



INSTRUCTIONS FOR:

PORTABLE WINCH 1360KG LINE PULL 12V

MODEL NO: PW1360

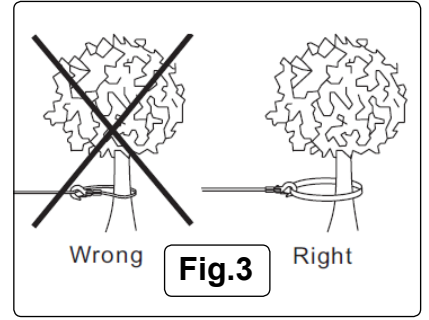
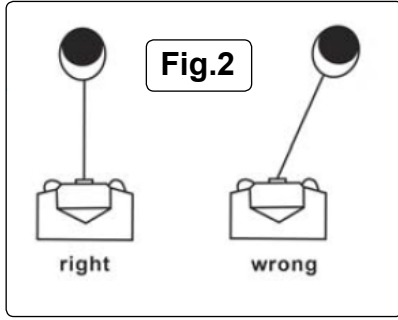
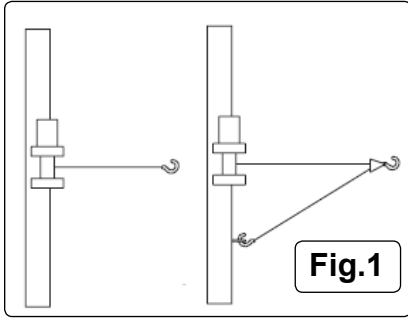
Thank you for purchasing a Sealey product. Manufactured to a high standard this product will, if used according to these instructions and properly maintained, give you years of trouble free performance.



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

- WARNING! Winching a vehicle, especially with a steel cable, has an inherent danger element to it, and there is always some risk of injury. Proper training is highly advised and constant risk assessment needs to be undertaken.**
- WARNING! Never connect DC powered winches to AC current. Motor damage or fatal shock may occur.**
- DO NOT** lift or hoist loads over people. **DO NOT** lift loads vertically. The winch was designed for ground use only.
- DO NOT** overload. Be sure all equipment used meets the winch's maximum line pull rating. We recommend using the pulley block option to double line the wire rope (see fig.1). Double line with a pulley block to reduce the load on the winch, wire rope and battery. When double lining, pulley blocks should be rated to a minimum of two times the winch's line pull rating. The cable may break before the winch stalls. For heavy loads use a pulley block to reduce the load on the cable.
- DO NOT** immerse the winch in water. Doing so will immediately effect load holding and brake efficiency and in time will damage the motor and cause accelerated gearbox wear invalidating the warranty.
- DO NOT** operate the winch with less than 5 turns of wire rope around the winch drum, since the wire rope end may not withstand the full load.
- DO NOT** pull from extreme angles, (see fig.2), because this will cause the rope to build up on one end of the drum, will damage the wire rope, and invalidate the warranty.
- WARNING!** The winch's line pull capacity is the maximum line pull of the first layer. Never operate a winch by pulling a load that is at or over the rated capacity.
- DO NOT** hook the wire cable back to itself because it could damage the wire rope. Use a Self Recovery Kit, (see fig.3) contact your dealer for full details..
- Make sure the winch is securely mounted on the vehicle or bracket before operation.
- Before moving a load inspect the wire rope. Prevent kinks and uneven wire layering before they occur. Loosened wire rope must be properly tensioned under a load of about 100lbs (45.4kg).
- Position a Wire Rope Dampener (available as an optional extra) over the wire rope near the hook end when pulling, as this will slow the snap back of a broken wire rope and prevent serious injury and/or damage.
- DO NOT** move your vehicle to assist the winch in pulling the load. It will be easy to overload, and cause wire rope damage.
- DO NOT** enter the danger zone. Keep away from the danger zone during operation. The danger zone is the area of the winch drum, the fairlead (if fitted), the wire rope, the pulley block (if used), and the hook.
- DO NOT** approach or span the wire rope when the winch is under load.
- When using the winch to move a load, place the vehicle transmission in neutral, apply the handbrake and chock all wheels. The vehicle engine should be running during winch operation so that the battery is fully charged. Never use the winch if there is any doubt as to the efficiency of the battery.
- DO NOT** disconnect the free spool clutch when there is load on the winch.
- After operation release the load immediately. **DO NOT** allow the cable to tighten anymore.
- Inspect winch, wire rope, hooks and other accessories frequently. A mashed, pinched, kinked or frayed wire rope with broken strands should be replaced at once because a damaged wire rope has a reduced load carrying capability and could break easily.
- Keep tension on the cable to re-spool the cable on the drum tightly after operating. It must be respoiled with a load of about 45.4kg (100lbs).
- DO NOT** allow the wire rope to slide through your hands, use heavy rigger gloves when handling wire rope.
- Disconnect the clutch first then use the hand saver strap to hitch the hook to pull the wire rope. **DO NOT** pull the wire rope using your finger and do not put your finger through the hook.
- DO NOT** operate the winch when under the influence of drugs, alcohol or medication.
- If there is something wrong with the winch, cut the power at once, then check it carefully. If required, return it to your dealer for servicing.
- Wear eye protection, insulated work clothes, non-slip shoes, keep hair tied up and wear rigger gloves. Remove all jewellery.
- DO NOT** machine or alter the winch in any way.
- Take good care of the winch when not in use.
- WARNING!** Unplug the remote control before working in or around the fairlead or the wire rope drum, (the danger zone). Never tuck it under your arm or allow anyone to hold it when you are in the danger zone, so as to avoid the hand control being accidentally activated.
- WARNING!** Do not use the winch to hold loads in place. Use other means of holding loads such as tie down straps.
- WARNING!** If you are within four feet of the winch do not hold the wire rope and remote control at the same time.
- WARNING!** Mount the winch to a firm base. Be sure that your structural support is strong enough to withstand the weight and rated pulling strength of the winch.
NOTE: Whilst mounting orientation is at your discretion, the winch is to be operated with the wire rope in an under wound orientation on the drum. The winch is designed to rope out and rope in, in one direction. **DO NOT** attempt to reverse the operation of the winch.
- WARNING! DO NOT** weld or machine any part of the winch, this will weaken it and void the warranty.
- WARNING!** Batteries contain explosive gases. The following precautions should be taken before making battery connections: wear eye protection; remove all jewellery; follow the wiring diagram included in the installation instructions; keep spectators away. In the event of a battery explosion, acid should be washed away as soon as possible, seek medical help immediately.
- WARNING!** Use of any other accessories or attachments other than those recommended in this instruction manual may result in personal injury or property damage and could void the warranty.
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.



2. SPECIFICATIONS & PERFORMANCE

Portable winch that can be safely and securely stowed in the vehicle. To use, simply attach the winch onto the tow ball and snap the quick connector into the supply cable plug. Remote control means that you can always be in the right position to oversee the winching. Wire rope is long enough to reach an anchor point or to lower boat trailers down slipways. The winch is free to rotate on the ball so it will always face the direction of the pull - no risk of the rope bunching up at one end of the drum as with fixed winches. The main benefit of this type of winch over a fixed vehicle mounted winch is that it can be used on both the front and the back of a vehicle if a tow hitch is fitted at both ends. Winch simply drops on to a ball or can be used with a ring hitch. Winch is supplied ready to fit. Supply cables include ring terminals to permanently connect the cables for regular use.

- Model No: PW1360
 - Voltage: 12V
 - Line Pull*: 1360kg
 - Motor Power: 2kW
 - Gear Ratio: 586:1
 - Line Speed*:
 - No Load: 3.6mtr/min
 - At Maximum Load: 1.7mtr/min
 - Current Draw:
 - No Load: 8A
 - At Maximum Load: 65A
 - Cable Ø: 5.4mm
 - Cable Length: 15.2mtr
 - Winch Weight: 16.4kg
 - Gross Weight: 18kg
 - Replacement Rope Wire: PW1360.WR
- * Performance quoted at first layer of cable on drum



PERFORMANCE SPECIFICATIONS

Specifications and Performance

Model	Guide to Rolling Load Capacity Maximum weight in pounds and Kilograms rolling load.							Load capacity*	
	Percent Incline							Single Line	Double Line
	5% (3°)	10% (6°)	20% (11°)	30% (17°)	50% (26°)	70% (35°)			

PW1360 30,000 lbs 22,600 lbs 15,200 lbs 11,600 lbs 8,300 lbs 6,800 lbs 3,000 lbs 4,500 lbs
 13,608 Kg 10,251 Kg 6,895 Kg 5,262 Kg 3,765 Kg 3,084 Kg 1,361 Kg 2,041 Kg

(*) Load capacity (dead weight) is a measure of actual maximum force to which the winch system may be subjected.

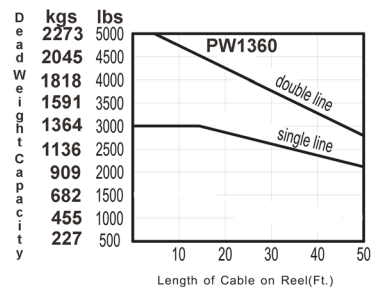
(***) Capacities and load speeds for model **PW1360** are for double line. Single line capacities are 2/3 of double line values. Single line speed is twice double line value.

Note: All capacities shown are with 15' of cable on the reel and 10% rolling friction factor. For full reel of cable adjust capacities according to graph

Model	Approximate Load Speed (Ft./Min.)			
	No Load		No Load	
	Full Reel	Empty Reel	Full Reel	Empty Reel

PW1360 5 2.5 2 1.5

CHART 1.



3. INSTALLATION

3.1 BALL HITCH MOUNTING INSTRUCTIONS

3.1.1 If using the ball hitch mounting plate ensure that the mounting area has sufficient strength to support a load well in excess of the rated winch capacity.

3.1.2 Slide the mounting plate on to the bottom of the winch and pass it over the ball hitch.

3.2 FIXED MOUNTING INSTRUCTIONS

3.2.1 Ensure that the mounting surface is of sufficient strength to support a load well in excess of the rated winch capacity.

3.2.2 Fasten the winch to the mounting surface with three 13mm bolts, washers and lockwashers. Position the winch so that the cable does not rub the front opening of the winch.

3.2.3 For double line use, install an eye hook on the winch stand close to the base of the winch for fastening the stationary cable hook, see fig.4. Be sure that the eye hook is of sufficient strength to withstand loads in excess of the single line rating of the winch.

3.2.4 The winch is equipped with keyhole slots in the base for use with quick mounting shoulder studs. They should be mounted securely into the winch stand. After positioning the winch on the studs, a 10mm bolt should be placed in one of the other holes available to keep the winch securely in position.

3.2.5 Make sure that the winch is positioned so that the hook will not be drawn into the drum and the cable will not rub the front opening. **DO NOT** reverse the direction the cable is wound on to the drum.

3.3 WIRING HARNESS INSTALLATION

3.3.1 The wiring harness is designed to be permanently installed on a vehicle and stored in the boot or truck bed etc. This prevents tampering, accidental or misuse of the winch, since the harness is required to power it electrically. The wiring harness can be made removeable from the vehicle with the 'Electrical Quick Connect', see parts list for details.

3.3.2 Feed the positive lead (long) wire through any convenient access hole in the car boot. (It may be necessary to remove a grommet or plug). It may also be necessary to remove the circuit breaker assembly from the positive wire in order to feed the wire under the car.

3.3.3 Pull the positive lead wire along the underside of the car into the engine compartment and up to the battery.

3.3.4 Fasten the short lead from the circuit breaker to the positive (+) battery terminal, (if it is a nut and bolt type) or to the battery side of the starter solenoid. Use the lugs on the circuit breaker casing to attach it to a safe position.

3.3.5 Attach the negative wire to an earth on the chassis using a 6mm bolt and locknut. Make sure it is a clean, tight connection.

3.3.6 Fasten the wiring to the underside of the car using wiring clamps and brackets, or cable ties as needed, making sure that it is not located near the exhaust or hot or moving parts. Wiring should be fastened securely and without slack. Excess wire should remain in the boot.

NOTE: If the winch is mounted at the front of the vehicle, cut the harness to the length needed. If spliced, make sure the splice is tight and well insulated. Attach the earth as described in 3.3.5.

CHECK THE WINCH THOROUGHLY BEFORE OPERATING!

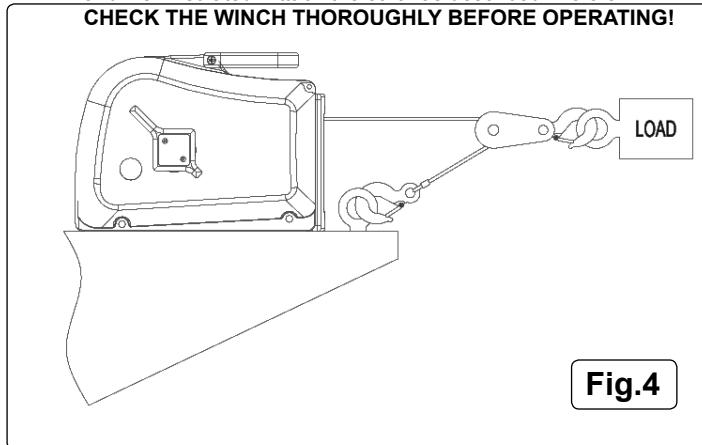


Fig.4

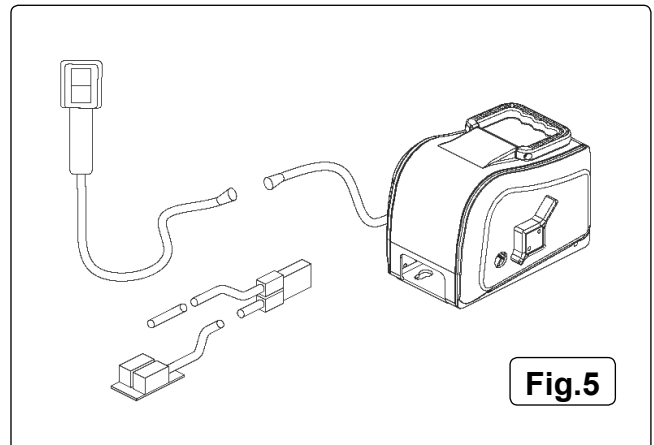


Fig.5

4. OPERATING INSTRUCTIONS

WARNING! This electric winch should be respected as power equipment. High forces are created when using a winch, creating potential safety hazards. **DO NOT** allow children or anyone not familiar with the operation of the winch to use it.

WARNING! Inspect the cable before each use, replace it immediately if it is damaged or worn.

WARNING! The auxillary handle is for emergency use only. **DO NOT** use the auxillary handle to assist the motor when it is running. Always remove the auxillary handle when it is not in use.

WARNING! When releasing a load with the clutch, maintain control of the speed. Excess speed could result in winch damage and severe personal injury.

4.1 WINCHING

4.1.1 Connect the power supply plug into the connector on the back of the winch, see fig.6. The plug pushes and snaps into place and will only fit in one position. Connect the remote switch cable by plugging it in on the back of the winch, see fig.6. Leave the vehicle engine running at fast idle.

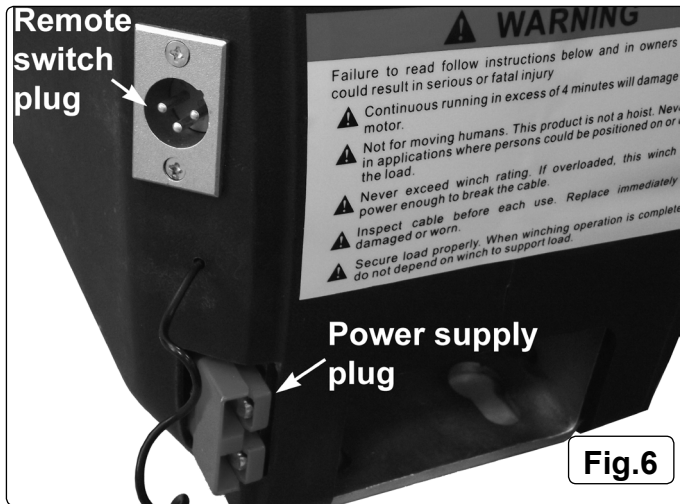
4.1.2 With the clutch lever in the 'engaged' position you can pay out or pay in the cable. Allowing the switch to return to the off position will automatically stop the winch and lock the load in position.

NOTE: It is normal for smoke to be produced during initial paying out use.

WARNING! Even though the winch is equipped with circuit breaker overload protection, special care should be taken not to create an overload. Pay attention to the sound of the winch and the load being pulled. Make certain that the cable tension does not rise suddenly because of a bind in the load.

WARNING! The electric motor is designed for intermittent use only. Extended use without cooling off periods will cause overheating resulting in motor damage. Maximum recommended run time is four minutes.

4.1.3 When winching is complete, secure the load with appropriate tie down straps or chains. When the load is being transported on a trailer relieve the tension on the winch cable, to avoid damage to the winch and trailer due to high shock when travelling.



4.1.4 Always disconnect the switch when winching is complete. Never leave the switch connected when it is not in use.

4.2 CLUTCH OPERATION

4.2.1 The clutch lever provides the means of releasing a load without power while maintaining control of the speed and provides free wheeling, so that the cable can be removed from the winch by hand. The clutch lever is spring loaded, so that it returns to the engaged position when released. The lever will remain in the free wheel position if moved completely over to the right, see fig 8.

4.2.2 In order to release a load without power, rotate the clutch slowly and carefully toward 'Free Wheel'. When the load begins to move, it can be controlled by moving the clutch lever. It will provide smooth control of the load.

WARNING! Always maintain control of the load. Allowing excess speed could result in winch damage and severe personal injury.

4.2.3 Remember that the gear train and brake mechanism are completely disengaged in the 'Free Wheel' position and in order to power the winch or hold a load in position, the lever must be allowed to return to the 'Engaged gears' position.

NOTE: It is not necessary to turn the clutch lever completely to the 'Engaged gears' position manually. The spring tension built into the winch provides adequate force on the clutch lever.

WARNING! never force the clutch lever in either direction.

4.3 EMERGENCY HANDLE

4.3.1 An emergency crank handle is provided for use in the event of a power failure.

4.3.2 Remove the electrical power from the winch. Remove the plastic blanking plug from the side of the winch and insert the handle, so that it completely engages with the drive shaft. The handle can be cranked in either direction with the clutch in the engaged position. To make cranking easier, the clutch can be placed in the free wheel position while holding on to the emergency handle.

WARNING! If the clutch is placed in the free wheel for hand cranking, make sure you maintain a firm grip on the handle at all times. If the handle is released, it will spin violently.

4.3.3 Because the emergency crank handle attaches to the clutch side of the winch, it is equipped with a spring operated clip which will be depressed by the clutch handle in the free wheel position when cranking in a clockwise direction to retrieve the cable. This clip is a safety feature and will re-engage the clutch mechanism in the event that the operator loses control of the handle with a load on the winch.

WARNING! Even with this safety feature the handle will still spin violently one or two turns before re-engaging the clutch to stop the winch. **DO NOT** lose control.

4.3.4 Always remove the handle from the winch after use and replace the plastic plug.



5. MAINTENANCE

5.1 It is strongly recommended that the winch is used regularly (once a month). Simply power out 10mtr of cable, free spool 5mtr then power back in. This will keep all the components in good working condition so that the winch can be relied on when needed.

Parts support is available for this product. To obtain a parts listing and/or diagram, please log on to www.sealey.co.uk, email sales@sealey.co.uk or phone 01284 757500.



Environmental Protection.

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycle centre and disposed of in a manner which is compatible with the environment.



WEEE Regulations.

Dispose of this product at the end of its working life in compliance with the EU Directive on Waste Electrical and Electronic Equipment. When the product is no longer required, it must be disposed of in an environmentally protective way. Contact your local solid waste authority for recycling information.

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 product.

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

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