex bolt	8
6	Front tie bar	1	56	Hex bolt	3
7	Socket	1	57	Hex bolt	8
8	Drum	1	58	Nylon hex. bolt	1
9	Gear box base	1	59	Hex bolt	1
10	Gear box A	1	60	Hex bolt	1
11	Gear box	1	61	Nut	1
12	Clutch sleeve	1	62	Spring washer	15
13	Clutch lever	1	63	Spring washer	8
14	Clutch spring	1	64	Plain washer	8
15	Clutch handle	1	65	Mounting board	1
16	Plain washer	1	66	Retaining ring	2
17	1st shaft	1	67	Roller fairlead	1
18	1st pinion	1	68	Remote switch ass'y	1
19	1st stage carrier	1	69	Detachable solenoid pack 12V	1
20	1st planet gear	6	70	Detachable solenoid pack 24V	1
21	1st shaft bushing	6	-1	Upper cover	1
22	1st planet gear pin	6	-2	Down cover	1
23	1st driving plate	2	-3	Connector ass'y	1
24	3rd shaft	1	-4	Anti-water glove	1
25	Hex bolt	6	-5	Cross screw	2
26	2nd shaft	1	-6	Nut	2
27	2nd planetary gear	3	-7	Solenoid wiring 12V	1
28	Bearing	3	-8	Solenoid wiring 24V	2
29	2nd planet gear pin	3	-8	Hex. cross bolt	5
30	2nd driving plate	1	-9	Dented washer	5
31	Output shaft	1	-10	Hex bolt	2
32	Hex bolt	3	-11	Nut	4
33	Plain washer	3	-12	Spring washer	2
34	Plain washer	1	-13	Cord gland	3
35	2nd ring gear	1	-14	Socket packing	1
36	Grounding cable	1	70	Cap	1
37	Braking clutch base	1	71	brake coil	1
38	Brake cam	1	72	Transmitting sleeve	1
39	Brake pad	1	73	Conductor disc	1
40	Cone brake disk	1	74	Brake disc	1
41	Spiral spring	1	75	Motor fix plate	1
42	Brake cover	1	76	Hex bolt	3
43	Gasket	1	77	Hex bolt	2
44	Hex bolt	6	78	Rear tie bar	1
45	Bearing	1	79	Hex bolt	6
46	Plain washer	1	80	Cap	1
47	Bearing	1	81	Cross screw	1
48	Bearing	1	82	Oil seal	1
49	Spring washer	2			

## Limited Warranty

This Limited Warranty is given by the Comeup Industries Inc. (the "Seller") to the original purchaser (the "Purchaser") of a **COME-UP** 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, motor and electric parts 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 **COME-UP** 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.