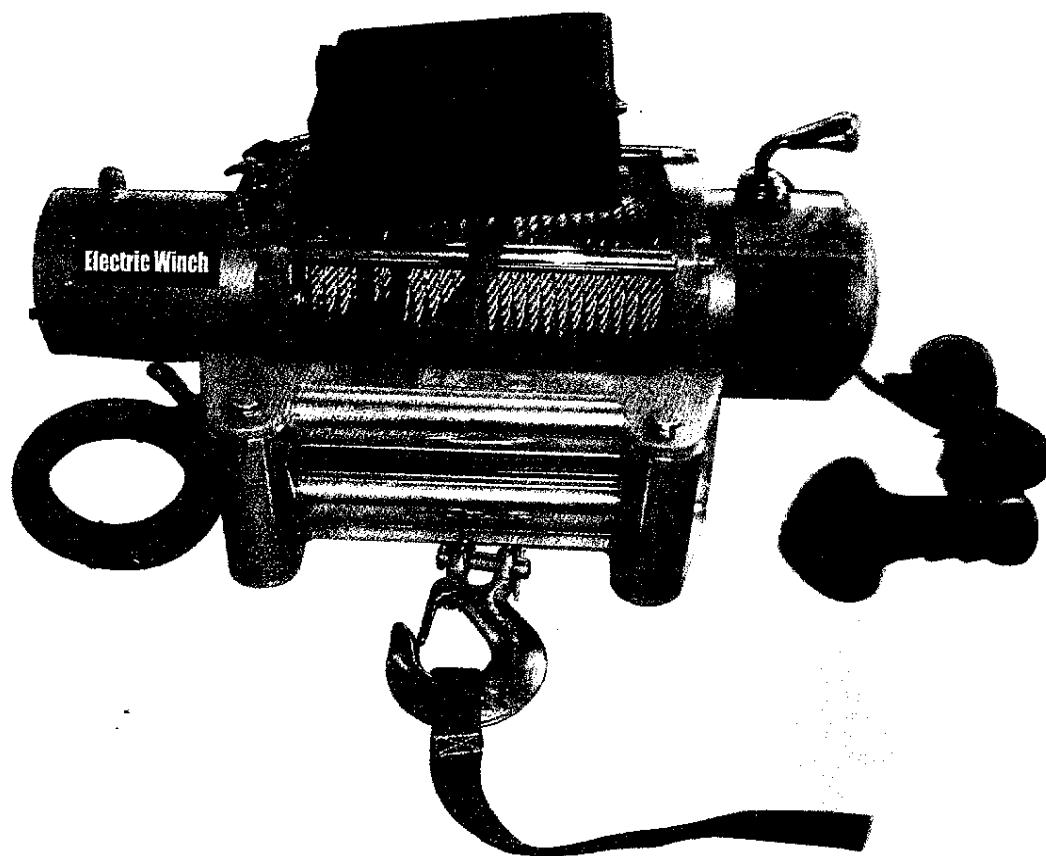


Electric Winch



VEHICLE RECOVERY ELECTRIC WINCH

SAFETY PRECAUTIONS

Warning! Observe safety precautions for personal safety and the safety of others. Improper equipment operation may cause personal injury and equipment damage.

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

1. Dress Properly:

- Don't wear loose clothing or jewellery. They can be caught in moving parts.
- Wear leather gloves when handling winch cable. Do not handle cable with bare hands as broken wires can cause injuries.
- Non-skid footwear is recommended.
- Protective hair covering to contain long hair.

2. Keep a Safe Distance:

- Ensure that all persons stand well clear of winch cable and load during winch operation, 1.5 times the cable length recommended. If a cable pulls loose or breaks under load it can lash back and cause serious personal injury or death.
- Don't step over the cable.
- All visitors and onlookers should be kept away from the work area.
- Keep proper footing and balance at all times.

3. Don't Abuse the Cord:

- Never carry your winch by the cord or yank it to disconnect it from the receptacle.
- Keep cord from heat, oil and sharp edges.

4. Don't Overwork the winch:

- If the motor becomes uncomfortably hot to touch, stop and let it cool for a few minutes.
- Don't maintain power to the winch if the motor stalls.
- Don't exceed maximum line pull ratings shown in tables. Shock loads must not exceed these ratings.

5. Avoid Unintentional Starting:

- Winch clutch should be disengaged when not in use and fully engaged when in use.

6. Check Damaged Parts:

- Before using, you should check your winch carefully. Any part that is damaged should be properly repaired or replaced by an authorized service centre.

7. Repair Your Winch:

- When repairing, use only identical replacement parts or it may cause considerable danger for the user.

8. Respool the Cable:

- Leather gloves must be worn while respooling. To respool correctly, it is necessary to keep a slight load on the cable. Hold the cable with one hand and the remote control switch with the other. Start as far back and in the centre as you can. Walk up keeping load on the cable as the winch is powered in.
- Do not allow the cable to slip through your hand and do not approach the winch too closely.
- Turn off the winch and repeat the procedure until all the cable except 1m is in.
- Disconnect the remote control switch and finish spooling in cable by rotating the drum by hand with clutch disengaged.
- On hidden winches, spool in cable under power but keep hands clear.

Warning: The use of any other accessory or attachment other than those recommended in the instruction manual may present a risk of personal injury.

VEHICLE RECOVERY ELECTRIC WINCH

WINCH OPERATION WARNINGS

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

- 1.** The uneven spooling of cable, while pulling a load, is not a problem, unless there is a cable pile up on one end of the drum. If this happens reverse the winch to relieve the load and move your anchor point further to the centre of the vehicle. After the job is done you can unspool and rewind for a neat lay of the cable.
- 2.** Store the remote control switch inside your vehicle where it will not become damaged, inspect it before you plug it in.
- 3.** When ready to begin spooling in, plug in remote control switch with clutch disengaged, do not engage clutch with motor running.
- 4.** Never connect the hook back to the cable. This causes cable damage. Always use a sling or chain of suitable strength.
- 5.** Observe your winch while winching, if possible while standing at a safe distance. Stop the winching process every metre or so to assure the cable is not pulling up in one corner. Jamming the cable can break your winch.
- 6.** Do not attach tow hooks to winch mounting apparatus. They must be attached to vehicle frame.
- 7.** The use of a snatch block will aid recovery operations by providing a doubling of the winch capacity and a halving of the winching speed, and the means to maintain a direct line pull to the centre of the rollers. When double loading during stationary winching, the winch hook should be attached to the chassis of the vehicle.
- 8.** Ensure rated "D" or bow shackles are used in conjunction with an approved tree trunk protector to provide a safe anchor point.
- 9.** When extending winch cable, ensure that at least five wraps of cable remain on drum at all times. Failure to do this could result in the cable parting from the drum under load. Serious personal injury or property damage may result.
- 10.** All winches are provided with a Red Cable marking to identify that 5 cable wraps remain on the Winch drum when this mark appears at the rollers. No recovery should be attempted beyond this marking.
- 11.** Since the greatest pulling power is achieved on the innermost 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 wraps minimum on the drum - red cable). If this is not practical use a snatch block and double line arrangement.
- 12.** 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.
- 13.** Neat, tight spooling avoids cable binding, which is caused when a load is applied and the cable is pinched between the others. If this happens, alternatively power the winch in and out. Do not attempt to work a bound cable under load, free by hand.
- 14.** Apply blocks to wheels when vehicles are on an incline.
- 15. Battery:**
 - Be sure that the battery is in good condition. Avoid contact with battery acid or other contaminants.
 - Always wear eye protection when working around a battery.
 - Have the engine running when using the winch, to avoid flattening the battery.

VEHICLE RECOVERY ELECTRIC WINCH

16. Winch Cable:

- Be sure that the cable is in good condition and is attached properly.
- Do not use the winch if cable is frayed.
- Do not move the vehicle to pull a load.
- Do not replace the cable with a cable of lesser strength.
- The life of the cable is directly related to the use and care it receives. Following its first and subsequent uses, a cable must be wound on to the drum under a load of at least 500lbs (230kg) or the outer wraps will draw into the inner wraps and severely damage the cable during winching. The first winch use should be a familiarisation run while in a relaxed, non-recovery situation. Spool out the cable until the red cable mark appears (about five wraps on the drum), then rewind the cable on to the drum under a load of 500lbs (230kg) 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 reduced cable life.
- 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 overtighten. The locktite will prevent loosening of the screw in arduous conditions. Loctite 7471 Primer and 222 Threadlocker are recommended.

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, the winch itself or cause damaging shock loads.

19. 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 a slack cable may induce a damaging shock load.

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

21. Do not use winch in hoisting applications due to required hoist safety factors and features.

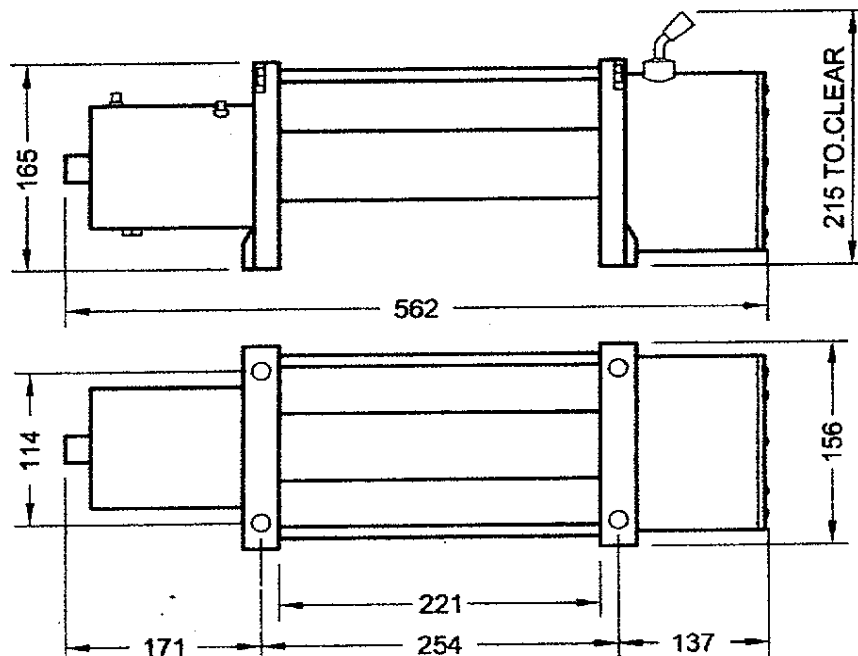
22. Do not use the winch to lift, support or otherwise transport personnel.

VEHICLE RECOVERY ELECTRIC WINCH

INSTALLATION

MOUNTING YOUR WINCH

- 1a) The winch is to be mounted into 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 be mounted on a flat surface so that the three sections (motor, cable drum and gear housing) are properly aligned.
 - c) Before commencing installation ensure the mounting facility being used is capable of withstanding the winches rated capacity.
 - d) The fitment of winches and / or a frontal protection system may affect the triggering of SRS air bags. Check that the mounting system has been tested and approved for winch fitment in the airbag equipped vehicle.
2. Winch mounting frames and / or Frontal Protection Systems are suggested to suit most popular vehicles. Winch frames are packaged with detailed fitting instructions.
 3. Should you wish to manufacture you're own mounting plate the dimensions below will assist. A steel mount plate 6mm thick is recommended. Fasteners should be steel high tensile grade 5 or better. A poorly designed mount may void warranty.
 4. The winch should be secured to the mounting with 3/8" UNC x 1-1/4" stainless steel bolts and spring washers provided.
 5. The roller fairlead is to be mounted so as to guide the rope onto the drum evenly.



LUBRICATION INSTALLATION

All moving parts in the winch are permanently lubricated with high temperature lithium grease at the time of assembly. Under normal conditions factory lubrication will suffice. Lubricate cable 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

Unwind the new cable by rolling it along the ground, to prevent kinking. Remove old cable and observe the manner in which it is attached to the cable drum flange.

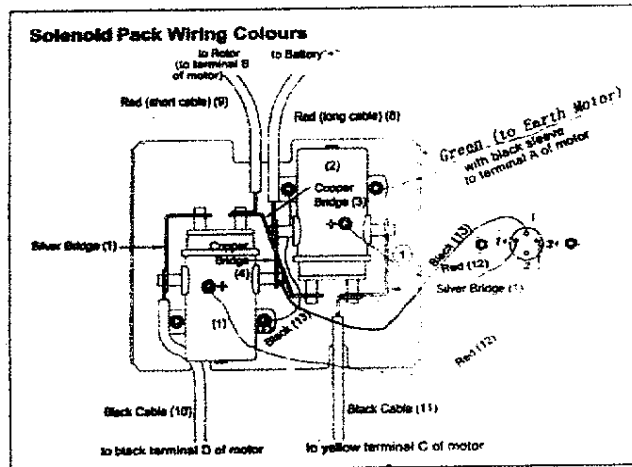
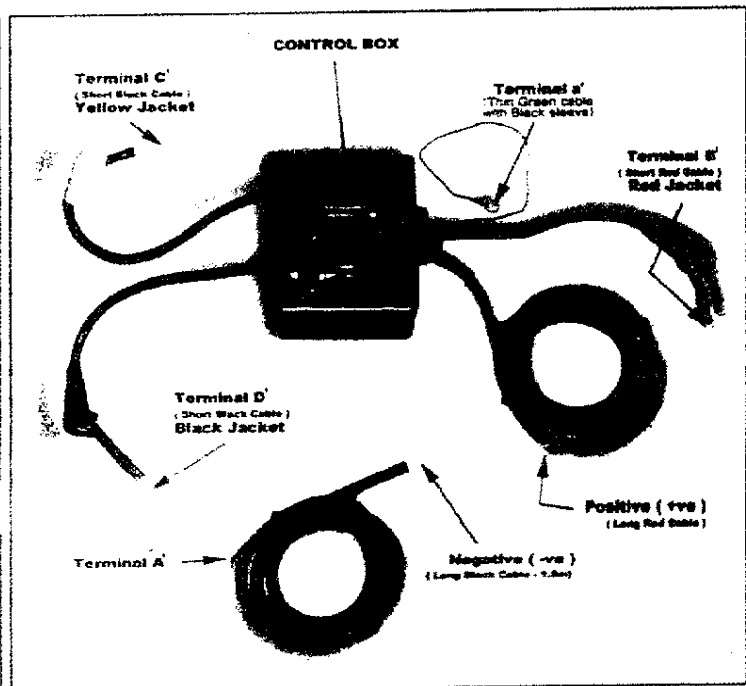
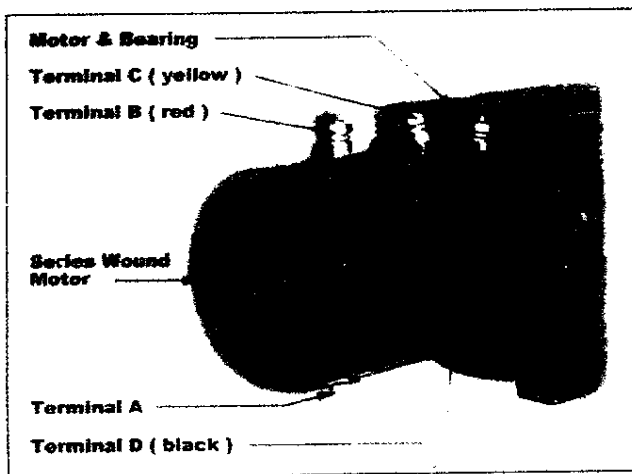
VEHICLE RECOVERY ELECTRIC WINCH

ELECTRICAL CONNECTION

For normal self-recovery work, your existing electrical system is adequate. A fully charged battery and proper connections are essential. Run the vehicle engine during winching operations to keep battery charged.

Pay close attention to proper electrical cable connection as follows (refer to Diagram 1)

1. Short red cable (B') connecting to the red terminal (B) of the motor.
2. Short black cable with yellow jacket (C') connecting to the yellow terminal (C) of the motor.
3. Short black cable with black jacket (D') connecting to the black terminal (D) of the motor.
4. Thin black cable (a') connecting to bottom terminal (A) of the motor.
5. Long black cable (1.8m), one terminal (A') connecting to the bottom terminal (A) of the motor, and the other terminal negative (-) connecting to negative (-) terminal of battery.
6. Long red cable positive (+) connecting to positive (+) terminal of battery.



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 remote control switch and receptacle.
5. In salty environments use a silicone sealer to protect from corrosion.
6. Index the heads of the plate studs into the keyhole slots on the back of the winch.
7. Attach the winch/Adaptor Plate assembly to your trailer hitch, by inserting the trailer hitch ball through the shaped hole in the Adaptor Plate.

VEHICLE RECOVERY ELECTRIC WINCH

WINCH OPERATION

SUGGESTION:

The best way to get acquainted with how your winch operates is to make a few test runs before you actually need to use it. Plan your test in advance. Remember you can hear your winch as well as you can see it operate. Get to recognize the sound of a light steady pull, a heavy pull, and sounds caused by load jerking or shifting. Soon you will gain confidence in operating your winch and its use will become second nature to you.

OPERATING:

1. Ensure the vehicle is secure by applying the parking brake or chocking the wheels
2. Pull out the winch cable the desired length and connect to an anchor point.
The winch clutch allows rapid uncoiling of the cable for hooking onto the load or anchor point. The shifter tab located on the gear housing of the winch operates the clutch as follows:
 - a) To disengage the clutch, move the clutch shifter tab to the "OUT" position. Cable may not be free spooled off the drum.
 - b) To engage the clutch, move the clutch shifter tab into the "IN" position. The winch is now ready for pulling.
3. Recheck all cable rigging before proceeding.
4. Plug in the winch hand control. It is recommended that the winching operation takes place from the driver's position to ensure safe operation.
5. To commence winching operation, start vehicle engine, select neutral in transmission, maintain engine speed at idle.
6. Operate the remote control switch to IN or OUT until the vehicle has been retrieved. Regularly check the winch to ensure cable is winding onto the drum evenly.

Note:

1. Never winch with your vehicle in gear or in park, which would damage your vehicle's transmission.
2. Never wrap the cable around the object and hook onto the cable itself. This can cause damage to the object being pulled, and kink or fray the cable.
3. Keep hands, clothing, hair and jewellery 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, or in line with the cable behind the winch while it is under power. If the cable should slip or brake, it can suddenly whip back towards the winch, causing a hazard for anyone in the area. Always stand well to the side while winding.
6. Don't leave the switch plugged in when winch is not in use.

CHECK THE WINCH CAREFULLY AND THOROUGHLY BEFORE OPERATING!

MAINTENANCE

It is highly recommended that the winch be used regularly (once a month). Simply power the cable out 15m, free spool 5m and then power back in. This will keep all components in good working condition so that the winch can be relied on when needed. Contact your authorised outlet for technical assistance and repairs.

SPARE PARTS:

A comprehensive range of spare parts is available.

Please kindly contact the distributor on the end cover or the local retailer.

VEHICLE RECOVERY ELECTRIC WINCH

WINCHING CAPACITY

1. This winch has a capacity of 8000/8500/9000/9500/12000lbs
2. Pulling capacity is reduced as the incline increases. Recommended safe loads for various inclines are listed in the table below:

Rated Line Pull	10%	20%	40%	60%	80%	100%
8000lb	40160	27200	17200	13280	11360	10240
8500lb	42670	28900	18275	14110	12070	10880
9000lb	42714	28912	18319	14167	12093	10925
9500lb	47690	32300	20425	15770	13490	12160
12000lb	60240	40800	25800	19920	17040	15360

Note:

1. This guide is recommended for average vehicle rolling loads. Some applications may require a larger winch than indicated.
2. The weight the winch could pull perpendicular to the ground with a single line on the first layer of cable on the drum.
3. A 10% grade is a rise of one metre in ten metre.
4. Winch is not intended as a load securing device.

NOTE:

The safety precautions and instructions discussed in this manual can't 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.

VEHICLE RECOVERY ELECTRIC WINCH

8000LBS FEATURES AND SPECIFICATIONS

Single line rated pull	8000Lb(3630kg)
Motor	5.5hp/4.0kw, Series Wound
Control	Remote switch, 12ft(3.7m)lead
Gear train	3 Stage Planetary
Gear reduction ratio	235:1
Clutch	Sliding Ring Gear
Braking Action	Automatic In-The-Drum
Drum size	Diameter 2.52"(64mm) Length 8.82"(224mm)
Cable	78ft of 1/3" diameter (24m of 8.1mm diameter)
Fairlead	4-Way Roller Fairlead
Remote Control	Included
Battery	Recommended: 650CCA minimum for winching
Battery Leads	2 gauge, 72"(1.83mm)
Finish	Black/Dark Grey
Weight	N.W. 88lbs(40kg) G.W. 95lbs(43kg)
Overall dimensions	(LxWxH) 21.3" x 6.3" x 8.6" (562 x 160 x 218mm)
Mounting Bolt Pattern	10.00±0.015" x 4.50±0.010" (254 x 114.3mm)

8000LBS LINE SPEED AND AMP DRAW (FIRST LAYER)

Line Pull	Lbs	NO	4000	6000	8000
	kgs	LADE	1814	2722	3629
Line Speed	ft/min	22	12	9	6.5
	m/min	6.8	3.6	2.8	2.0
Motor Current	amps	80	200	270	330

8000LBS LINE PULL AND CABLE CAPACITY

Layer of cable		1	2	3	4
Rated line pull per layer	Lbs	8000	6540	5550	4750
	Kgs	3630	2970	2520	2160
Cumulative cable capacity	Ft	19.6	42.6	72	78
	m	6	13	22	24

8500LBS FEATURES AND SPECIFICATIONS

Single line rated pull	8500Lb(3856kg)
Motor	5.5hp/4.0kw, Series Wound
Control	Remote switch, 12ft(3.7m)lead
Gear train	3 Stage Planetary
Gear reduction ratio	235:1
Clutch	Sliding Ring Gear
Braking Action	Automatic In-The-Drum
Drum size	Diameter 2.5"(63.5mm) Length 8.8"(224mm)
Cable	78ft of 1/3" diameter (24m of 8.1mm diameter)
Fairlead	4-Way Roller Fairlead
Remote Control	Included
Battery	Recommended: 650CCA minimum for winching
Battery Leads	2 gauge, 72"(1.83mm)
Finish	Black/Dark Grey
Weight	N.W. 84lbs(38kg) G.W. 94lbs(42.5kg)
Overall dimensions	(LxWxH) 21.3" x 6.3" x 8.6" (562 x 160 x 218mm)
Mounting Bolt Pattern	10.00±0.015" x 4.50±0.010" (254 x 114.3mm)

8500LBS LINE SPEED AND AMP DRAW (FIRST LAYER)

Line Pull	Lbs	NO	4000	6000	8000	8500
	kgs	LADE	1814	2722	3629	3856
Line Speed	ft/min	22	12	9	6.5	6.2
	m/min	6.8	3.6	2.8	2.0	1.9
Motor Current	amps	80	200	270	330	380

8500LBS LINE PULL AND CABLE CAPACITY

Layer of cable		1	2	3	4
Rated line pull per layer	Lbs	8500	6900	5845	5100
	Kgs	3856	3130	2650	2310
Cumulative cable capacity	Lbs	19.6	42.6	72	78
	Kgs	6	13	22	24

VEHICLE RECOVERY ELECTRIC WINCH

9000LBS FEATURES AND SPECIFICATIONS

Single line rated pull	9000Lb(4080kg)
Motor	5.5hp/4.0kw, Series Wound
Control	Remote switch, 12ft(3.7m)lead
Gear train	3 Stage Planetary
Gear reduction ratio	218:1
Clutch	Sliding Ring Gear
Braking Action	Automatic In-The-Drum
Drum size	Diameter 2.5"(63.5mm) Length 8.8"(224mm)
Cable	92ft of 5/16" diameter (28m of 8.3mm diameter)
Fairlead	4-Way Roller Fairlead
Remote Control	Included
Battery	Recommended: 650CCA minimum for winching
Battery Leads	2 gauge, 72"(1.83mm)
Finish	Black/Dark Grey
Weight	N.W. 84lbs(38kg) G.W. 94lbs(42.5kg)
Overall dimensions	(LxWxH) 22" x 6.3" x 8.6" (560 x 160 x 218mm)
Mounting Bolt Pattern	10.00±0.015" x 4.50±0.010" (254 x 114.3mm)

9000LBS LINE SPEED AND AMP DRAW (FIRST LAYER)

Line Pull	Lbs	NO	2000	4000	6000	8000	9000
	kgs	LADE	910	1814	2720	3630	4080
Line Speed	ft/min	28.2	15.4	11.5	9.2	7.7	7
	m/min	8.6	4.7	3.5	2.8	2.35	2.15
Motor Current	amps	80	140	220	300	360	390

9000LBS LINE PULL AND CABLE CAPACITY

Layer of cable		1	2	3	4
Rated line pull per layer	Lbs	9000	7320	6175	5340
	Kgs	4080	3320	2800	2420
Cumulative cable capacity	Lbs	16	42	72	92
	Kgs	5	12	21	28

9500LBS FEATURES AND SPECIFICATIONS

Single line rated pull	9500Lb(4300kg)
Motor	5.5hp/4.0kw, Series Wound
Control	Remote switch, 12ft(3.7m)lead
Gear train	3 Stage Planetary
Gear reduction ratio	218:1
Clutch	Sliding Ring Gear
Braking Action	Automatic In-The-Drum
Drum size	Diameter 2.5"(63.5mm) Length 8.8"(224mm)
Cable	92ft of 5/16" diameter (28m of 8.3mm diameter)
Fairlead	4-Way Roller Fairlead
Remote Control	Included
Battery	Recommended: 650CCA minimum for winching
Battery Leads	2 gauge, 72"(1.83mm)
Finish	Black/Dark Grey
Weight	N.W. 84lbs(38kg) G.W. 94lbs(42.5kg)
Overall dimensions	(LxWxH) 21.3" x 6.3" x 8.6" (562 x 160 x 218mm)
Mounting Bolt Pattern	10.00±0.015" x 4.50±0.010" (254 x 114.3mm)

9500LBS LINE SPEED AND AMP DRAW (FIRST LAYER)

Line Pull	Lbs	NO	2000	4000	6000	8000	9500
	kgs	LADE	907	1814	2722	3629	4300
Line Speed	ft/min	28.2	15.4	11.5	9.2	7.7	6.8
	m/min	8.6	4.7	3.5	2.8	2.35	2.1
Motor Current	amps	80	140	220	300	360	410

9500LBS LINE PULL AND CABLE CAPACITY

Layer of cable		1	2	3	4
Rated line pull per layer	Lbs	9500	7700	6500	5700
	Kgs	4300	3480	2940	2580
Cumulative cable capacity	Lbs	19.6	42.6	72	92
	Kgs	6	13	22	28

VEHICLE RECOVERY ELECTRIC WINCH

12000LBS FEATURES AND SPECIFICATIONS

Single line rated pull	12000Lb(5440kg)
Motor	5.5hp/4.0kw, Series Wound
Control	Remote switch, 12ft(3.7m)lead
Gear train	3 Stage Planetary
Gear reduction ratio	265:1
Clutch	Sliding Ring Gear
Braking Action	Automatic In-The-Drum
Drum size	Diameter 2.52"(64mm) Length 8.82"(224mm)
Cable	85ft of 3/8" diameter (26m of 9.5mm diameter)
Fairlead	4-Way Roller Fairlead
Remote Control	Included
Battery	Recommended: 650CCA minimum for winching
Battery Leads	2 gauge, 72"(1.83mm)
Finish	Black/Dark Grey
Weight	N.W. 88lbs(40kg) G.W. 95lbs(43kg)
Overall dimensions	(LxWxH) 21.3" x 6.3" x 8.6" (562 x 160 x 218mm)
Mounting Bolt Pattern	10.00±0.015" x 4.50±0.010" (254 x 114.3mm)

12000LBS LINE SPEED AND AMP DRAW (FIRST LAYER)

Line Pull	Lbs	NO	2000	4000	6000	8000	10000	12000
	kgs	LADE	907	1814	2722	3629	4532	5440
Line Speed	ft/min	21.3	11.5	9.4	7.9	6.5	5.8	4.4
	m/min	6.5	3.5	2.85	2.4	2	1.75	1.35
Motor Current	amps	65	126	175	230	280	355	400

12000LBS LINE PULL AND CABLE CAPACITY

Layer of cable		1	2	3	4
Rated line pull per layer	Lbs	12000	9210	8030	6894
	Kgs	5440	4170	3640	3125
Cumulative cable capacity	Lbs	17	41	71	85
	Kgs	4.8	12	21	26

VEHICLE RECOVERY ELECTRIC WINCH

9000/9500/10000/12000LBS WINCH PARTS LIST

Item No.	Part No.					Description	Qty
	8000lbs	8500lbs	9000lbs	9500lbs	12000lbs		
1	0109/10-01	0107/08-01	0107/08-01	0107/08-01	0107/08-01	Gear-Box End Cover	1
2	0109/10-02	0107/08-02	0111/12-02	0111/12-02	0115/16-02	Inner Gear	1
3	0107/08-24	0107/08-24	0107/08-24	0107/08-24	0107/08-24	Gear Box-Tube	1
4	0107/08-04	0107/08-04	0107/08-04	0107/08-04	0107/08-04	Clutch Handle Ass y	1
5	0107/08-06	0107/08-06	0107/08-06	0107/08-06	0115/16-06	Clutch Gear	1
6	0107/08-07	0107/08-07	0107/08-07	0107/08-07	0107/08-07	Drum Ass y	1
7	0107/08-08	0107/08-08	0107/08-08	0107/08-08	0107/08-08	Tie Bar	2
8	0107/08-09	0107/08-09	0107/08-09	0107/08-09	0115/16-09	Stator (12V)	1
	0107/08-09A	0107/08-09A	0107/08-09A	0107/08-09A	0115/16-09A	Stator (24V)	1
9	0107/08-10	0107/08-10	0107/08-10	0107/08-10	0107/08-10	Carbon Brush Ass y	1
10	0107/08-11	0107/08-11	0107/08-11	0107/08-11	0107/08-11	Motor End Cover	1
11	0107/08-12	0107/08-12	0107/08-12	0107/08-12	0115/16-12	Rotor (12V)	1
	0107/08-12A	0107/08-12A	0107/08-12A	0107/08-12A	0115/16-12A	Rotor (24V)	1
12	0107/08-13	0107/08-13	0107/08-13	0107/08-13	0107/08-13	Link Screw M8x25	4
13	0107/08-14	0107/08-14	0107/08-14	0107/08-14	0107/08-14	Motor Base	1
14	0107/08-15	0107/08-15	0107/08-15	0107/08-15	0107/08-15	Nylon Bearing	2
15	0107/08-16A	0107/08-16A	0107/08-16A	0107/08-16A	0107/08-16A	Coupling Joint	1
16	0107/08-25A	0107/08-25A	0107/08-25A	0107/08-25A	0107/08-25A	Brake	1
17	0107/08-18	0107/08-18	0107/08-18	0107/08-18	0107/08-18	Gear-Box Base	1
18	0107/08-19	0107/08-19	0107/08-19	0107/08-19	0107/08-19	Mounting Bolt M10x32	4
19	0107/08-20	0107/08-20	0107/08-20	0107/08-20	0107/08-20	Outer Spline	1
20	0107/08-21	0107/08-21	0111/12-21	0111/12-21	0115/16-21	Gear Carrier Ass y-output	1
21	0107/08-22	0107/08-22	0111/12-22	0111/12-22	0115/16-22	Gear Carrier Ass y-intermediate	1
22	0107/08-23	0107/08-23	0111/12-23	0111/12-23	0115/16-23	Gear Carrier Ass y-input	1
23	0107/08-50	0107/08-50	0107/08-50	0107/08-50	0115/16-50	Sun Gear-Input	1
24	0107/08-26	0107/08-26	0107/08-26	0107/08-26	0107/08-26	Bearing	1
25	0107/08-27	0107/08-27	0107/08-27	0107/08-27	0107/08-27	Roller Fairlead	1
26	0107/08-28	0107/08-28	0107/08-28	0107/08-28	0107/08-28	Hook	1
27	0107/08-29	0107/08-29	0107/08-29	0113/14-29	0113/14-29	Wire rope	1

