



# PORTABLE HANDHELD WINCH 500KG PULLING FORCE

MODEL NO: **PPH500/24**

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. KEEP THESE INSTRUCTIONS SAFE FOR FUTURE USE.



Refer to instruction manual



Wear eye protection



Wear protective gloves



Wear safety footwear



Keep dry

## 1. SAFETY

### 1.1. GENERAL SAFETY

- ✓ The responsibility for safe installation and operation of this product ultimately rests the operator. Read and understand all safety precautions and operating instructions before installing and operating your product. Careless operation can result in serious injury and/or property damage.
- ✓ Restrict use of this winch to skilled or instructed persons only.
- 1.1.1. **WARNINGS!** Throughout this manual you will find these warnings:
  - ▲ **DANGER:** Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.
  - **WARNING!** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.
  - **CAUTION:** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. This notation is also used to alert against unsafe practices.
- ✓ The user shall ensure that the operating personnel are given the necessary training. Before use, read this manual and ensure that you are familiar with all winching operations (winch speeds & direction).
- ✓ We strongly recommend that prior to using this product, intended users undertake off road training that includes winch operation.
- ✓ The operator shall always work in compliance with the operating instructions.
- ✓ The operator shall lift the load from the ground with the lowest available speed. The rope (chain, belt) shall be tightened and shall not be in the slack-condition when the load is being lifted from the ground.
- ✗ It is forbidden to move loads above the rated capacity of the winch.
- ✗ **DO NOT** try to lift fixed or obstructed loads.
- ✗ Excessive inching (e.g. giving short pulses to the motor) shall be avoided.
- ✗ **DO NOT** use the tool to move or lift people. **DO NOT** suspend loads with this tool over people.
- ✗ **DO NOT** leave loads attached to the winch.
- ✗ **DO NOT** side-pull loads. Avoid side-pulls where the cable exits winch at an angle as this will cause cable to pile up unevenly on the drum. Use a pulley block to lessen these angles.
- ✗ Avoid twisting the cable during pulls or hoists.
- ✗ If pulling horizontally, use a winch dampner on the line to reduce danger in the event of a broken cable.
- ✓ Remove battery from winch when not in use.
- 1.1.2. **EMERGENCY STOP PROCEDURE**
  - ✓ Always push System/Emergency Stop button after operation. If any abnormal noise or vibration occurs, press the System/Emergency Stop button immediately.
  - ✗ **DO NOT** disassemble, professional repair only.
  - ✗ Never spool out past the red paint on the wire cable. The onboard computer monitors cable length and will allow no further unspooling of cable. To reset this function, see TROUBLESHOOTING.
  - ✓ Winch is rated by pulling capacity. The maximum pulling torque occurs when there is only one layer of wire cable on the drum. As the layers of wire cable on the drum increase, pulling power decreases. This is the basis of mechanical advantage.
  - ✓ Winch operator must be alert and not under the influence of drugs, alcohol or medications. The operator must remain with the tool during operation.
  - ✗ **DO NOT** modify plug, tool or hooks. Only use factory-supplied cable. Inspect for damage and/or defects before use.
  - ✓ Stand clear of wire and load during use. Keep all others at a safe distance. If a cable pulls loose or breaks under load, it can lash back with dangerous force.
  - ✗ **DO NOT** grab hook with hand, use the included handsaver strap instead. Always use appropriate gloves when handling the cable.
  - ✓ Avoid water or moisture. Never operate in a wet environment.
  - ✓ Use only rigging accessories rated for tool/loads. **DO NOT** use damaged or bent accessories.
  - ✗ **DO NOT** hook cable back onto itself. This damages the cable.
  - ✗ Avoid loads rotating freely.
  - ✗ The tool duty rating is S2 (Short-time duty). Load rating is rated based on the first layer of cable on the drum.
- 1.1.3. **LOAD LIFTING ATTACHMENTS AND SLINGS**
  - ✓ The used load lifting attachments/slings shall have a rated capacity of at least 2 times (fixing point) the total load (load, load lifting attachment) actually suspended.
  - ✓ Loads shall be attached only with positive-locking means.

## 2. INTRODUCTION

Winch can pull up to 500kg consistently. Unit can identify when it is being overloaded and will turn itself off to protect the user. Emergency stop button instantly stops the unit if pressed. Grooved drum helps to keep the wire neat and tidy without any kinks. End stopper prevents the wire from being fully retracted into the drum and ensures a portion of the wire remains accessible. Can be used anywhere due to being battery powered. Requires 20V 8Ah battery (CP20VBP8) and mains charger (CP20VMC), sold separately.

## 3. SPECIFICATION

Model No: ..... PPH500/24  
Capacity (Single Cable): ..... 500kg  
IP Rating: ..... IP50  
Lift Speed (Maximum): ..... 2m/min  
Motor Power: ..... 0.75kW  
Weight: ..... 12.5kg  
Voltage: ..... 20V  
Duty Cycle Ratings: ..... S2 20%  
E.g.: Power on: 10 mins Power off: 20mins  
Temperature Limits: ..... 5°C - 40°C

## 4. CONTENTS

Winch  
Cable Hook: silver  
Anchor Hook: black  
Handsaver for Cable Hook not shown  
Manual

## 5. PREPARATION FOR USE

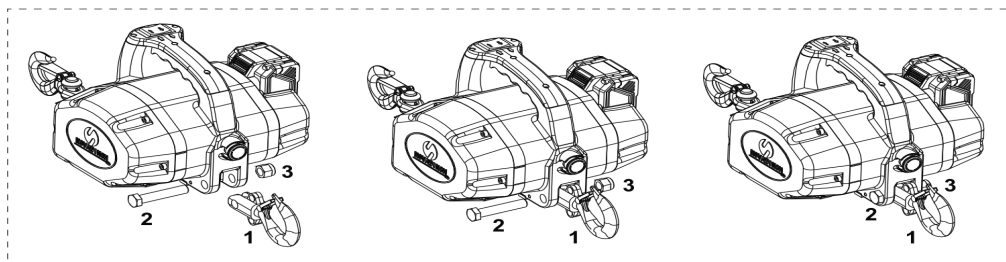
Open package and carefully inspect tool for damage and compare contents to parts list above. If damage is found, please contact your vendor immediately and do not use winch.

Read and understand all documentation that comes with your winch.

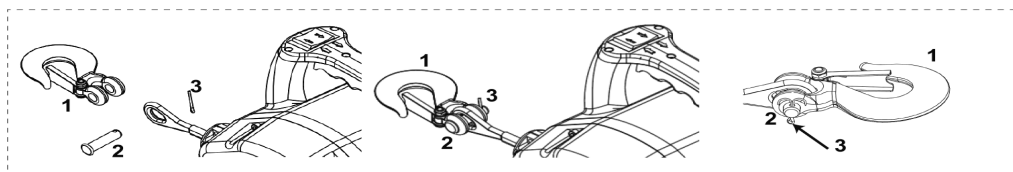
Check that all fasteners are tight and secure.

### 5.1. MOUNT HOOKS:

Mount anchor hook (black) to the slot below the red System/Emergency Stop button. The hook mounts easily with bolt, nut and hook. Tighten until secure.



Mount winch cable hook (silver) to the winch cable using the hook, bolt and cotterpin. After cotterpin is inserted, bend the two arms of the cotterpin to ensure a secure fit.



Finish set up by attaching handsaver to the winch cable hook (silver) which should be used when Pulling cable.

## 6. OPERATION

❑ **WARNING!** Read instruction manual.

▲ **DANGER** Only use this winch in a safe location, avoid loud environments, clear bystanders away and ensure a competent user is at the controls.

**CAUTION:** Operator must wear protective gear such as gloves and eye protection.

6.1. Ensure the System/Emergency Stop button is pressed to disabled position (fig 1).

6.2. Securely connect the winch anchor and cable hooks. Always use a suitable anchor point capable of withstanding your intended load.

6.3. Clear winching area essential persons only.

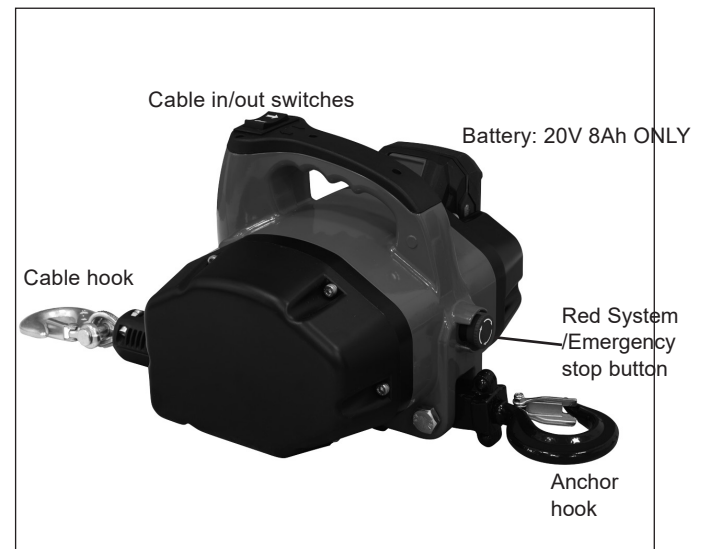
### 6.4. BATTERY OPERATIONAL INFORMATION

Always use correctly rated battery: 20V 8Ah only.

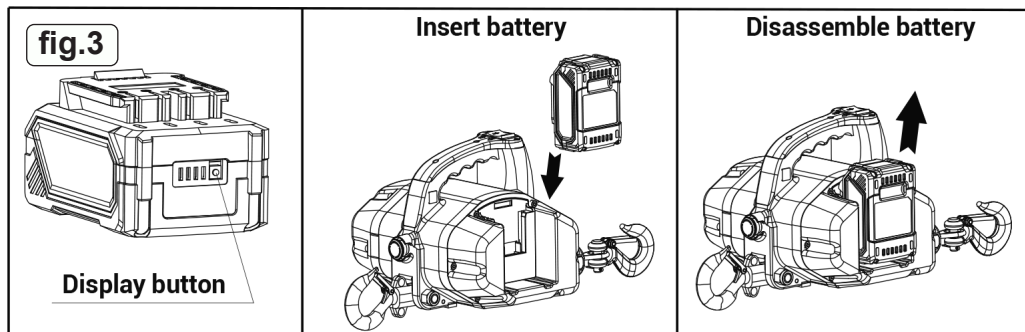
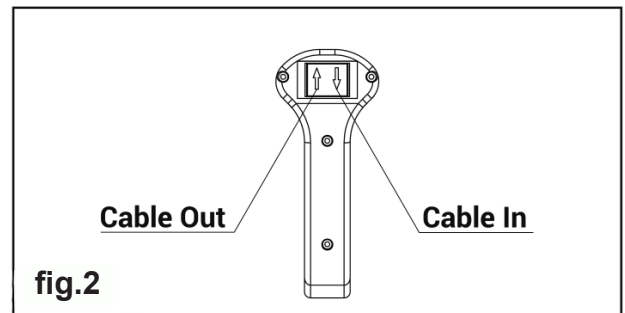
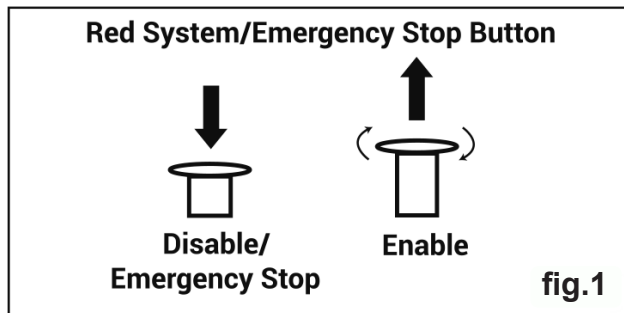
\* **DO NOT** use winch with a low charge battery.

Always use correct charger for battery.

6.4.1. Insert battery, fig.3.



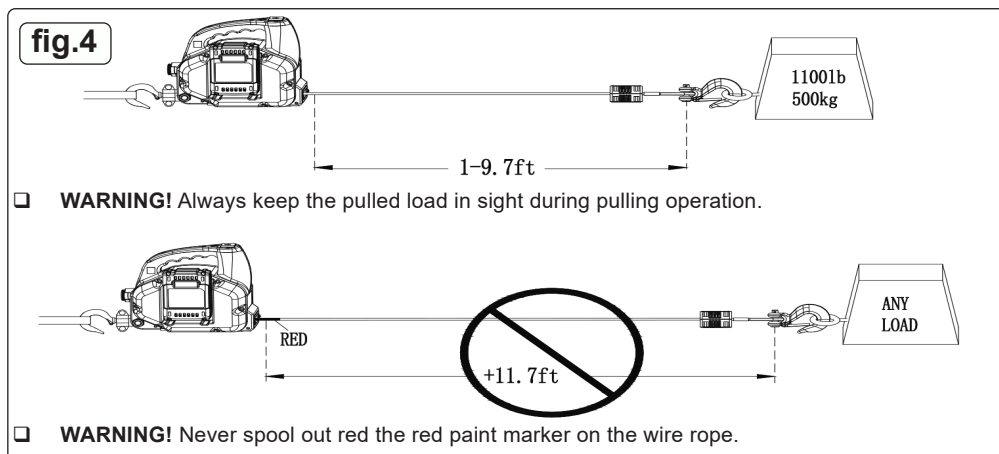
- 6.5. To power the winch, turn the System/Emergency Button clockwise to confirm that the button is in the Enabled state. When winching is paused or emergency stop is required, push button to stop.
- 6.6. Operate winch by pressing Cable Out for at least 5 seconds to release cable (or 3 feet, 1m of cable has extended from drum), fig.2. Unspool wire cable as needed, but only until you see red paint indicating a minimum wrap on the drum.
- ✱ **DO NOT** unspool past this point. 5 wraps of wire cable must be kept on the drum at all times.
- 6.7. When winching, ensure the wire cable is wrapping the drum in an orderly fashion. If mis-wrapped, unspool, adjust unit so that it is perpendicular to load, and spool again.
- 6.8. When winching is complete, push the red System/Emergency Button and remove battery.



**NOTE:** Push the Power/Emergency stop button in when not in use.

**CAUTION:** This tool features an automatic stoppage of cable in/cable out when it senses the limit of safe operation.

- 6.9. During cable-in, the tool will automatically stop when reaching maximum safe cable wrap on the drum, allowing only winch-out operation.
- 6.10. During cable-out operation, the tool will automatically stop spooling out cable when it reaches maximum safe extension. At this point, only cable-in will be possible, see fig.4.



#### 6.11. SAFE WINCH OPERATION

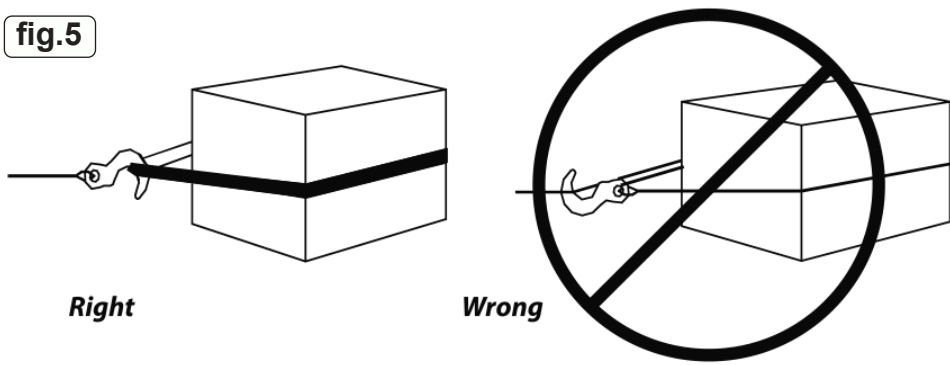
**CAUTION:** Use a pulley block to avoid winching at sharp angles. Uneven layering of winch cable will cause serious damage to both winch and cable. It can be corrected by securing load, spooling out the cable and repositioning it to the opposite end of the drum.

**CAUTION:** Use the winch to move the load. If winching a vehicle, do not attempt to assist the winch by moving the vehicle. The combination of the winch and vehicle pulling could overload cable and/or rigging and the load could break the winch/rigging. Never rely on the winch to hold a load in place. This winch is not designed for load-holding applications and may unwind or fail due to shock-loading.

The load should be secured by other means, and the winch hook detached from the load.

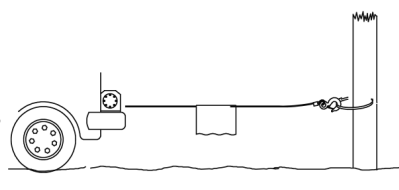
- ☐ **WARNING!** Take your time when rigging and include a reasonable factor for safety. Improper rigging can result in damage to vehicle and equipment. It can also cause an injury.

**CAUTION:** Use a Tree Saver Strap or similar when attaching the cable to an anchor point. **DO NOT** run the cable around the anchor and back onto itself - doing so can cause the cable to break or degrade, see fig.5.

**fig.5**

- ❑ **WARNING!** Always use the handsaver. **DO NOT** hold the hook with your hand. This is important not only when spooling cable in, but also when removing cable from the winch under power.  
After unspooling the cable and preparing for recovery, run the winch intermittently to take up cable slack. When using a pulley block, be sure the cable is running properly in all pulley rollers before applying a load.
- ❑ **WARNING!** Always operate winch with an unobstructed view of the winching operation. Never obscure warning and instruction labels.
- ▲ **DANGER!** Never touch the cable or hook while they are in tension or under load. Even at rest, the winch may have the cable in tension. Never guide a cable under tension onto the drum with your hands.

When pulling a load, place a dampner or blanket, jacket, or floor mat over the cable near the hook end (see illustration). This will slow the snap back of a broken cable and help to prevent serious injury. Raise hood to protect windshield.



- 6.12. TRANSPORT:** in its original packaging. Secure whilst being transported in a vehicle to prevent damage.
- 6.13. STORAGE:** Remove battery. Store in a dry place, away from sunlight and out of reach of children.

## 7. MAINTENANCE

### 7.1. WIRE CABLE REPLACEMENT

- ▲ **DANGER** Replacement should be performed only by an expert using certified Sealey products. Winch cable is a critical component, improper replacement could result in injury and or death. Contact Sealey for more information.
- 7.1.1. If your winch requires wire cable replacement it is critical to obtain replacement of exact size and length. The wire rope should be replaced by technicians of professional maintenance and repair points. This operation should only be performed by an experienced service technician.
- 7.1.2. Disassemble the gearbox cover with hex key by removing 6 hex head bolts, fig.6.
- 7.1.3. Remove the gearbox screws (3) and remove gears from the gearbox fig.7.
- 7.1.4. Fig.8, remove the drum support plate, cable tensioner and drum. Use a hex key to loosen the wire cable fixing screw and remove wire cable.
- 7.1.5. Fig.9: Re-install the cable tensioner to the main body, note the direction of the tensioner.  
**NOTE:** insert the smaller-shouldered side of the cable tension pin into motor-side fitting.
- 7.1.6. Install new wire cable onto drum, noting direction of wrap. As shown in fig.10, feed the wire cable end through the roller fairlead opening. The wire cable beginning should be carefully secured with fixing screw (see inset image) after a tight-close winding. Open the cable tensioner and insert drum into the assembly. Ensure installation is correct by rotating drum and tensioner is pressing against cable.
- 7.1.7. As shown in fig.8, remount the drum support plate to the main body.
- 7.1.8. As shown in fig's 7 and 6 mount the gear system, gear box and cover to the main body.
- 7.1.9. Once complete, perform a System Reset as shown below Troubleshooting.

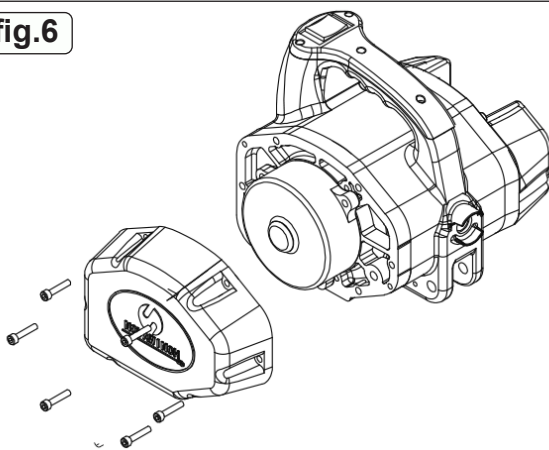
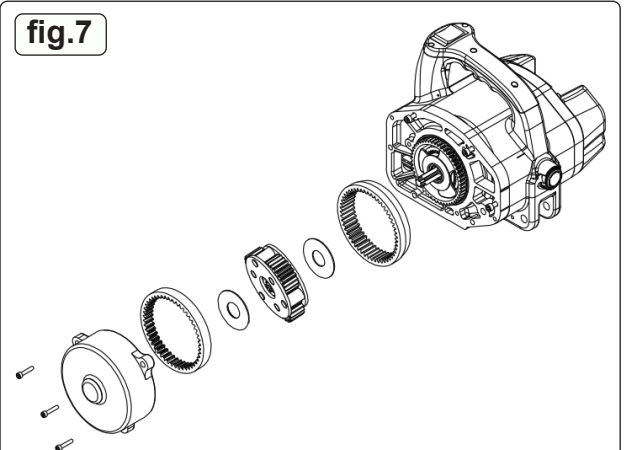
**fig.6****fig.7**

fig.8

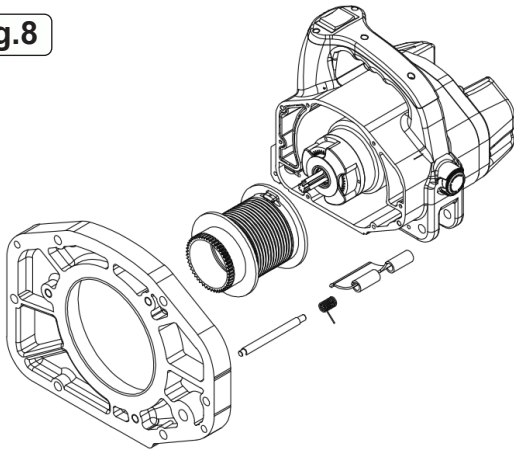


fig.9

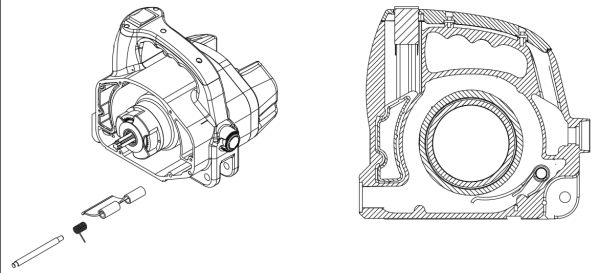
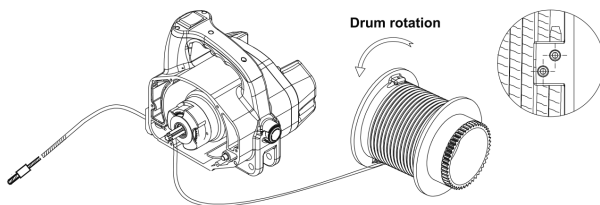


fig.10



## 7.2. SYSTEM RESET

A system reset is required after replacing the wire cable or if troubleshooting has eliminated other issues. Performing these steps will reset the winch's ability to monitor cable extension for safety.

Please calibrate and reset the system regularly. Recommended to reset the system after using more than 600 times, or each six months for reset.

**THIS PROCEDURE WILL CAUSE TOOL TO SPOOL CABLE IN AUTOMATICALLY.**

Follow these steps:

7.2.1. Clear area around tool, ensure no harm will come to people or property from sudden winch activation.

7.2.2. Connect unit to power. Ensure System/Emergency Stop button is pressed, fig.1.

7.2.3. Press the "Cable Out" Button 5 times within 5 seconds.

**THIS STEP WILL ENGAGE WINCH IN AUTOMATICALLY.**

A. Count 5 seconds, then turn the System/Emergency Stop Button until the button pops out. Keep hands away from hooks and cable, fig.2

B. Winch will automatically winch in until cable stopper is in contact with hawse, fig.4. Once tool has stopped, the System Reset is complete.

7.2.4. Confirm operation by pressing "Cable Out" for 10 seconds, then bringing the cable back in with "Cable In". Operation should be 100% normal and back to factory setting.

fig.11

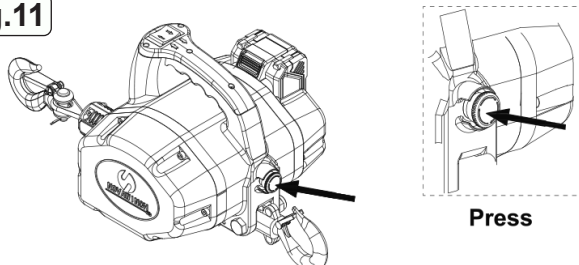


fig.12

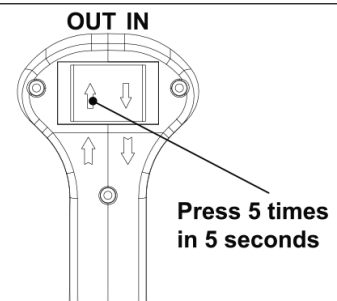


fig.13

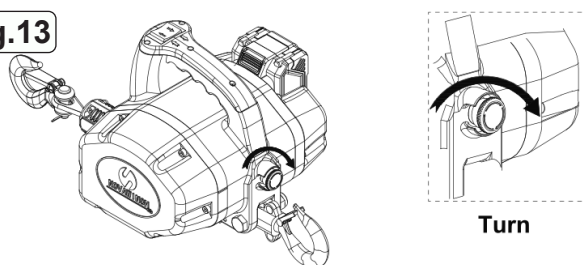
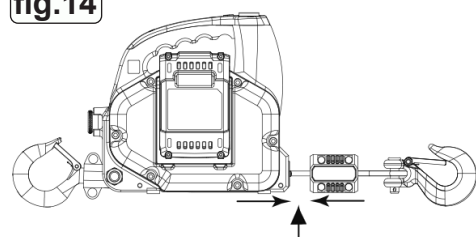


fig.14



- 7.3. **NATURE AND FREQUENCY OF INSPECTIONS FOR SAFETY FUNCTIONS**
- 7.3.1. Before operating the winch, a thorough pre-operation inspection must be conducted to ensure safe and reliable use.
- 7.3.2. Begin by opening the package and carefully inspecting all components for any signs of damage. Compare the contents with the parts list to ensure all items are present. If any damage is found, contact your supplier immediately and do not use.
- 7.3.3. Read and fully understand all documentation supplied with the product before use. Verify that the winch is correctly rated for the intended load and the battery is sufficiently charged.
- 7.3.4. Inspect the winch housing, cable, hooks, and attachment points for wear, damage, or deformation. Ensure all fasteners are secure and the cable is properly spooled without kinks or overlapping layers.
- 7.3.5. Check that the control switch operates correctly and that any emergency stop mechanism is functional.
- 7.3.6. Confirm the mounting or anchoring point is secure and capable of withstanding at least twice the maximum load.
- 7.3.7. Keep the work area clear of obstructions and bystanders and never use the handheld winch if there are any doubts about its condition or setup.
- 7.4. **METHOD AND FREQUENCY OF FUNCTIONAL TESTING**
- Functional testing of winches (pulling/lifting) involves verifying brake holding/rendering capacity, emergency stops, control response, and spooling.
- Frequency is usually annually, upon installation, or after significant repairs/replacements.
- 7.4.1. Test and inspection intervals
- Winch inspection intervals range from daily pre-use checks to annual thorough examinations by competent persons, ensuring structural integrity and operational safety, particularly for brakes and cables. Functional testing, including load tests up to 110-125% capacity, should be performed annually or after maintenance to confirm braking power and smooth operation.
- 7.4.2. Checking the function of the limiter
- Checking a winch limiter involves verifying that the electrical circuit breaks and stops motor operation at the maximum extended and retracted positions. This ensures the hook block does not damage the drum.
- Daily checks include verifying that the upper/lower limit switches stop motion safely.

## 8. TROUBLESHOOTING

| Symptom                                 | Possible Cause                                                                                            | Remedy                                                                                                  |
|-----------------------------------------|-----------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|
| Winch will not operate                  | Power not connected                                                                                       | Plug in battery                                                                                         |
|                                         | System/Emergency stop button                                                                              | Pull button to reset position                                                                           |
|                                         | Motor too hot: needs to cool down                                                                         | Wait 20 mins and retry                                                                                  |
|                                         | Too heavy/overloaded                                                                                      | Reduce load                                                                                             |
|                                         | Winch not engaged                                                                                         | Hold cable out button down for 5 seconds                                                                |
|                                         | Cable fully extended/spooled                                                                              | Red paint on cable indicates max cable out                                                              |
| Wire cable is tangled                   | If cable is pulled in at an angle, a tangle may occur. To prevent, always pull perpendicular to the Unit. | To resolve, slowly feed out the cable and rewind at a better angle.                                     |
| Wire cable damage                       | Damaged cable                                                                                             | Replace wire cable                                                                                      |
|                                         | Fairlead worn                                                                                             | Replace fairlead                                                                                        |
| Cable won't extend, but will cable in   | Cable is at max extension or is out of sync with winch and needs to be reset                              | Verify red warning paint (indicating cable end) is not visible and/or perform System Reset, section 7.2 |
| Cable won't power in but will power out | Cable position and winch are out of sync. Computer reset needed.                                          | Verify cable position and Perform System Reset section 7.2                                              |

## 9. END OF LIFE

Dismantle and recycle at the end of its working life, according to regulations in force.



#### 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 (WEEE). 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.



#### ENVIRONMENT PROTECTION

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.

**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 is required for any claim.



REGISTER YOUR  
PURCHASE HERE

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