

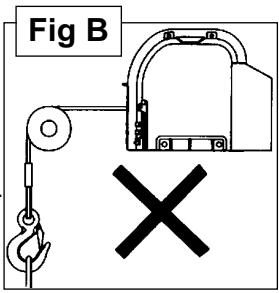
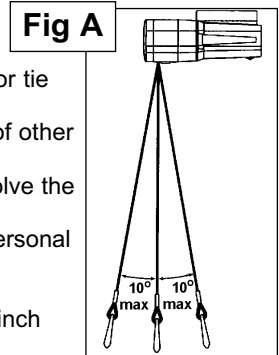
Models: **RW2500/12,** **RW3500/12,** **RW4500/12,**
RW2500/24, **RW3500/24,** **RW4500/24.**

Thank you for purchasing a Sealey product. Manufactured to a high standard this product will, if used according to these instructions and properly maintained, give you years of trouble free performance.

⚠ IMPORTANT: PLEASE READ THESE INSTRUCTIONS CAREFULLY. NOTE THE SAFE OPERATIONAL REQUIREMENTS, WARNINGS & CAUTIONS. USE THE PRODUCT CORRECTLY AND WITH CARE FOR THE PURPOSE FOR WHICH IT IS INTENDED. FAILURE TO DO SO MAY CAUSE DAMAGE AND/OR PERSONAL INJURY AND WILL INVALIDATE THE WARRANTY. PLEASE KEEP INSTRUCTIONS SAFE FOR FUTURE USE.

1. SAFETY INSTRUCTIONS

- IMPORTANT WARNING!** DO NOT pull the the cable at an angle of more than 10° (fig A). Pulling angles greater than 10° will put excessive pressure on cable drum and will result in damage to winch and invalidate the warranty.
- WARNING!** Your winch is NOT designed for lifting or slinging loads. It is intended only for pulling a load and must be used with care.
- ✓ The winch is designed to take the strain of a load as a temporary manoeuvre and should not be used to hold or secure a load when winching has been completed. Maximum operating time should not exceed two minutes. If the load fails to move, or stops, switch off winch within thirty seconds to prevent winch damage.
- ✓ Fit only appropriately rated cable and hook-up suitable for the task for which the winch is to be used.
- ✓ Ensure the winch is maintained in a safe working condition. Inspect the cable regularly checking for fraying, kinks, broken strands or distortion. If such appears, replace the cable. Check all component parts, do not use if damaged, contact authorised service agent. **USE ONLY GENUINE PARTS SUPPLIED BY SEALEY.**
- ✓ Choose an appropriately strong winching point, which we recommend is reinforced with steel plates and appropriate securing bolts. The winch mounting point must be capable of withstanding loads greater than the maximum rated capacity of the winch.
- ✓ Ensure the winch is protected from the elements. **DO NOT** allow the winch or the switch unit to become wet.
- ✓ Ensure you plug the remote control switch cable into the winch before connecting the power supply cable.
- ✓ Ensure the winch is correctly connected to a 12V, or 24V, power supply, according to the model in use.
- ✓ Ensure connection to battery is undertaken in accordance with the safe connecting and handling instructions for the battery.
- ✓ Ensure power cables are safely placed away from winch cable and will not be accidentally caught up in the winching process.
- ✓ The vehicle from which the battery will be used must be in neutral gear with the hand brake fully on and the wheels chocked.
- ✓ Keep the vehicle engine running whilst the winch is being used so that the battery is not drained.
- ✓ Check running direction of the winch drum before use.
- WARNING!** Keep hands, body and clothing away from the winch components and the cable. Use a rag or protective gloves when handling cable. Take any necessary precautions to protect your personal safety whilst using the winch.
- ✓ For a heavy load, place a blanket (or similar) over extended cable about two feet away from hook to lessen the severity of a cable break.
- WARNING!** Ensure you know how much load you are winching. Never exceed the maximum pulling capacity. Take into account any angle of incline over which the load must be pulled and the additional loading when winching from thick mud, or through snow or water. Chock the wheels of vehicle to be winched, then release any brakes and place gears in neutral. Ensure the load is capable of free movement before winching. Take the strain on cable and remove wheel chocks to move the load.
- ✓ Ensure the load to be pulled has an appropriate fixing point. If not, fit an adequate sling, eyebolt or other accessory to the load. Ensure accessories are equal to, or exceed, winch maximum pulling capacity.
- ✓ Ensure cable is securely attached to the load before winching.
- ✓ Maintain correct balance and footing whilst using the winch.
- ✓ Remove ill fitting clothing. Remove ties, watches, rings and other loose jewellery and contain and/or tie back long hair.
- ✓ Keep children and non-essential persons away from the operating area. Be aware of the location of other persons assisting you.
- ✓ Should the winch vibrate or emit a noise during use, stop immediately and check to identify and solve the problem.
- ✗ **DO NOT** operate the winch if any parts are damaged or missing as this may cause failure and/or personal injury.
- ✗ **DO NOT** disconnect the electrical power supply during winching.
- WARNING!** **DO NOT** use the hand crank to assist the winch in operation as this will damage the winch and may cause personal injury.
- WARNING!** **DO NOT** use winch as a lifting device of any type (fig B). **DO NOT** use the winch for any purpose other than that for which it is designed.
- WARNING!** **DO NOT** exceed the rated pulling capacity of the winch.
- ✗ **DO NOT** pull cable over or around a corner and **DO NOT** take hook around load and back onto cable. Use appropriate sling or pulley if necessary.
- ✗ **DO NOT** operate the winch with less than FIVE wraps of cable on the drum. The end of the cable is red, do not use with any of the red cable off the drum.
- ✗ **DO NOT** use a cheater bar, or any additional leverage on the crank handle when manually winching.
- ✗ **DO NOT** operate winch if you are tired, under the influence of alcohol, drugs or intoxicating medication.
- ✓ When not in use, place the clutch in engaged position. Disconnect winch from power supply and store remote control and power cable in a safe, dry location.



2. SPECIFICATIONS & PERFORMANCE

CHART 1.

MODEL	RW2500/12 RW2500/24		RW3500/12 RW3500/24		RW4500/12 RW4500/24	
	lb	kg	lb	kg	lb	kg
Layer 1	2,500	1,134	3,500	1,588	4,500	2,041
2	2,061	935	2,888	1,310	3,714	1,685
3	1,753	795	2,457	1,114	3,159	1,433
4	1,527	693	2,141	971	2,750	1,247
5	1,353	614	1,894	859	2,435	1,104

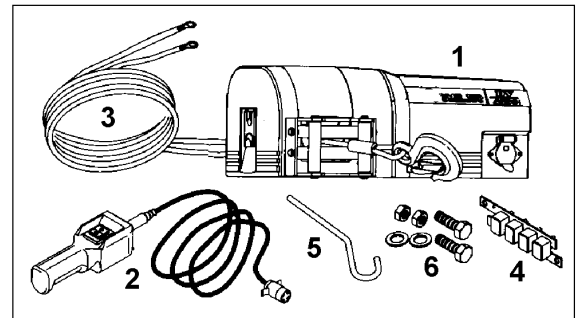
LINE PULL AND LINE SPEED vary according to how much cable is on the drum. The winch is rated at the first layer of cable on the drum. The maximum line pull force will be reduced by subsequent layers of cable on the drum. Chart 1 illustrates the maximum line force at increasing cable layers. Your could experience a loss of 13% pulling power per layer of cable. Also check any incline on which you are pulling as an incline will further reduce the line pulling capacity, see Chart 6.

COMPONENTS

Check that you have the equipment as shown below. If any item is missing or damaged contact your supplier immediately.

CHART 2.

Model		RW2500.	RW3500	RW4500
Rated Line Pull	lb	2,500	3,500	4,500
	kg	1,134	1,588	2,041
Voltage(DC)	V	12VDC or 24VDC		
Motor	hp	0.67	1.2	1.6
	w	500	900	1,200
Gear Train		3 stages planetary gears		
Gear Ratio		170:1	170:1	170:1
Cable	ft	3/16"x50'	7/32"x50'	1/4"x50'
	m	4.8mmx15.2m	5.5mmx15.2m	6mmx15.2m
Control		Solenoid / Indirect		



1. Winch
2. Remote switch
3. Battery cable
4. Circuit breaker assembly
5. Hand saver bar
6. Nuts, bolts and washers

CHART 3. LINE SPEED

MODEL		RW2500/12 RW2500/24		RW3500/12 RW3500/24		RW4500/12 RW4500/24	
lb	kg	fpm	mpm	fpm	mpm	fpm	mpm
0	0	19.7	6.0	21.3	6.5	21.3	6.5
1,000	454	13.5	4.1	16.4	5.0	16.4	5.0
2,000	907	7.5	2.3	11.8	3.6	11.8	3.6
2,500	1,134	4.2	1.3	10.5	3.2	10.5	3.2
3,000	1,361			8.2	2.5	8.2	2.5
3,500	1,588	Stall		5.9	1.8	5.9	1.8
4,000	1,814					4.6	1.4
4,500	2,041			Stall		1.3	0.4
5,500	2,495					Stall	

CHART 4. AMP DRAW

MODEL		RW2500		RW3500.		RW4500.	
lb	kg	12VDC	24VDC	12VDC	24VDC	12VDC	24VDC
0	0	40	23	33	15	33	15
1,000	454	135	104	110	55	110	55
2,000	907	236	175	200	100	200	100
2,500	1,134	300	230	230	115	230	115
3,000	1,361			260	130	280	140
3,500	1,588	Stall		300	150	320	160
4,000	1,814					360	180
4,500	2,041			Stall		400	200
5,500	2,495					Stall	

CHART 5. CABLE WINDING CUMULATIVE LENGTH ON DRUM

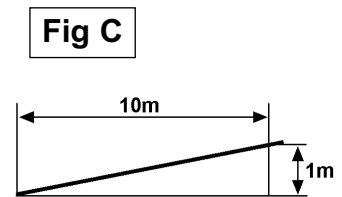
MODEL	RW2500/12 RW2500/24		RW3500/12 RW3500/24		RW4500/12 RW4500/24	
	ft	m	ft	m	ft	m
Layer 1	10.4	3.2	9	2.7	8	2.4
Layer 2	22	6.7	19.8	6	17.4	5.3
Layer 3	35.8	10.9	32.3	9.8	28.1	8.6
Layer 4	51	15.5	46.5	14.2	41	12.5
Layer 5			62.2	19	54.9	16.7
Cable	3/16"x50'		7/32"x50'		1/4"x50'	
	4.8mmx15.2m		5.5mmx15.2m		6mmx15.2m	

CHART 6.

ROLLING LOAD CAPACITY AT DIFFERENT ANGLES ON FIRST LAYER OF CABLE.

The rolling weight performance shown includes a 12% rolling friction factor, and is based upon a hard level smooth surface. A 10% incline means a rise of 1m in 10m (fig C).

MODEL	RATED LINE PULL lb /kg	GRADIENT									
		0°(0%)		6°(10%)		11°(20%)		17°(30%)		45°(100%)	
		lb	kg	lb	kg	lb	kg	lb	kg	lb	kg
RW2500/12 RW2500/24	2,500 /1,134	20,833	9,450	11,167	5,065	8,101	3,675	6,141	2,786	3,157	1,432
RW3500/12 RW3500/24	3,500 /1,588	29,167	13,230	15,634	7,091	11,341	5,144	8,597	3,900	4,419	2,004
RW4500/12 RW4500/24	4,500 /2,041	37,500	17,010	20,101	9,118	14,581	6,614	11,053	5,014	5,682	2,577



3. INSTALLATION

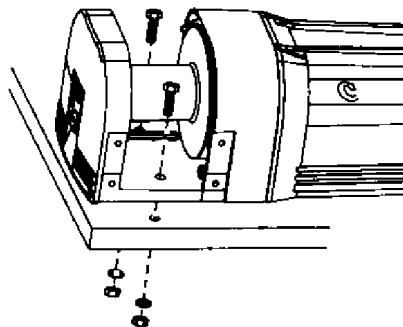
⚠ WARNING! Ensure you read and understand the safety instructions before installation.

3.1. MOUNTING THE WINCH.

3.1.1. Mounting.

1. Choose the winch mounting location with care as it may not be designed to support the pulling capacity of a winch (especially if mounting on a vehicle). The mounting point must be capable of withstanding loads above the maximum rated capacity of the winch. Ensure the mounting point is protected from deterioration or corrosion over the lifetime of the winch use. We recommend the mounting point is reinforced with steel plates and appropriate securing bolts.
2. Before fixing, ensure the power supply cables will easily reach the battery.
3. Use the washers, bolts and nuts to fix the winch to the mounting plate (see fig.1). The motor, drum and gear housing must be correctly aligned.
4. Once fixed in place, the winch must be protected against the elements at all times.
5. Ensure there is an appropriate safe, dry, childproof location for the storage of the power cables and switches when not in use.

Fig 1



3.2. POWER SUPPLY CONNECTION.

3.2.1. Battery cable connection.

1. Ensure connection to the battery is undertaken in accordance with the safe connecting and handling instructions for the battery.
2. Ensure the power cables are safely routed away from the winch cable and will not be accidentally caught up in the winching process.

3. Attach the free end of RED cable (positive +) tightly to the end of the circuit breaker marked 'AUX' and connect the copper plate to the end marked 'BAT'.
4. Connect the copper plate tightly to the positive (+) terminal of the supply battery (fig 4.A).
5. Connect BLACK cable (negative -) to a suitable earthing point on the vehicle frame (fig 4.B).

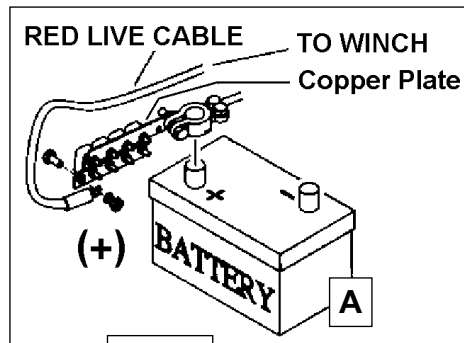
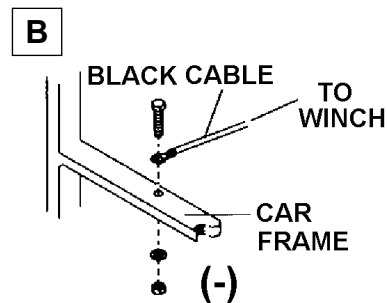


Fig 4



3.2.2. Cable specification.

Model	RW2500	RW3500	RW4500
12 Volt	6AWG x 1.5m	6AWG x 1.5m	6AWG x 1.5m
24 Volt	8AWG x 1.5m	8AWG x 1.5m	6AWG x 1.5m

3.2.3. Switch connection.

WARNING! Always connect the remote control before connecting winch to battery. Disconnect winch from battery before disconnecting remote control.

To fit remote control, lift dust cover on the side of the winch and insert remote plug.

4. OPERATING INSTRUCTIONS

WARNING! Ensure you read and understand the safety instructions before use.

4.1. FREE WHEEL FUNCTION.

Note: The cable may be unwound under power by engaging the clutch and following steps in 4.2. below.

The cable may also be free wheeled and unwound by hand as follows:

The speed of unwinding the winch cable is controlled by a clutch.

For rapid unwinding proceed as follows:

1. Disconnect the winch from the electrical power supply.
2. Disengage the clutch by lifting the clutch lever (fig 5).
3. To unwind the cable, pull by hand using the hand saver bar and ensure that you wear appropriate safety gloves (fig 6).

Note: If the clutch lever will not lock into the 'Disengage' position, rotate the drum until it does.

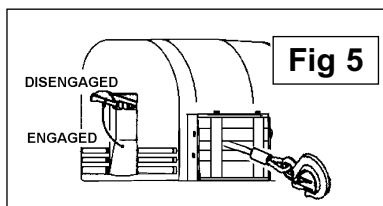


Fig 5

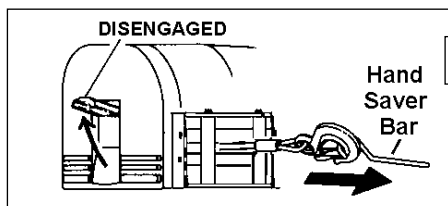


Fig 6

4.2. REMOTE SWITCH OPERATION.

WARNING! Always connect the remote control before connecting winch to battery. Disconnect winch from battery before disconnecting remote control.

To use the electrical remote switch control the clutch must be engaged as follows:

1. Connect remote control to winch (para. 3.2.3.)
2. Connect the winch to the power supply.
3. Engage the clutch by pushing the lever down (fig 5).
4. To extend the cable, move the toggle switch (fig 7) to the 'Out' position.
5. To winch the cable, move the toggle switch (fig 7) to the 'In' position.
6. Stop the winch by releasing the switch. The internal brake will hold the load in place.
7. Before disengaging cable from load, disconnect winch from power supply.

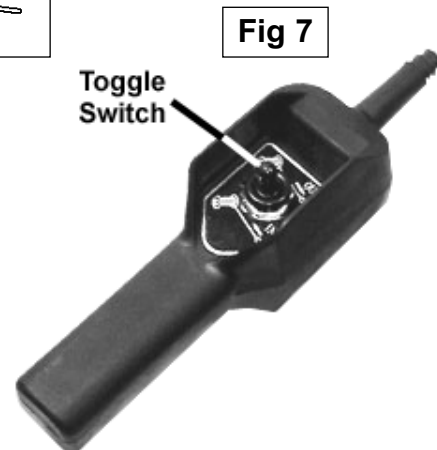


Fig 7

4.3. USE OF A PULLEY.

Additional pulling power may be obtained by use of a pulley block assembly. This almost doubles the effective pull and halves the pulling speed.

WARNING! When using a pulley, ensure the hook anchorage point (fig 8.C) will be capable of withstanding loads greater than the capacity of the winch.

Note that if winch and hook anchorage are both mounted on the same structure then this structure must be capable of withstanding at least twice the winch capacity.

DO NOT attach hook back onto winch body as winch mounting may fail.

Always use a separate anchorage point.

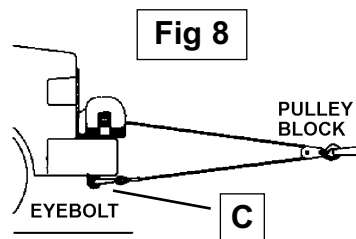


Fig 8

5. MAINTENANCE

5.1. CHECK BEFORE EACH USE.

Before each use check the following to ensure all parts are sound and in good working order and condition:

Mounting/fixing bolts and nuts, motor for correct operation, steel winch cable for fraying, kinks, broken strands or distortion, operating switches and cables, power supply cables, clutch and brake to ensure loads will hold when switch is released. If any parts are broken or damaged, do not use the winch, but take immediate action to repair. With the exception of the items below, all service and maintenance must be undertaken by fully qualified personnel.

5.2. LUBRICATION.

The winch is a sealed unit and has been fully lubricated at the time of manufacture. No additional lubrication should be necessary.

5.3. CABLE REPLACEMENT.

Only use a new cable of the same rating as the one supplied with the winch. **DO NOT** use a smaller or larger cable and ensure the cable is made of steel wire.

1. Unwind the entire cable from the winch drum. Undo the retaining grub screw and remove cable from the drum.
2. Insert the replacement cable through outlet guides (fig 9. A) under and around drum securing with grub screw (B).
3. Attach the cable to the hook by returning it through the hook eye and tightly secure with 2 cable clamps.
4. Check that the cable winds smoothly and correctly before use.

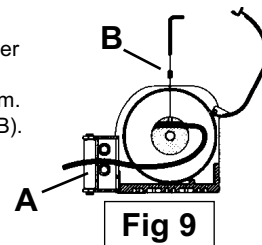


Fig 9

6. DECLARATION OF CONFORMITY

Declaration of Conformity We, the sole importer into the UK, declare that the products listed below are in conformity with the following standards and directives.

12 & 24V ELECTRIC POWER WINCH
Models: RW2500/12, RW3500/12, RW4500/12,
RW2500/24, RW3500/24, RW4500/24

98/37/EC Machinery Directive
89/336/EEC EMC Directive
93/68/EEC EC Marking Directive



The construction files for these products are held by the Manufacturer and may be inspected, by a national authority, upon request to Jack Sealey Ltd.

Signed by Mark Sweetman

23rd July 2003

For Jack Sealey Ltd. Sole importer into the UK of Sealey Power Products.

NOTE: It is our policy to continually improve products and as such we reserve the right to alter data, specifications and component parts without prior notice.

IMPORTANT: No liability is accepted for incorrect use of this equipment.

WARRANTY: Guarantee is 12 months from purchase date, proof of which will be required for any claim.

INFORMATION: For a copy of our latest catalogue and promotions call us on 01284 757525 and leave your full name and address, including postcode.



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