BUCKINGHAM MFG.

P/N 5100W Series Battery / Power Supply Hoist Instructions

Instructions for use:

Warning: Do not use this product if you cannot understand and follow the instructions and warnings that come with it and complete all necessary functions.

A) Winch:

Note: P/N 5100W Battery Hoist is supplied with a winch that can be driven by turning the Hex Stud using either the Removable Winch Handle (Fig.1) by hand or, turned by a powered tool such as a cordless drill (See Fig. 7) etc. (Never use an Impact driver). Read carefully and follow all instructions packed with this product.

- Wind the rope onto the winch reel by turning the hex stud in a clock-wise direction. To remove the rope from the winch reel, turn the hex stud in a counterclockwise direction. Use one of the previously indicated options to turn the Hex Stud.
- 2. The load will remain in position when the Hex Stud has stopped turning.

Note: Tension must be applied to the rope for the hoist to wind properly.

B) Mounting the Battery Hoist System:

Remove all components from the storage bag (Fig.1). Note: colors, or options may vary from those shown throughout these instructions.

- 1. If using a ladder, position it directly beneath the battery box, and stabilize it with a ladder stabilizing strap system. Buckingham recommends using their PN 355B. (Fig. 2).
- 2. Using appropriate PPE, climb the ladder (or position bucket) and open the cover to the battery box. It may be necessary to remove the cover if it inhibits the proper function of the hoist.
- 3. Using a hand line, raise the Battery Hoist to the battery box.
- 4. Place the Battery Hoist on top of the battery box (Fig. 3). Align the Battery Hoist with the angled bracket on the top left side of the battery box with the winch pointing forward and ensure the J-bracket is under the inside lip of the battery box (Fig. 4 & 5).
- 5. Wrap the strap attached to the angled bracket around the pole. Attach the ratchet strap hook back onto the ratchet strap and remove all the slack. Rotate the ratcheting handle until the strap is securely tight (Fig. 5.)
- 7. It may be necessary to re-position the ladder to the left side of the box when attaching the Second ratchet strap and to create clearance for hoisting (Fig. 6).
- 8. Cinch the hook end of the ratchet strap attached to the winch around the pole and above the battery box. Attach the hook back onto the ratchet strap and remove slack. Rotate the ratchet handle to securely tighten the strap and to add extra support to the hoist arm and battery box (Fig. 5.).

Fig. 4



Fig. 5



Fig. 1



Fig. 2













Fig. 8

Fig. 9

Fig. 6

(C) Removing Battery from the Battery Box:

- Slightly tilt up one end of the battery and slide the plastic sheeting of the Battery Carrie under the battery. Ensure the battery is completely inside of the Battery Carrier.
- 2. Secure the battery into the carrier by connecting the Quick Lock Buckle attached to the containment strap (Fig. 8).
- 3. Place the Battery Carrier Handle onto the prongs of the Dual Hook and center the handle between the prongs (Fig. 9).
- 4. Rotate the Battery Hoist Hex Stud clockwise (using the removable handle or drill) to raise the battery off the shelf.
- 5. Swing the battery outward so it clears the battery box and position for lowering.
- 6. Ensure the area below is clear and rotate the Battery Hoist Hex Stud counterclockwise to slowly lower the battery to the ground. Rotate the Battery Hoist Hex Stud counterclockwise to lower the battery to the ground.
- 7. Disconnect the Dual Hook and remove the battery from the carrier.

(D) Raising Battery from the Ground:

- 1. Slightly tilt up one end of the battery and slide the bottom plate of the Battery Carrier under the battery Ensure the battery is completely inside of the Battery Carrier.
- 2. Secure the battery into the carrier by connecting the Quick Lock Buckle attached to the containment strap (Fig. 8).
- 3. Place the Battery Carrier Handle onto the prongs of the Dual Hook and center the handle between the prongs (Fig. 9).
- 4. Rotate the Battery Hoist Hex Stud clockwise (using the removable handle or drill) to raise the battery to the desired height.

(E) Battery Replacement

- 1. Open the door of the Battery Box and secure it so it cannot accidentally swing or close while changing the battery. A bungee cord or an additional ratchet strap can be used to secure the door.
- 2. Rotate the Battery Hoist Hex Stud clockwise to raise the battery from the ground to a level slightly above the shelf of the Battery Box.
- 3. Swing the battery inward so it will land on the desired location of the shelf when being lowered
- 4. Rotate the Battery Hoist Hex Stud counterclockwise to lower the battery onto the shelf.
- 5. Disconnect the Dual Hook and remove the battery from the carrier.

Repeat steps 'C' through 'E' for each battery to be removed/replaced.

Remove the Battery Hoist system and its components in the reverse order/direction of steps in 'B' above.

(F) Inspection to include but not be limited to the following:

- Inspect the Battery Hoist for any sign of loose fasteners, excessive wear, damage, cracks, corrosion, or malfunction of equipment.
- Inspect entire length of Battery Hoist rope for cuts, nicks, kinks, abrasion burns, broken fibers, chemical or physical exposures, excessive wear, discoloration, swelling, or herniation (core popping through cover).
- Inspect the Battery Hoist rope stitched/spliced eye connected to the dual hook for excessive wear, abrasions, cut/broke/missing/unraveling thread, that the heat shrunk plastic cover is intact, not nicked or cut.
- Inspect the Battery Carrier, it's base and Quick Lock Buckle for excessive wear or damage, abrasions, cut/broke/missing/unraveling thread, that the heat shrunk plastic handle cover is intact, not nicked or cut.

If any evidence of wear or deterioration as outlined above is observed, immediately cease use, destroy the product, and replace it with new equipment. Should any unusual conditions not outlined above be observed, or you have reasonable doubt about a particular condition, remove the equipment from service and notify your Supervisor, Safety Director, or contact Buckingham Mfg. Co. for clarification. Failure to carefully and completely inspect your equipment could result in serious injury or death.

(G) Warnings:

- Completely read, understand, and follow all instructions, warnings, and guidelines pertaining to this and all associated equipment before use. Failure to do so could result in your serious injury or death.
- Please consult with your physician prior to using this product. Do not use this product under the influence of drugs or alcohol.
- Never work without independent fall protection if there is danger of a fall.
- This product is for equipment hoisting only. <u>NOT</u> for human support / hoisting. Use this equipment only for the specific purpose for which it is designed and intended.
- Always inspect this equipment and check winch for proper operation prior to use.
- Never exceed rated capacity. Excess loads may cause premature failure. This winch is rated on the first layer of rope on the reel. Using more layers of rope increases the load on the winch.
- Never apply a load on the winch with the rope fully extended. Keep at least three full turns of rope on the reel.
- Secure the load properly. When winching operation is complete, do not depend on the winch to support the load.
- Operate the winch with hand or drill power only, do not exceed 600 rpm. Never operate with an impact driver.
- Avoid any contact with live electrical wires or components.
- Never stand, or allow anyone, under the Battery Hoist when in operation.
- Ensure that the battery/power box is securely mounted to pole (or structure) and is capable of supporting this hoist and associated loads.
- Ensure that the battery/power box door cannot swing open or closed while working near the battery box.
- When raising, or lowering tools/materials, place yourself in a position where the movement of the load can be observed to its
 destination.
- Destroy any and all equipment subjected to impact loading.
- Do not exceed the hoist maximum load rating of **100 lbs**.
- Except for the attachment knot, Never tie knots in the Battery Hoist Rope. Knots can reduce the strength of the rope up to 50%.
- Keep fingers and loose clothing away from pinch points of the winch.
- Only Buckingham Mfg. Co. or those authorized in writing by Buckingham Mfg. Co. may make repairs / modifications to this equipment.

(H) Maintenance, Storage and Cleaning:

- Proper maintenance and storage of your equipment will prolong its useful life and contribute toward its performance. Webbing
 and rope should be cleaned with water and mild soap (a dish washing soap that removes grease (i.e. Dawn) and be allowed
 to dry thoroughly without using excessive heat.
- Store in a cool, dry area and away from moisture, corrosion, physical or electrical damage.

(I) Battery Hoist Rope Replacement:

Note: The Battery Hoist Winch is shown below detached from the mounting bar for clarity purposes.

- Use only approved replacement ropes supplied by Buckingham for rope change out. PN 5100L replacement hoist rope with hook is shown (Fig. 10).
- To replace, unwind all of the old rope from the drum and cut off the factory tied stopper knot. Remove and discard the remaining old rope.
- Slide the free end of the replacement rope under the guide bar and then behind the drum of the winch. Pull up enough slack so that the free end can be fed through the rope attachment hole in the side plate of the winch drum (Fig. 11).
- Feed the free end through the attachment hole and securely tie a stopper knot in the end of the rope. Be careful not to get the grease from the gear on the rope. Pull the rope back through so that the stopper knot rests against the sideplate of the hoist drum (Fig. 12)
- Turn the drum by hand until three complete wraps are on the drum as shown. (Fig. 13).
- Once three complete wraps are on the drum a power tool may be used to take up the rest of the rope (Fig. 14). do not exceed 600 rpm.
 Never operate with an impact driver or exceed 600 rpm.











Fig. 10

Fig. 11

Fig. 12

Fig. 13

Fig. 14

STATEMENT of OBSOLESCENCE:

Precise "useful life expectancy" or "shelf life" for this product is not specified, as the degree of use, conditions of use, and the degree of care and storage determines useful life. All users maintain responsibility to select proper equipment for the job, be properly trained in its use, and ensure all personnel support equipment passes inspection before each use. Upon evidence of defects, damage or deterioration, all equipment shall be removed from service immediately and tagged or marked as unusable or destroyed. Additionally, all equipment shall be inspected on a regular basis not to exceed one year by a Competent Person, as defined by OSHA/ANSI, to verify that the equipment is safe for use. In the event of any question or concern regarding the condition of such equipment, users shall remove the equipment from service for further inspection. All users must comply with OSHA/ANSI/ASTM standards prior to and in using such equipment. For more information regarding safe and appropriate use of equipment, please contact Buckingham Manufacturing at 1-800-937-2825.

INTERNATIONAL USERS:

Notwithstanding the above, please know that certain international jurisdictions require manufacturers of equipment to provide customers with a maximum useful lifespan (sometimes referred to as a "Statement of Obsolescence"). To the extent required, Buckingham personal protective equipment manufactured from synthetic fiber materials including but not limited to items such as webbing and/or rope are subject to a maximum useful lifespan of ten (10) years from the date of manufacture. As stated above proper usage, storage, maintenance, and care impacts the useful lifespan of equipment. Extreme circumstances may require that product must be retired after only one use. This statement is made in conformance and compliance with BS EN 365:2004. International users must ensure that product inspections are completed by Competent Persons as defined by international standards including but not limited to British Standard ("BS"). If equipment fails any inspections, it must be immediately withdrawn from service and destroyed. For more information regarding safe and appropriate use of equipment, please contact Buckingham Manufacturing at 1-800-937-2825.

OUR GUARANTEE:

We guarantee the equipment we manufacture to be free from defects in material and workmanship. We will repair any equipment deemed to be defective which is returned to us by the original purchaser. However, this guarantee is void if any product is changed or altered in any way, or if the product is used in a manner other than for which it is intended. This express guarantee supersedes all other expressed or implied guarantees, obligations or liabilities. THERE ARE NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND AS SUCH, ALL IMPLIED WARRANTIES ARE SPECIFICALLY DISCLAIMED.

LIMITATION ON LIABILITY:

IN NO EVENT WILL BUCKINGHAM OR BUYER BE LIABLE TO THE OTHER FOR LOST REVENUES, LOST PROFITS OR ANY OTHER INDIRECT, CONSEQUENTIAL, SPECIAL OR PUNITIVE LOSSES OR DAMAGES, HOWEVER CAUSED, WHETHER IN ACTION FOR BREACH OF CONTRACT, STRICT LIABILITY, TORT, OR OTHERWISE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH LOSSES OR DAMAGES. IN NO EVENT WILL BUCKINGHAM'S LIABILITY EXCEED THE TOTAL AMOUNT PAID BY BUYER TO BUCKINGHAM FOR THE PRODUCT OR EQUIPMENT GIVING RISE TO SUCH CLAIM(S).

PLEASE SEE OTHER TERMS AND CONDITIONS RELATING TO THIS PRODUCT AT https://buckinghammfg.com/terms-conditions/

REGISTRATION:

Before use of the product, ensure to register and confirm the product at www.buckinghammfg.com/register.

NOTE: Ensure proper fit / size of product before use. This product cannot be returned unless it is in new / unused condition.

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