WICHTIG: Vor Gebrauch lesen IMPORTANT: Read before using IMPORTANTE: Lea antes de usar IMPORTANT: Lire avant usage IMPORTANT: leggere prima dell'uso BELANGRIJK: lees voor gebruik VIKTIG: Les før du bruker VIKTIGT: Läs innan du använder





www.portablewinch.com

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THE ORIGINAL LANGUAGE OF THIS DOCUMENT IS

Introduction

Portable Winch Co. wishes to thank you for purchasing a *Portable Capstan Winch*TM. This manual was written to help you get the best use of your new winch and to use it in the most secure way.

PLEASE READ IT CAREFULLY BEFORE USING THE WINCH.

In case of any problems or questions, please refer to an authorized Portable Winch Co. dealer or contact us directly.

1. Safety guidelines

Portable Capstan Winches[™] are designed to **pull non-rolling objects**, generally at angles of more or less 45 degrees relative to the horizontal. The use of a winch may present serious risks of injury, property damage or even death. **Do not underestimate the potential danger.**

1.1. Safety messages

Your safety and the safety of others are very important. You will find important safety messages in this manual. **Please read them carefully.**

These security messages are warning you of potential injuries to either yourself or others. Each safety message is preceded by a warning symbol.

| SYMBOL | MEANING | |
|-----------|---|--|
| ▲ DANGER | YOU WILL BE MORTALLY OR SEVERELY INJURED IF YOU DO NOT FOLLOW THESE INSTRUCTIONS. | |
| ▲ WARNING | YOU COULD BE MORTALLY OR INJURED IF YOU DO NOT FOLLOW THESE INSTRUCTIONS. | |
| ▲ CAUTION | YOU COULD BE INJURED IF YOU DO NOT FOLLOW THESE INSTRUCTIONS. | |
| | READ THE USER GUIDE. | |
| | EYE AND HEARING PROTECTION. | |
| | GLOVES | |

1.2. Protection of the environment



End-of-life electrical products must not be disposed of with household waste. Recycle them through the establishments available. Contact the local authorities for more information on recycling conditions.

The battery contains materials which are harmful to you and the environment. It must be removed and disposed of separately at a collection point that accepts lithium-ion batteries.

1.3. Battery and charger

CHARGE THE BATTERY IN A DRY ENVIRONMENT PROTECTED FROM THE WEATHER. DO NOT EXPOSE THE CHARGER OR THE BATTERY TO RAIN.

NEVER CHARGE THE BATTERY IN A DAMP ENVIRONMENT. USE THE CHARGER AT TEMPERATURES BETWEEN 7 AND 40 °C (45 AND 104 °F). TO REDUCE THE RISKS OF ELECTRIC SHOCK, ONLY USE THE CHARGER PROVIDED BY THE MANUFACTURER TO CHARGE THE BATTERY; NEVER STORE THE TOOL OUTDOORS. HANDLE THE CHARGER'S POWER CABLE WITH CARE.

A CAUTION NEVER CARRY THE CHARGER HOLDING ITS

IF THE TOOL IS USED INTENSIVELY OR UNDER EXTREME TEMPERATURES, BATTERY LEAKS MAY OCCUR. IF THE LIQUID COMES INTO CONTACT WITH YOUR SKIN, RINSE THE AFFECTED AREA IMMEDIATELY WITH SOAPY WATER. IN CASE OF CONTACT WITH YOUR EYES, RINSE WITH CLEAN WATER FOR AT LEAST 10 MINUTES THEN CONTACT A DOCTOR IMMEDIATELY, RESPECTING THIS RULE WILL REDUCE THE RISK OF SERIOUS INJURIES.

MAINS BY PULLING ON THE POWER CABLE.

NEVER CRUSH, DROP OR DAMAGE THE BATTERY. NEVER USE A BATTERY OR CHARGER THAT HAS BEEN DROPPED, CRUSHED, RECEIVED A VIOLENT SHOCK OR BEEN DAMAGED IN ANY WHATSOEVER. A DAMAGED BATTERY RISKS EXPLODING. DISPOSE OF A DAMAGED BATTERY IMMEDIATELY USING AN APPROPRIATE METHOD.

WHEN THE BATTERY IS NOT IN USE, KEEP IT AWAY FROM METAL OBJECTS SUCH AS: PAPER CLIPS, COINS, KEYS, NAILS, SCREWS AND OTHER SMALL METAL OBJECTS.

A WARNING DO NOT USE THE CHARGER IF IT IS DAMAGED. REPLACE THE CHARGER OR ITS CABLES IMMEDIATELY.

KEEP THE CHARGER AND PORTABLE CAPSTAN WINCH™ AWAY FROM WATER, HEAT SOURCES (RADIATORS, HEATERS, STOVES, ETC.), FLAMES AND CHEMICAL PRODUCTS.

NEVER USE ANY WIRELESS DEVICE IN THE PRESENCE OF AN OPEN FLAME.

MAKE SURE THAT THE BATTERY IS SECURE IN THE CHARGER BEFORE USING IT.

DURING CHARGING. THIS IS NORMAL AND DOES NOT INDICATE A PROBLEM.

NEVER PLACE THE CHARGER IN A LOCATION EXPOSED TO EXTREME TEMPERATURES (HOT OR COLD). IT WORKS BEST AT AMBIENT TEMPERATURE.

WHEN THE BATTERY IS FULLY CHARGED, UNPLUG THE CHARGER FROM THE MAINS AND REMOVE THE BATTERY.

A CAUTION KEEP THE BATTERY CLEAN, DRY AND FREE OF OIL AND GREASE. ALWAYS USE A CLEAN CLOTH FOR ANY CLEANING. NEVER USE BRAKE FLUID, PETROL, OIL-BASED PRODUCTS OR ANY SOLVENT TO CLEAN THE BATTERY.



Compatible batteries 1.3.1

ALL 80V AND 82V BATTERIES MADE BY GLOBE TOOLS MAY BE USED WITH YOUR PCW3000-Li WINCH.

Here is a non-exclusive list of compatible battery models:

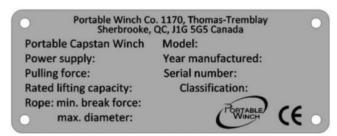
- GREENWORKS PRO 80V 2Ah.
- GREENWORKS PRO 80V 4Ah.
- GREENWORKS COMMERCIAL 82V 2.5Ah.
- GREENWORKS COMMERCIAL 82V 5Ah.
- POWERWORKS 82V 2.5Ah.
- POWERWORKS 82V 5Ah.
- CRAMER 82V 3Ah.
- CRAMER 82V 6Ah.
- STIGA VOLTAGE 80V 2.5Ah.
- STIGA VOLTAGE 80V 4Ah.
- STIGA VOLTAGE 80V 5Ah.
- BRIGGS & STRATTON 82V MAX 2Ah.
- BRIGGS & STRATTON 82V MAX 4Ah.
- BRIGGS & STRATTON 82V MAX 5Ah.

Please consult our website www.portablewinch.com for the list of compatible batteries or contact us.

1.4. Labels.

1.4.1 Serial number labels.

The serial number label can be found on the right side of the winch's gearbox. In addition to the winch's serial number, the fundamental specifications of your model are also found there.



1.4.2 **Engine label**



Line installation label 1.4.3



This label is placed on the winch's housing. It indicates the installation direction of the line for the Portable Capstan $Winch^{TM}$.

Hearing protection label

We recommend wearing hearing protection when using the Portable Capstan Winch^{1M}.



1.5. Safety information.

A CAUTION DO NOT ALLOW

CHILDREN TO USE THE *PORTABLE CAPSTAN WINCH™*. KEEP CHILDREN AND ANIMALS OUTSIDE OF THE WORK ZONE.

A WARNING NEVER ALLOW AN UNTRAINED PERSON TO USE THE PORTABLE CAPSTAN WINCHTM. MAKE SURE THAT THEY ARE AWARE OF THE SAFETY AND USAGE INSTRUCTIONS AND HAVE READ THIS MANUAL.

A WARNING INFORM ALL USERS OF THE SAFETY

AND USAGE INSTRUCTIONS.

A WARNING FAMILIARISE YOURSELF WITH THE OPERATION OF THE PRODUCT AND THE SECURITY INSTRUCTIONS BEFORE STARTING WORK WITH THE PORTABLE CAPSTAN WINCH $^{\rm TM}$.

A WARNING MAKE SURE THAT YOUR CLOTHING CANNOT GET CAUGHT IN THE MOVING PARTS OF THE PORTABLE CAPSTAN WINCH™

A CAUTION REPLACE ALL SECURITY LABELS THAT ARE DAMAGED, ILLEGIBLE OR TORN.

A WARNING NEVER PLACE YOUR HANDS CLOSE TO THE LINE GUIDE, CAPSTAN DRUM OR ENTRY HOOK WHEN THE ENGINE IS RUNNING.

A WARNING ALWAYS KEEP ONLOOKERS OUTSIDE

OF THE WORK ZONE.

A WARNING NEVER PULL ROLLING MATERIAL THAT RISKS ROLLING OUT OF YOUR CONTROL.

A WARNING THE PORTABLE CAPSTAN WINCH™ IS NOT DESIGNED TO LIFT LOADS.

A WARNING NEVER USE THE PORTABLE CAPSTAN

WINCH™TO LIFT PEOPLE.



ALWAYS WEAR GLOVES.



WE RECOMMEND THE WEARING OF HEARING PROTECTION.



BEFORE USING THE ELECTRIC DEVICE, ALWAYS WEAR SAFETY GLASSES WITH SIDE SHIELDS. ALWAYS WEAR SAFETY GLASSES BEARING A COMPLIANCE MARK.



MEDIATELY AFTER USE AS IT IS VERY HOT AND MAY BURN YOUR SKIN.

WARNING MOST PULLING SITUATIONS PRESENT POTENTIAL DANGERS!

A WADNING

DO NOT USE A 3-STRAND YELLOW

PROPYLENE LINE

- POLYPROPYLENE AND POLYETHYLENE LINES ARE DANGEROUS FOR PULLING DUE TO THEIR ELASTICITY AND THEIR LOW MELTING POINT.
- MAKE SURE THAT THE LINE IS NOT DAMAGED AND OFFERS ADEQUATE RESISTANCE FOR THE LOAD TO BE PULLED.

A WARNING STRETCHING = DANGER!

- STRETCHING THE LINE MAY CAUSE SERIOUS INJURY. BE CAREFUL WHEN RELEASING THE TENSION IN THE LINE.
- ALL LINES STRETCH: INCREASED LENGTH: THE MORE THE LINE IS PULLED, THE MORE IT STRETCHES.
- STRETCHING THE LINE MAY CAUSE THE LOAD TO MOVE IN AN UNEXPECTED AND DANGEROUS MANNER.
- STRETCHING THE LINE MAY CAUSE IT TO RELAX AND MOVE BACKWARDS QUICKLY, PULLING YOUR HAND TOWARDS THE WINCH OR CAUSING SEVERE BURNS.
- NEVER WIND THE LINE AROUND YOUR HAND.

PERFORM A VISUAL INSPECTION OF THE LINE BEFORE EACH USE. IF IT PRESENTS OBVIOUS SIGNS OF WEAR (CHOPPED STRAINS, EXCESSIVE ABRASION), CHANGE IT.

LINE CAN QUICKLY BECOME DAMAGED AND CAUSE PREMATURE WEAR TO THE PARTS IN CONTACT WITH IT.

A CAUTION WHAT NOT TO DO:

WHEN YOU INSTALL THE SLING TO ANCHOR THE WINCH, AVOID A FULL TURN AROUND AN ANCHORING POINT. THIS WILL PREVENT THE WINCH FROM ALIGNING ITSELF WITH THE LOAD CORRECTLY. THIS WILL ALSO APPLY UNEVEN TENSION TO EACH OF THE HOOKS.

ACAUTION AVOID INSTALLING THE SLING ON SHARP CORNERS LIKELY TO DAMAGE THE POLYESTER SLING. WHEN YOU USE A POLE, A TREE OR A STUMP AS AN ANCHORING POINT, INSTALL THE SLING CLOSE TO THE BASE.

ANCHORING AROUND A STUMP REQUIRES SPECIAL ATTENTION TO AVOID THE SLING SLIPPING OFF THE TOP OF THE STUMP.

MAKE SURE THAT THE ANCHORING POINT IS ABLE TO RESIST THE PULLING WITHOUT BREAKING, BEING UPROOTED OR BECOMING DAMAGED.

A DANGER

HANDS OR YOUR BODY! ALSO BEWARE OF THE BUILT-UP TENSION CLOSE TO YOU AND MAKE SURE THAT YOU ARE A SAFE DISTANCE FROM THIS ACCUMULATION.

WARNING

KEEP AN EYE ON THE CAPSTAN DRUM

DURING OPERATION AND MAKE SURE THAT THE LINE DOES NOT

CROSS THE LATTER. IF THIS OCCURS, RELEASE THE TENSION IN

THE LINE, STOP THE ENGINE AND REMOVE THE KINK.

IF THE WINCH PULLS THE LINE AND THE LOAD DOESN'T MOVE (OFTEN WHEN A VERY LONG LINE IS USED), THIS MEANS THAT YOUR LINE IS STRETCHED AND THE BREAKING POINT COULD QUICKLY BE REACHED AND THE LOAD CAN SUDDENLY BE HEADING TOWARDS YOU. SLOWLY RELEASE THE TENSION IN THE LINE BUT BEWARE OF THE BUILT-UP TENSION: THE LINE MAY QUICKLY GET AWAY FROM YOU CAUSING BURNS OR TAKING YOU TOWARDS THE WINCH.

THE HOOKS, THE LINE AND THE POLYESTER SLING TO DETECT ANY DAMAGE OR SIGNS OF WEAR

2.0 Checks before use

2.1 When receiving the winch

Inspect the box to detect any obvious damage. If a part is missing or damaged, notify the carrier immediately.

2.2 Battery

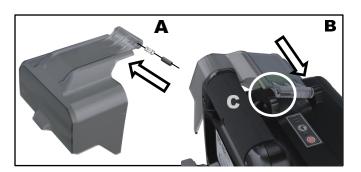
THE BATTERY IS ONLY HALF-CHARGED AT THE TIME OF PURCHASE. BEFORE USING YOUR PORTABLE CAPSTAN WINCHTM FOR THE FIRST TIME, FOLLOW ALL THE INSTRUCTIONS AND GUIDELINES INDICATED IN THE BATTERY AND CHARGER SUPPLIER GUIDES. REMOVE THE BATTERY BEFORE STORING THE PORTABLE CAPSTAN WINCHTM FOR A LONG PERIOD. BEFORE REUSING THE PORTABLE CAPSTAN WINCHTM AGAIN, CHARGE THE BATTERY AGAIN FOR AT LEAST ONE COMPLETE CHARGING PERIOD. THIS BATTERY INCLUDES NO MEMORY EFFECT.

2.3 Installing the battery's protective cover.

This cover is designed to protect 4.0 - 5.0Ah batteries located outside the housing from rain. The cover is supplied with a spring and a short metal rod.

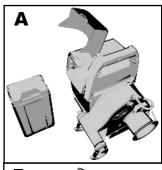
A CAUTION Perform the following operation inside a building:

- A) Place the spring in the housing cavity and then the pin.
- B) Place the lid in the other cavity and push the pin against the spring.
- Position the cover holding the pin until it snaps into the housing.

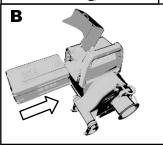


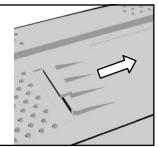


2.4 Installing the battery

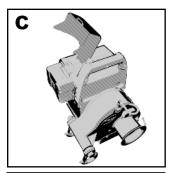


A) Open the battery's protective cover.

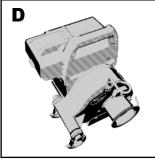




B) Insert the battery (plastic part towards the compartment)



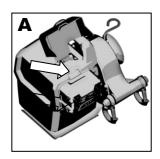
C) Hold the handle of the PORTABLE CAPSTAN WINCH™ and push the battery until you hear a "click".

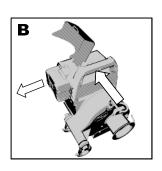


D) Close the cover.

2.5 To remove the battery

- Press the battery release button located above the A) battery. This allows the battery to easily be removed from the device.
- B) Hold the handle to remove the battery.





2.6 Starting the engine

The engine controls can be found on the engine's housing, above the battery cavity.



Operation of the unit: Press twice to turn on press again to turn off.

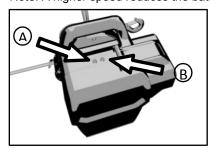


Press to select the speed of the

Once = 8.1 m/minute. Twice = 9.9 m/minute.

3 times = 11.6 m/minute.

Note: A higher speed reduces the battery's operating time.



THE LITHIUM-ION BATTERY IS FITTED WITH AN INTERNAL BREAKER WHICH WILL AUTOMATICALLY STOP THE DEVICE IN CASE OF OVERLOAD. IF THIS HAPPENS, TURN THE DEVICE OFF BY PRESSING BUTTON "A" (SEE ILLUSTRATION).

2.7 Capstan drum

The Portable Capstan Winch™ is equipped with the following drum:

PCW3000-Li: Drum 76 mm in diameter.

3.0 Using the winch

A WARNING POTENTIAL DANGERS!

MOST PULLING SITUATIONS PRESENT



BEFORE USING THE ELECTRIC DEVICE, ALWAYS WEAR SAFETY GLASSES WITH SIDE SHIELDS. ALWAYS WEAR SAFETY GLASSES BEARING A COMPLIANCE MARK.



IN CASE OF EXTENDED USE, MAKE SURE YOU USE SUITABLE HEARING PROTECTION BEARING A COMPLIANCE

3.1 <u>Line</u>

A WARNING KEEP THE WINCH LINE WITHDRAWN

3.2 Type of line

Only use a line with low elasticity. We recommend a double braid polyester line.

- Min, max and recommended diameters, PCW3000-Li:
 - Min: 10 mm \cap
 - Max: 13 mm 0
 - Recommended: 10 mm
- Please contact us if you have any questions about line types.





DO NOT USE A 3-STRAND YELLOW

- POLYPROPYLENE AND POLYETHYLENE LINES ARE DANGEROUS FOR PULLING DUE TO THEIR SIGNIFICANT ELASTICITY AND THEIR LOW MELTING POINT.
- MAKE SURE THAT THE LINE IS NOT DAMAGED AND OFFERS ADEQUATE RESISTANCE FOR THE LOAD TO BE PULLED.

WARNING STRETCHING = DANGER!

- STRETCHING THE LINE MAY CAUSE SERIOUS INJURY. BE CAREFUL WHEN RELEASING THE TENSION IN THE LINE.
- ALL LINES STRETCH; INCREASE IN LENGTH; THE MORE THE LINE IS PULLED, THE MORE IT STRETCHES.
- STRETCHING THE LINE MAY CAUSE THE LOAD TO MOVE IN AN UNEXPECTED AND DANGEROUS MANNER.
- STRETCHING THE LINE MAY CAUSE IT TO RELAX AND MOVE BACKWARDS QUICKLY, PULLING YOUR HAND TOWARDS THE WINCH OR CAUSING SEVERE BURNS. NEVER WIND THE LINE AROUND YOUR HAND.



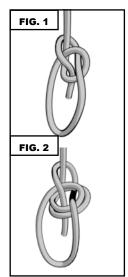
ALWAYS WEAR GLOVES.

3.3 Line maintenance

A CAUTION PERFORM A VISUAL INSPECTION OF YOUR LINE BEFORE EACH USE. IF IT PRESENTS SIGNS OF OBVIOUS WEAR (CHOPPED STRANDS, EXCESSIVE ABRASION), CHANGE IT.

A CAUTION IF YOUR LINE IS DIRTY, CLEAN IT. A DIRTY LINE CAN QUICKLY BECOME DAMAGED AND CAUSE PREMATURE WEAR TO THE PARTS IN CONTACT WITH IT.

Recommended knots



You must attach the load to the end of the line.

Although a simple knot may sometimes suffice, we recommend using a bowline knot (fig. 1).

This knot maintains around 70% of the line's capacity while most knots reduce the line's capacity by 50% or more.

In addition, it may be easy to undo after use even if a heavy load has been pulled.

Even better, the double bowline knot (fig. 2) allows you to maintain approx. 75% of the line's capacity.

3.5 Anchoring the winch

OPTION 1:

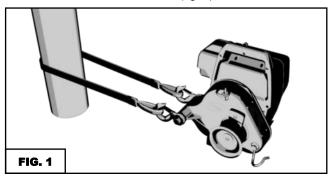
In most cases, the winch is anchored to a fixed object using a polyester sling or one of our optional anchors and the line is attached to the object you are trying to move. The latter is moved towards the winch as the winch pulls the line.

OPTION 2:

Sometimes, the winch can be anchored to the object you want to move and the line is attached to a fixed object.

The winch and the object being moved are then pulled towards the line's anchoring point. This method is useful when you guide the load while operating the winch.

Your winch is supplied with a 2-meter polyester sling. To anchor the winch, wind it around the anchoring point with the sling. Insert each end of the sling in each of the two hooks located on the back of the winch (fig. 1).

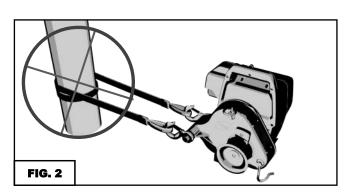


Place the winch in the direction of the load to be pulled. When the winch is switched on, it will attempt to align itself with the load. The friction of the sling against the anchor may prevent correct alignment; in this case, release the tension in the line and move the sling so that the tension is distributed over the two books equally.

A CAUTION WHAT NOT TO DO:

WHEN YOU INSTALL THE SLING TO ANCHOR THE WINCH, AVOID A FULL TURN AROUND AN ANCHORING POINT (FIG. 2 BELOW). THIS WILL PREVENT THE WINCH FROM ALIGNING ITSELF WITH THE LOAD CORRECTLY.

THIS WILL ALSO APPLY UNEVEN TENSION TO EACH OF THE HOOKS.





A CAUTION AVOID INSTALLING THE SLING ON SHARP CORNERS LIKELY TO DAMAGE THE POLYESTER SLING. WHEN YOU USE A POLE, A TREE OR A STUMP AS AN ANCHORING POINT, INSTALL THE SLING CLOSE TO THE BASE.

A CAUTION ANCHORING AROUND A STUMP REQUIRES SPECIAL ATTENTION TO AVOID THE SLING SLIPPING OFF THE TOP OF THE STUMP.

MAKE SURE THAT THE ANCHORING POINT IS ABLE TO HANDLE THE PULLING WITHOUT BREAKING, BEING UPROOTED OR BECOMING DAMAGED.

We also offer a wide range of anchoring accessories for our capstan winches. Please see www.portablewinch.com

3.6 Installing the line

THE CORRECT DIRECTION WHEN DEPLOYING THE LINE IS THE KEY TO SAFE USE OF THE WINCH.

The wide range of situations encountered during pulling prevents us from given precise instructions; however, consider the following points:

3.6.1 Line

Use a line with a low elasticity in good condition, with a minimum diameter of 10 mm and a maximum diameter of 13 mm with good knots.

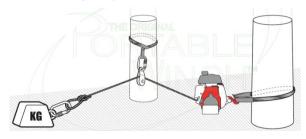
We highly recommend the bowline knot (§3.4).

3.6.2 **Pulley**

Use pulleys to divert the line and increase the pulling power when the load approaches or exceeds the winch's pulling capacity.

The use of a short-distance winch pulley offers the following benefits:

- Provides an angle allowing the load to be slightly raised to reduce friction;
- Maintains the winch in an almost horizontal position;
- Keeps the winch and the operator away from the load's trajectory.



3.6.3 Direction

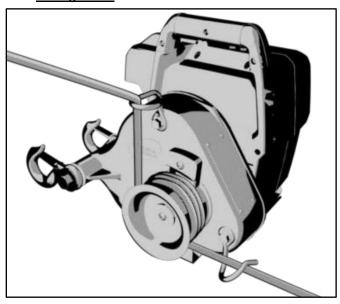
Install the line so that it doesn't rub against any objects during pulling. Try to install the line so that the front of the load is slightly raised. Never pull downwards or through obstacles.

IN GENERAL, IF THE LINE TOUCHES THE GROUND DURING PULLING, THE INSTALLATION IS INCORRECT.

3.6.4 On a slope

NEVER PULL A LOAD ALONG A DESCENDING SLOPE DIRECTLY TOWARDS THE WINCH BECAUSE THE LOAD MAY SLIDE TOWARDS YOU WITHOUT YOU BEING ABLE TO STOP IT. IN THIS CASE, USE A PULLEY AT THE BOTTOM OF THE SLOPE AND POSITION THE WINCH FURTHER BACK AWAY FROM THE AXIS OF THE LOAD.

3.7 Pulling a load



CHECK THE POSITION OF THE WINCH, THE CONDITION OF THE LINE, THE SOLIDITY OF THE ANCHORING POINT, THE KNOTS, HOOKS TO AVOID INJURIES AND MATERIAL DAMAGE.

3.7.1 Winding the line around the capstan drum

▲ WARNING

NEVER PLACE YOUR HANDS CLOSE TO THE LINE GUIDE, CAPSTAN DRUM OR ENTRY HOOK WHEN THE ENGINE IS RUNNING.

- Press the On/Off button twice and the speed button once.
- 2) Wind the line around the drum (3 or 4 turns).
- 3) Take the line behind the exit hook.
- 4) Keep a safe distance from the winch (approx. 1m) and pull gently and horizontally on the line until the slack in the line is taken up and you feel tension in the line.
- Inspect your installation to make sure that the anchoring of the winch and the entrance hook are aligned with the line.
- 6) Check that the line does not rub against objects in its trajectory; if you want to increase the pulling speed, press the speed button once or twice again.

Note: A high speed reduces the battery's operating time.



3.7.2 Pulling

When pulling, position yourself so that you can see the winch and the load. Pull on the line **HORIZONTALLY**. The tension you exert on the line keeps the winch level.

▲ DANGER

NEVER WIND THE LINE AROUND YOUR

HANDS OR YOUR BODY!

ALSO BEWARE OF THE BUILT-UP OF TENSION CLOSE TO YOU AND MAKE SURE THAT YOU ARE A SAFE DISTANCE FROM THIS ACCUMULATION.

DURING OPERATION AND MAKE SURE THAT THE LINE DOES NOT CROSS THE LATTER. IF THIS OCCURS, RELEASE THE TENSION IN THE LINE, STOP THE ENGINE AND REMOVE THE KINK.

3.7.2.1 If the line slips

If the line slips on the drum while you are pulling, add a turn of line around the drum (4th turn). The engine will stop when the winch reaches its maximum capacity. A warning will be audible and the LEDs will flash four times. You should then repeat the installation (add pulleys) or "cradle" the load (see next section).

3.7.2.2 To "cradle" the load

Pull sharply for a brief moment and release the tension in the line. Then return the tension to the line and repeat as required.

"CRADLING" METHOD. THIS METHOD MAY CAUSE RAPID WEAR TO THE LINE DUE TO THE HEAT CREATED ON THE DRUM.

IF THE WINCH PULLS THE LINE AND THE LOAD DOESN'T MOVE (OFTEN WHEN A VERY LONG LINE IS USED), THIS MEANS THAT YOUR LINE IS STRETCHED AND THE BREAKING POINT COULD QUICKLY BE REACHED AND THE LOAD COULD SUDDENLY BE HEADING TOWARDS YOU.

SLOWLY RELEASE THE TENSION IN THE LINE BUT BEWARE OF THE BUILT-UP TENSION: THE LINE MAY QUICKLY GET AWAY FROM YOU CAUSING BURNS OR TAKING YOU TOWARDS THE WINCH.

3.7.2.3 To take a break during pulling

Slowly release the tension in the line and allow it to slide over the drum.

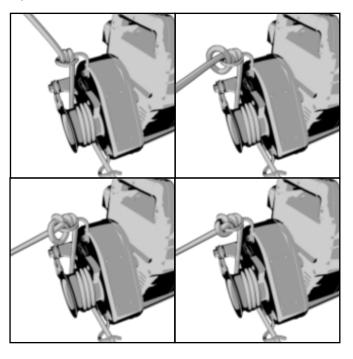
THE DRUM FOR MORE THAN A FEW SECONDS WHEN A LOAD IS ATTACHED - THE HEAT CREATED BY THE FRICTION COULD MELT OR DAMAGE THE LINE.

3.7.2.4 <u>Maintaining the load without releasing the tension</u>

You must maintain the tension at the end of the line by holding it or attaching it to a fixed object.

1) Turn off the engine;

- Complete two turns of line around the exit hook before removing the tension from your hands.
- 3) Then do two half-knots around the exit hook.



3.7.2.5 To recommence pulling

You should release some of the tension before restarting the winch's engine. Firstly, undo the two half-knots. Allow the line to move slowly to release the tension. Then, whilst holding the line in one hand, restart the engine. You can recommence pulling.

3.7.2.6 If it is essential to keep the tension in the line at startup

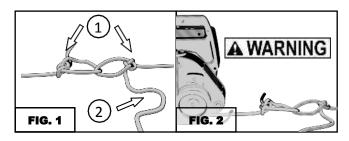
You can use a blocker or a Prusik knot connected to your anchoring point to maintain the tension in the line.

3.7.2.7 If your line is too short

If your line is too short, you can connect two lines together:

- Fig. 1, no.1: Use a bowline knot to link the two lines together.
- Fig. 1, no.2: Allow approx. 1 m (3') of line to exceed the knot of the line pulling the load. This length of line will be used for pulling when the knot is undone.
- Fig. 2: Stop the winch before the knots reach the winch because the latter will not be able to pass through and will cause the entanglement of the line.
- Release the tension in the line. Attach the load to a fixed point if necessary.
- Untie the line's knot and use the remaining length (1 m (3')) to wind it around the drum and restart the winch again.





3.7.2.8 Stopping the winch

- Gradually release the tension to gradually lower the winch towards the ground;
- 2) Press the on/off button.

4.0 Maintenance

4.1 Cleaning

When your work is complete, clean and dry the winch. Avoid using solvents for cleaning the plastic parts. Most of plastic materials can be damaged by various types of commercial solvents. Use a clean cloth to remove any dirt, dust, oil, grease, etc.



A CAUTION

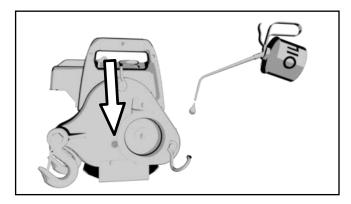
DURING

CLEANING, INSPECT THE WINCH, THE HOOKS, THE LINE AND THE POLYESTER SLING TO DETECT ANY DAMAGE OR SIGNS OF WEAR.

Regularly remove the capstan drum and clean around the shaft. Any accumulated debris may damage the seal. Brush the shaft with a little oil to avoid corrosion.

4.2 Lubrication

The gearbox is lubricated in the factory and thus should not require lubrication or maintenance. If oil losses become apparent, check the oil level by placing the winch on a level surface and unscrew the cap. Use an 8 mm hexagonal key.



When tipping the winch forwards, a little oil may escape through the hole. If required, you can add SAE80W90EP gear oil.

4.3 Charger and battery

4.3.1 Charger

THE BATTERY IS NOT FULLY CHARGED. WE RECOMMEND CHARGING THE BATTERY FULLY BEFORE THE FIRST USE TO ACHIEVE A MAXIMUM OPERATING TIME. THIS LITHIUM-ION BATTERY HAS NO MEMORY AND CAN BE CHARGED AT YOUR DISCRETION.

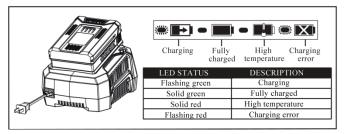
4.3.1.1 Low-voltage charging:

If the battery has been stored with little charge or with no charge for a long period, the charger enters restart mode which takes 20 hours for the battery to be fully charged. This increases the battery's life. Once fully charged, standard charging is available next time.

Any discharged battery requires a cooling period which is mentioned in the battery user manual.

- Plug the charger into the mains.
- Insert the battery in the charger.

This is a diagnostic charger. The LED will come on in a specific order to indicate the battery's current status. This order is as follows:



Never leave the battery on the charger as soon as it is fully charged and ready to use.

4.3.1.2 Fault indication.

When the battery is inserted in the charger and the LEDs flash red, remove the battery from the charger for a minute and insert it again.

- If the LEDs flash green, this means that the battery is charging normally.
- If the LEDs still flash red, remove the battery and unplug the charger again.

Wait a minute then plug the charger in again and reinsert the battery. If the LEDs flash green, this means that the battery is charging normally.

 If the LEDs still flash red, the battery is faulty and must be replaced.

4.3.2 Battery

4.3.2.1 Charge verification.

If the battery does not charge correctly:

- Check the socket using another device. Make sure that power is reaching the socket.
- Check that the charger's contacts are not short-circuited by debris or foreign objects.
- If the ambient temperature is unusual, move the charger and the battery to a place where the temperature is between 7 °C and 40 °C.



CAUTION IF THE BATTERY IS INSERTED IN THE CHARGER WHEN IT IS WARM OR HOT, THE RED LEDS MAY COME ON. IF THIS HAPPENS, ALLOW THE BATTERY TO COOL AWAY FROM THE CHARGER. THE BATTERY MAY BE CHARGED NORMALLY ONCE A NORMAL CHARGING TEMPERATURE IS ACHIEVED.



REFER TO THE CHARGER AND BATTERY MANUAL FOR MORE INFORMATION.

4.4 Storage

Always store your *Portable Capstan Winch*TM horizontally on its base

Storing the battery for more than 30 days:

- Remove the battery from the device.
- Store the device in a location where the temperature is between 7 °C and 40 °C.

5.0 Additional information.

5.1 Accessories.

A full range of accessories are available. Take a look at www.portablewinch.com

5.2 Warranty

The Portable Winch Co. winch and accessories are guaranteed against all manufacturing defects when owned by the "original owner" as defined here below.

The "original owner" is defined as the person or entity that purchased the winch or accessories from an authorized Portable Winch Co. dealer as shown by the original invoice. The warranty is transferable if the new buyer holds a copy of the original invoice.

This warranty does not apply to items sold "as is". The warranty does not apply to the wear parts defined as those coming into contact with the line during pulling.

The portable capstan winch is covered as follows:

PCW3000-Li

O Commercial use: 3 months

O Private use: 2 years

Serviced by Portable Winch Co. or its retailers.

Portable Winch Co. will replace or repair, at its discretion, any faulty products. All other Portable Winch Co. accessories are covered by a one-year (1) warranty with the exception of the lines which are covered by a 3-month warranty. If you have any questions, please consult the warranty policy at www.portablewinch.com

Extend your warranty for free

We want to thank you for your purchase. To do this, we are offering you AN ADDITIONAL ONE-YEAR (1) WARRANTY FOR FREE! It's easy, just register your winch at www.portablewinch.com or over the phone on 1 888 388-7855 or + 1 819 563-2193.

5.3 Troubleshooting area

In case of unexpected problems, consult the document *Troubleshooting area* at <u>www.portablewinch.com</u>in the section *Manuals and instructions*.

5.4 Error codes:

| Descriptions | DEL code | Definitions |
|--------------------------------|-------------|---|
| Battery connection issue | 3 | No communication between the battery and the control card. Or loss of communication during the current phase. |
| Surge protection | 4 | The current process exceeds the maximum admissible load. |
| Low-voltage protection | 5 | The battery has achieved its minimum charge (Recharge the battery). |

In most situations, turn the device off and restart it.

5.5 Disposing of the battery



The device's battery contains lithium-ion, a toxic substance.

ALL TOXIC MATERIALS MUST BE DISPOSED OF IN ACCORDANCE WITH CURRENT DIRECTIVES TO AVOID CONTAMINATING THE ENVIRONMENT. BEFORE DISPOSING OF A DAMAGED OR END-OF-LIFE LITHIUM-ION BATTERY, CONTACT YOUR LOCAL WASTE DISPOSAL FACILITY FOR MORE INFORMATION AND THE APPROPRIATE GUIDELINES. TAKE THE BATTERIES TO THE LOCAL RECYCLING AND LANDFILL CENTER AUTHORIZED TO DISPOSE OF LITHIUM-ION BATTERIES. IF THE BATTERY IS CRACKED, EVEN IN THE ABSENCE OR A LEAK, YOU MUST NOT CHARGE OR USE IT. YOU SHOULD REMOVE IT AND REPLACE IT WITH A NEW BATTERY.

This avoids injuries and risks of fire, explosion or electric shock or contamination of the environment:

- Cover the battery's terminals using resistant adhesive tape.
- Never try to remove or destroy any battery component.
- Do NOT open the battery.
- When a leak occurs, the electrolyte substances released are corrosive and toxic.
 AVOID this solution coming into contact with your eyes or skin and do not swallow it.



- AVOID disposing of this type of battery with your household waste.
- AVOID burning them.
- AVOID taking then to a landfill site or any municipal solid waste facilities.
- Take them to an approved recycling or landfill center.

5.6 Technical data

PCW3000-Li

Engine: 1kW brushless
Gearbox: Aluminum alloy box

Gears made of tempered steel with ball bearings.

Weight: 9.4 kg (without battery)

Reduction ratio: 200:1

Protection class: IPX3 (protection against rainwater).

Maximum continuous pulling force (single line): 700 kg

Maximum momentary pulling force (single line): 1,000 kg

Speed: 1- 8.1 m/min

2- 10 m/min

3- 11.6 m/min

Capstan drum: 76 mm in diameter.

Up to 4 turns of line 10 mm.

Dimensions (overall): 30.2 cm x 31.8 cm x 31.0 cm Line: Double braid polyester with low elasticity (not

included) of unlimited length.

Minimum diameter: 10 mm

Maximum diameter: 13 mm

Recommended: 10 mm

5.7 Sound power levels

These are the different sound power levels for the *Portable Capstan Winch* TM :

Full throttle engine speed, L_WA 87.1 dB(A). L_WA de 90 dB(A) with uncertainty included KwA = 2.5dB.

5.8 Manufacturer

The Portable Capstan WinchesTM are manufactured by:

Portable Winch Co.

1170 Thomas-Tremblay St.

Sherbrooke, Québec, J1G 5G5, CANADA

Telephone: +1 819 563-2193

Freephone (CAN & USA): 1-888-388-7855

Fax: + 1 514 227-5196 E-mail: info@portablewinch.com Website:

www.portablewinch.com



5.9 <u>CE DECLARATION OF</u> <u>CONFORMITY</u>



We **PORTABLE WINCH CO.**

Located 1170 Thomas-Tremblay St.

Sherbrooke, QC J1G 5G5

CANADA

Tel.: +1 819 563-2193 www.portablewinch.com

Declare, under our sole responsibility

that the product: Portable Capstan Winch™

Models PCW3000-Li

Engine 1.0kW

Serial no.: 32180000 and over

Designed for this use Pulling non-rolling objects at angles of +45° on a

horizontal surface

In compliance with the "Machines" directive 2006/42/EC as well as the following directives:

- 2014/30/EU Electromagnetic Compatibility Directive
 - 2000/14/EC Directive on environmental noise emissions

Mr. Gerold Vonblon, Landstrasse 28, A-6714 Nuziders

is authorized to compile the technical file.

Signed by:

v - C___

Name: Pierre Roy

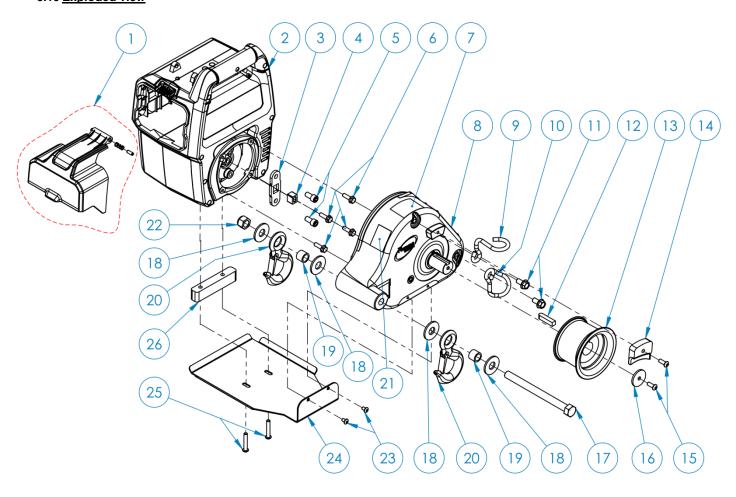
Position: Managing Director

In Sherbrooke, QC, Canada

On 24 August 2018







| VIEW# | PART# | DESCRIPTION |
|-------|----------|---|
| 1 | 10-0431 | BATTERY COVER |
| 2 | 10-0432 | ELECTRIC POWER HEAD 1.0 kW - BLACK |
| 3 | 10-0133 | ENGINE COUPLING PLATE |
| 4 | 10-0132 | ALUMINIUM COUPLING PART FOR ENGINE |
| 5 | 32-0007 | SHCS M8-1.25 X 16 MM - BLACK |
| 6 | 32-0056 | INDENTED HEX FLANGE BOLT M6-1.0 X 20 mm - ZN |
| 7 | 44-0025 | LABEL - LINE INSTALLATION |
| 8 | 10-0415 | GEARBOX 200:1 |
| 9 | 10-0135 | EXIT HOOK |
| 10 | 10-0136 | ENTRANCE HOOK |
| 11 | 32-0008 | INDENTED HEX FLANGE BOLT M8-1.25 X 16 MM - ZN |
| 12 | 43-0013 | CAPSTAN DRUM WRENCH 57 MM, 76 MM & 85 MM |
| 13 | 10-0129 | CAPSTAN DRUM 76 MM |
| 14 | 10-0427 | ALUMINIUM GUIDE LINE FOR CAPSTAN DRUM 76 mm |
| 15 | 32-0004 | BHCS M6-1.0 X 16 mm - SS |
| 16 | 10-0102 | RETAINING WASHER 1/4 X 1-1/4 - ZN |
| 17 | 31-0010 | HCS 1/2-13 X 6 - GR5 - ZN |
| 18 | 35-0004 | FLAT WASHER 1/2 - ZN |
| 19 | 10-0098 | SOCKET FOR SAFETY HOOK |
| 20 | PCA-1281 | SAFETY HOOK - LCT: 3/4 TONNE |
| 21 | 44-0185 | LABEL PROTECTION AUDITIVE |
| 22 | 33-0005 | BOLT 1/2-13 NYLON - ZN |
| 23 | 32-0055 | BHCS M5-0,8 X 8 MM - SS |
| 24 | 10-0421 | FLOOR PLATE |
| 25 | 32-0016 | BHCS M6-1 X 35 MM - SS |
| 26 | 10-0422 | PLATE-HOUSING SPACER |





www.portablewinch.com

in fo@portable winch.com

1888 388-7855 / +1 819-563-2193

Rev: 00 (2018-08-31) 44-0188