COME-UP WINCH

Model : ATV-3000
UTV-4000

INSTRUCTION MANUAL

ATV / UTV WINCH

TÜV CERT
ISO-9001:2000

CE

ATV/UTV WINCH

Thank you for purchasing a COME UP. 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.

I. General Safety Precautions

WARNING: FAILURE TO READ AND FOLLOW THE SAFETY INSTRUCTIONS IN THIS OWNER'S MANUAL BEFORE INSTALLING OR USING YOUR ELECTRIC WINCH COULD RESULT IN DAMAGE TO YOUR WINCH AND SERIOUS OR FATAL INJURY!!

- ⚠ Check all safety and environmental conditions prior and during use.
- ⚠ Before use, ensure that you are familiar with all winching performance and operation such as speed & direction.
- ⚠ A wire rope should be replaced if it shows signs of excessive wear, broken wires, corrosion or any other defects.
- ⚠ The winches duty rating is S3 (intermittent – periodic)
- ⚠ If the winch fails to pull a load under normal conditions, stop the operation within 30 seconds otherwise motor damage may occur.
- ⚠ Ensure that the winch is connected to the correct voltage of 12VDC only.
- ⚠ Check that the freespool shifter is in the "Engaged" position during and after use.
- ⚠ Remove the remote control from the winch when not in use.
- ⚠ Do not wrap the wire rope around the load and back onto it self. Always use a strap to ensure that the wire rope does not fray or kink.
- ⚠ Keep hands and clothes away from the winch, wire rope, and fairlead during operation..
- ⚠ Never unplug the remote control and battery leads when winching a load.
- ⚠ To avoid insufficient power when winching a load, the vehicle should be running and in neutral.
- ⚠ When winching a heavy load, lay a heavy blanket or jacket over the wire rope near to the hook end
- ⚠ If excessive noise or vibration occurs when running, stop the winch immediately and return it for repair.
- ⚠ If a freespool can't be properly locked in the "Engaged" position, rotate the drum to have the freespool coupled to the gear train.

⚠ WARNING

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. The rated line pull of the winch must be powerful enough to overcome the added resistance caused by whatever the vehicle is stuck in.
5. Never operate the winch under water.
6. Operate the winch cable in and cable out at no load after a winch was ingressed by water.

II. Performance Data

▶Specifications

Model			ATV-3000	UTV-4000
Line Pull (first layer)			1,360 kg / 3,000 lb	1,814 kg / 4,000 lb
Line Speed (first layer, no load)			7.6 mpm / 24.9 fpm	6.0 mpm / 19.7 fpm
Amp. Draw	12V		230A	230A
Motor	Type		Permanent magnet	
	Input	12V	800 w / 1.0 hp	800 w / 1.0 hp
Gear Train	Type		3 stage planetary	
	Ratio		145:1	184:1
Freespool			Sliding shaft gear	
Brake			Dynamic and mechanical	
Control			Remote switch & trigger switch	Remote switch
Wire Rope	Type		A7 x 19 aircraft galvanized	
	Length		15.2 m / 50 ft	15.2 m / 50 ft
	Size		4.8 mm / 3/16 in	5.5 mm / 7/32 in
Drum size			55mm×75mm	55mm×119mm

▶Line Pull and Rope Capacity

Model		ATV-3000	UTV-4000
1st layer	Line pull (kg / lb)	1,363 / 3,000	1,814 / 4,000
	Line speed (mpm / fpm)	2.6 / 8.5	2.6 / 8.5
	Rope cap. (m / ft)	2.6 / 8.5	3.3 / 10.8
2nd layer	Line pull (kg / lb)	1,170 / 2,590	1,694 / 3,735
	Line speed (mpm / fpm)	2.9 / 9.5	3.0 / 9.8
	Rope cap. (m / ft)	5.7 / 18.7	7.2 / 23.6
3rd layer	Line pull (kg / lb)	1,030 / 2,270	1,446 / 3,188
	Line speed (mpm / fpm)	3.3/10.8	3.5 / 11.5
	Rope cap. (m / ft)	9.2 / 30.2	11.9 / 39.0
4th layer	Line pull (kg / lb)	920 / 2,030	1,261 / 2,780
	Line speed (mpm / fpm)	3.8	4.0 / 13.1
	Rope cap. (m / ft)	13.1/ 43	15.2 / 50
5th layer	Line pull (kg / lb)	830 / 1,830	*
	Line speed (mpm / fpm)	4.2	*
	Rope cap. (m / ft)	15.2 /50	*

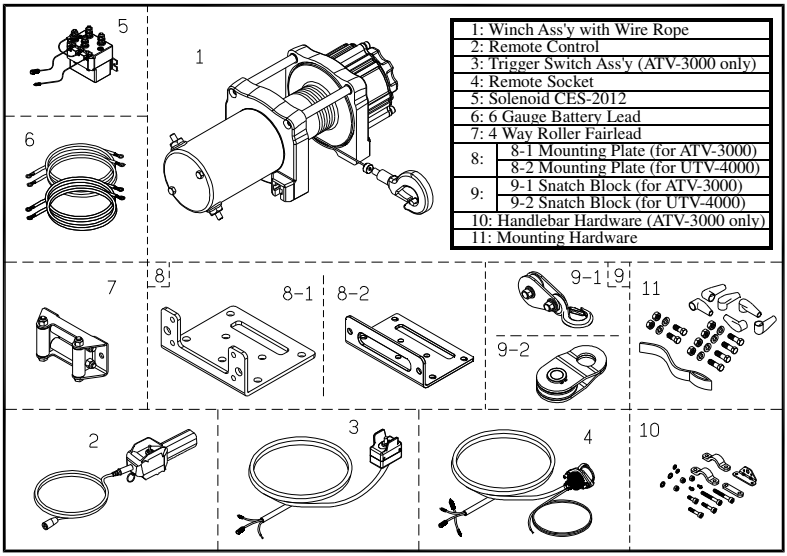
▶Line Speed and Amp. Draw

(First layer of wire rope on the drum)

Model		**ATV-3000**			**UTV-4000**		
Line Pull		**Line Speed**		**Amp.**	**Line Speed**		**Amp.**
kg	lb	mpm	fpm	12V	mpm	fpm	12V
0	0	7.6	24.9	15	6.0	19.7	20
230	500	6.3	20.7	40	3.9	12.8	45
450	1,000	4.9	16.1	70	3.4	11.2	70
680	1,500	4.3	14.1	100	3.1	10.2	90
900	2,000	3.7	12.1	140	2.9	9.5	120
1,140	2,500	3.1	10.2	180	2.7	8.9	150
1,363	3,000	2.5	8.2	230	2.4	7.9	180
1,588	3,500	*	*	*	2.2	7.2	210
1,814	4,000	*	*	*	2.0	6.6	230

Your winch will pull your ATV/UTV up or down in a ramp, it also help another ATV/UTV or a load if it is anchored in a stationary position.

▶Main Components

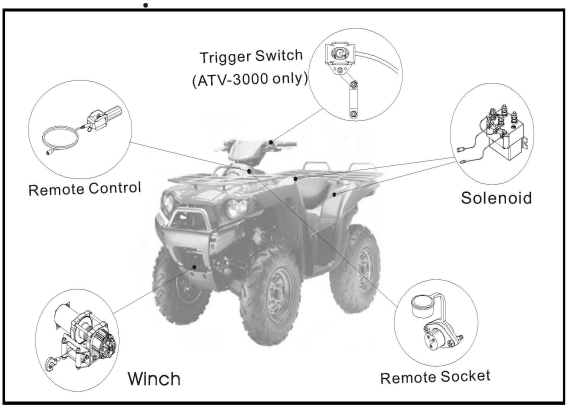


1: Winch Ass'y with Wire Rope	
2: Remote Control	
3: Trigger Switch Ass'y (ATV-3000 only)	
4: Remote Socket	
5: Solenoid CES-2012	
6: 6 Gauge Battery Lead	
7: 4 Way Roller Fairlead	
8:	8-1 Mounting Plate (for ATV-3000)
	8-2 Mounting Plate (for UTV-4000)
9:	9-1 Snatch Block (for ATV-3000)
	9-2 Snatch Block (for UTV-4000)
10: Handlebar Hardware (ATV-3000 only)	
11: Mounting Hardware	

Ⅲ. Installation

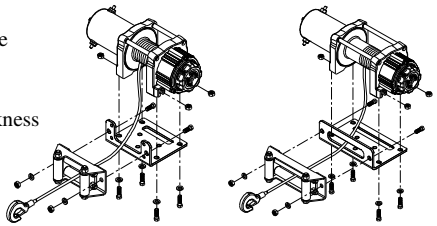
▶Complete kit installation

To install the complete kit, you need to amount the winch, roller fairlead, solenoid, remote socket and trigger switch. Read and understand the following instruction to choose the proper mounting locations.



▶Winch & Roller Fairlead Mounting

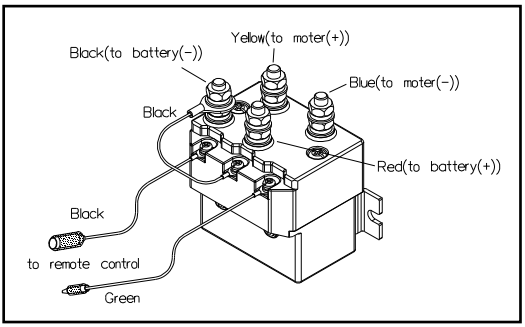
ATV-3000 **UTV-4000**



1. It is very important that the winch shall be mounted on a flat hard surface in order to make sure the motor, drum and gearbox housing are aligned correctly.
2. If a different mounting plate is used, the thickness shall be 5 mm (3/16”). If different hardware is used, it must be SAE grade 8 minimum.
3. Four (4) included M8x 25L Grade 8.8 High Tensile Steel Bolts must be used for securing the winch on the mounting plate in order to sustain the loads imposed on the winch mounting.
4. Two (2) included M8 x 20L Grade 8.8 High Tensile Steel Bolts must be used for securing the roller fairlead on the mounting plate.

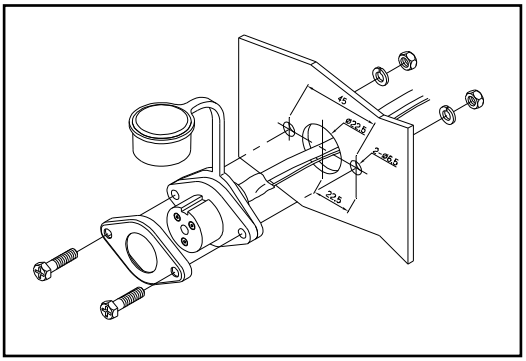
▶Solenoid Mounting

1. It disconnects your winch from the power source when the vehicles is not in use
2. It should be mounted close to the battery and keep the location from all metal structures.



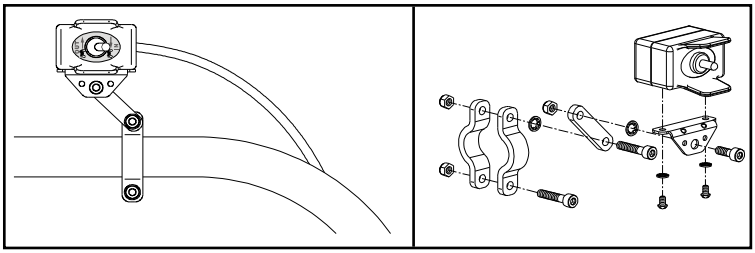
▶Remote Socket Mounting

1.Determine the mounting location for the remote socket.
2.Drill three holes on a plate and install.

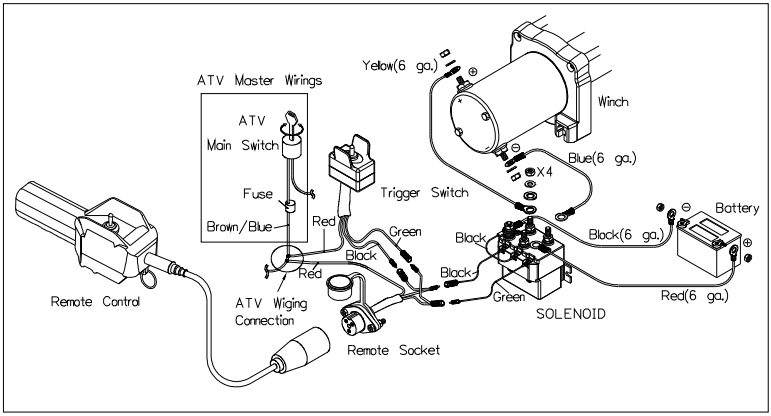


▶Trigger Switch Mounting (ATV-3000 only)

Handlebar mounted trigger switch can be operated without removing your hand from the grip.



▶wiring Diagram



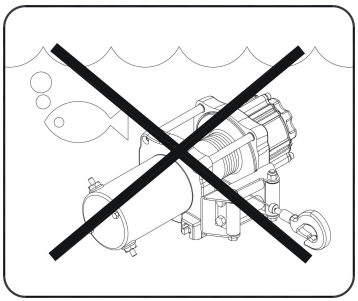
Ⅳ. Operation

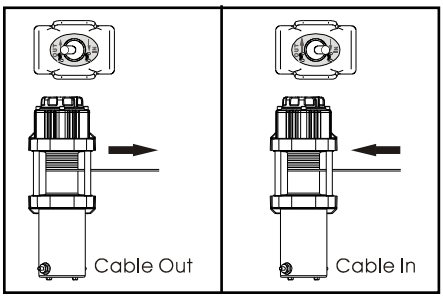
▶Cable In and Out

1). To determine " Cable Out ", trigger to the "Out" position

2). To determine " Cable In ", trigger to the "In" position

3). To stop winching, release the trigger level





▶Freespool Function

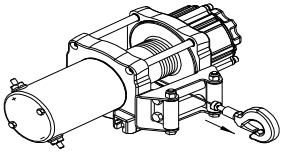
The freespool allows rapid pay-out of the wire rope for hooking onto a load or anchor points and is operated by a freespool shifter located on the end of the winch.

1). To engage the freespool, turn the freespool shifter counter-clockwise to the “Engaged” position. The winch is now ready for pulling.

2). To disengage the freespool, turn the freespool shifter clockwise to the “Disengaged” position. Wire rope can now be free spooled off the drum.

(Engaged)

(Disengaged)



V. Maintenance

▶Wire Rope Replacement

Before installing a new wire rope, wrap the end of the wire rope with tape to prevent fraying. Wind the wire rope on the drum by pull a force to keep the tension constant. Never use a wire rope of a different size or material and only use aircraft grade wire ropes.

1). Disengage the freespool.

2). Spool the old wire rope, and then remove it from the drum.

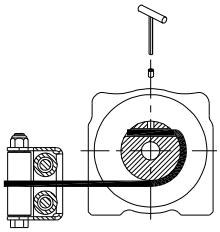
3). Have horizontal roller and bolts apart from the roller fairlead, then place the replacement wire rope through the roller fairlead throat, pass below the drum, and insert it into the hole on the drum core.

4). Use a hex wrench to tighten the screw downwards to secure the wire rope.

5). Tighten the horizontal roller and bolt of roller fairlead

6). Wear leather gloves and use a strap when guiding the wire rope off the drum.

(Disengaged)



7). It is very important that the winch shall be mounted on a flat surface , with the wire rope feeding form the bottom of the drum.

8). To rewind wire rope on the drum correctly , it is necessary to keep a slight load on the wire rope while cable in.

▶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

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.

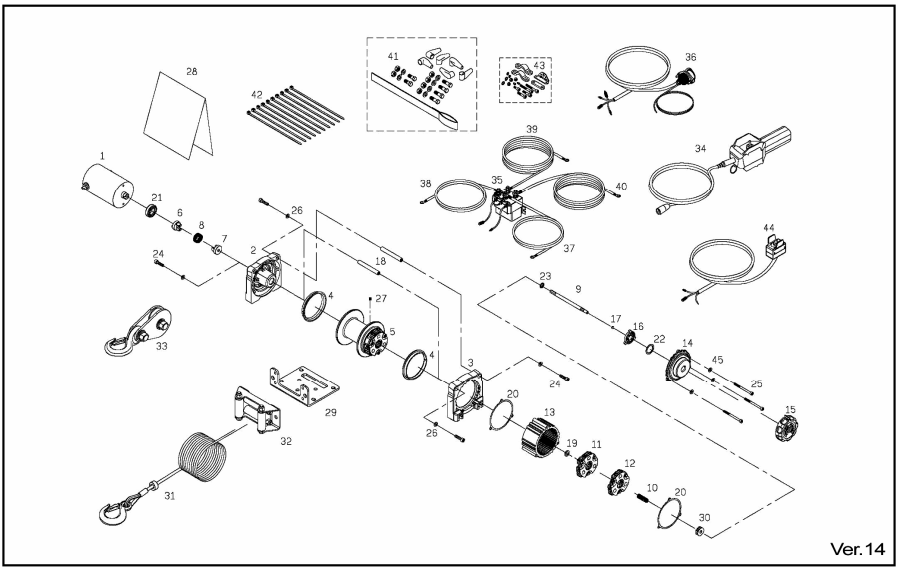
Ⅵ. Trouble Shooting

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

Symptom	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 free spool.	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

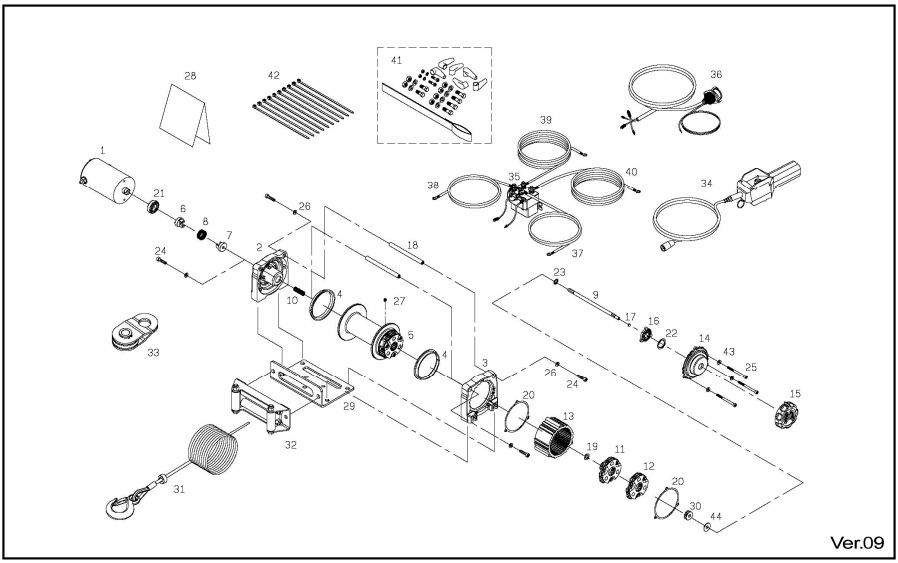
Ⅶ. Replacement Parts List

▶ATV-3000



No.	Description		No.	Description		No.	Description	
1	Motor	1	16	Freespool block	1	31	Wire rope	1
2	Motor support rack	1	17	Friction block	1	32	Roller fairlead	1
3	Gearbox support rack	1	18	Tie bar	2	33	Snatch block	1
4	Drum bushing	2	19	Plain washer	1	34	Remote control	1
5	Drum	1	20	Anti-leakage packing	2	35	Solenoid	1
6	Connector A	1	21	Bearing	1	36	Remote socket	1
7	Connector B	1	22	Dented retaining ring	1	37	Battery lead	1
8	Brake spring	1	23	Dented retaining ring	1	38	Battery lead	1
9	1st shaft	1	24	Hex bolt	4	39	Battery lead	1
10	Pressed spring	1	25	Hex bolt	3	40	Battery lead	1
11	2nd stage carrier	1	26	Spring washer	4	41	Mounting hardware	1
12	1st stage carrier	1	27	Screw	1	42	Cable tie	10
13	Ring gear	1	28	Foot print	1	43	Handlebar hardware	1
14	Freespool base	1	29	Base plate	1	44	Trigger switch	1
15	Freespool shifter	1	30	1st pinion	1	45	Spring Packing	3

▶UTV-4000



No.	Description		No.	Description		No.	Description	
1	Motor	**1**	**16**	Freespool block	**1**	**31**	Wire rope	**1**
2	Motor support rack	**1**	**17**	Friction block	**1**	**32**	Roller fairlead	**1**
3	Gearbox support rack	**1**	**18**	Tie bar	**2**	**33**	Snatch block	**1**
4	Drum bushing	**2**	**19**	Plain washer	**1**	**34**	Remote control	**1**
5	Drum	**1**	**20**	Anti-leakage packing	**2**	**35**	Solenoid	**1**
6	Connector A	**1**	**21**	Bearing	**1**	**36**	Remote socket	**1**
7	Connector B	**1**	**22**	Retaining ring	**1**	**37**	Battery lead	**1**
8	Brake spring	**1**	**23**	Ring	**1**	**38**	Battery lead	**1**
9	1st shaft	**1**	**24**	Hex bolt	**4**	**39**	Battery lead	**1**
10	Pressed spring	**1**	**25**	Hex bolt	**3**	**40**	Battery lead	**1**
11	1st stage carrier	**1**	**26**	Spring washer	**4**	**41**	Mounting hardware	**1**
12	2nd stage carrier	**1**	**27**	Hex bolt	**1**	**42**	Cable tie	**10**
13	Ring gear	**1**	**28**	Foot print	**1**	**43**	Spring washer	**3**
14	Freespool base	**1**	**29**	Base plate	**1**	**44**	Plain washer	**1**
15	Freespool shifter	**1**	**30**	1st pinion	**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, 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 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 authorized 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.