

## PullzAll™ Installation and Operator's Guide

Every pulling and lifting situation has the potential for personal injury. In order to minimize that risk, we ask that you read this basic guide carefully. Please familiarize yourself with the operation of your PullzAll before using it, and be constantly safety oriented. In this guide, we will set forth many of the basic rules of safe PullzAll operation. However, because every pulling/lifting situation is different, your constant good judgment and consistent focus on safety are of great importance.

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#### **GENERAL SAFETY PRECAUTIONS**

SYMBOL	EXPLANATION	
	Read the instruction manual	
	Explosion/Bursting Hazard	
	Fire and Burn Hazard	
	Never lift load over persons	
	Do not move persons	
	Properly seat load in throat of hook	
	Never apply load to hook tip or latch	
May 1	Always wear gloves	
$\triangle$	Finger/Fairlead Crushing Hazard	
	Always use supplied hookstrap	
	Hand Piercing/ Cutting Hazard	
	Hot Surface Hazard	
	Wind wire rope on top of drum	
	Do not wind wire rope on bottom of drum	
€	Always wear hearing and eye protection	
A	Shock Hazard	
	Charger Plug Pinout	

WARN INDUSTRIES \* THE BASIC GUIDE TO UTILITY PULLING

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#### **GENERAL SAFETY PRECAUTIONS**

## Warnings and Cautions





As you read these instructions, you will see WARNINGS, CAUTIONS, NOTICES and NOTES. Each message has a specific purpose. WARNINGS are safety messages that indicate a potentially hazardous situation, which, if not avoided could result in serious injury or death. CAUTIONS are safety messages that indicate a potentially hazardous situation which, if not avoided, could result in minor or moderate injury. A CAUTION may also be used to alert against unsafe practice. CAUTIONS and WARNINGS identify the hazard, indicate how to avoid the hazard, and advise of the probable consequence of not avoiding the hazard. NOTICES are messages to avoid property damage. NOTES are additional information to help you complete a procedure. PLEASE WORK SAFELY!



## WARNING





#### CHEMICAL AND FIRE HAZARD

Failure to observe these instructions could lead to serious injury or death.

- Always read all instructions and cautionary markings on battery charger, battery pack and cordless pulling tool.
- Never operate pulling tool in an environment containing explosive or combustible material.
- · Never expose battery unit to high heat or fire.
- Never store Cordless PullzAll battery unit in a tool box or pocket with nails, screws, keys, etc.
   Shorting of battery terminal may cause fire.
- Always avoid contact with battery leakage, which may occur under extreme usage or temperature conditions.
- Always remove the battery when the unit is not in use.
- Always dispose or recycle battery according to local ordinances / regulations.
- Always protect terminals with insulating tape, prior to disposal, to prevent shorting.
- Never attempt to disassemble the battery. No user serviceable parts inside.



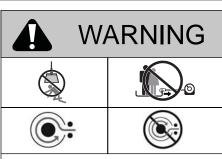
## **WARNING**



#### **ELECTRICAL HAZARD**

Failure to observe these instructions could lead to serious injury or death.

- Always use properly grounded single phase receptacle protected by a ground fault circuit interrupter (GFCI).
- · Never remove ground pin from plug.
- Never route electrical cables across sharp edges.
- Never route electrical cables through or near moving parts.
- Never route electrical cables near parts that become hot.
- Never remove electrical cover from battery charger.
- Never leave the pulling tool power cord plugged in when installing, rigging, servicing or when the pulling tool is not being used.
- · Never disconnect ground bond.
- Never operate product in a wet environment.
- Always power pulling tool with only the recommended electrical system voltage. See the pulling tool specification sheet for details.
- Never operate charger with damaged cord or plug.
   Replace them immediately.
- Never operate charger if it has received a sharp blow, been dropped or otherwise damaged in any way.
- Never charge battery in damp or wet environment.
- Always charge battery pack in temperatures above +32 °F (0° C) and below 120 °F (49° C). This is important and will prevent serious damage to the battery
- Always store pulling tool and battery pack where temperatures will not exceed 120 °F (49 °C).
- Always disconnect charger when battery is fully charged.



#### **FALLING OR CRUSHING HAZARD**

Failure to observe these instructions could lead to serious injury or death.

- · Never use pulling tool to secure a load.
- Never shock load rope. Shock load can damage, overload and break rope.
- Never use the pulling tool's rope to tow vehicle or object. Impact loading during towing can exceed rope strength.
- Always be certain the anchor you select will withstand the load and the strap or chain will not slip.
- Always take time to use appropriate rigging techniques for pulling/lifting.
- · Never spool out past the red paint on wire rope.
- Never exceed pulling tool or rope capacity listed on product data sheet. Double line using a snatch block to reduce pulling tool load.
- Never exceed 1000 lb. (454 kg) Maximum pulling capacity.
- Always use suitable anchor point capable of handling load.
- Always use factory approved mounting hardware, components, and accessories.
- Always respool under tension load after use.
   Tightly wound rope reduces chances of "binding", which can damage the rope.
- Always spool the rope onto the drum in the direction specified by the product warning label on the product and/or documentation.
- Always avoid "jogging" or "plugging" (quick on/ off cycles) with the pulling tool. This can damage motor controls and rope.



## **WARNING**





#### **FALLING OR CRUSHING HAZARD**

Failure to observe these instructions could lead to serious injury or death.

- Never attach a recovery strap to the pulling tool hook to increase the length of a pull.
- Always use a hook with a latch.
- Always ensure hook latch is closed and not supporting load.
- Never apply load to hook tip or latch. Apply load only to the center of hook.
- Never use a hook whose throat opening has increased, or whose tip is bent or twisted.
- Never attempt to tow a vehicle or object with the recovery strap attached directly to the pulling tool hook.
- Never use bungee straps that develop tremendous and potentially dangerous amounts of force when stretched.
- Always avoid side pulls which can pile up rope at one end of the drum. This can damage rope or pulling tool.
- Never hook rope back onto itself. This damages the rope.
- Always use a choker chain, choker rope, or strap.
- Never use pulling tool to lift or move persons.
- Never use pulling tool to lift over persons
- Always select an anchor point as far away as possible. This will provide the pulling tool with its greatest pulling power.
- Always use suitable anchor point capable of handling load.



## WARNING





## MOVING PARTS ENTANGLEMENT HAZARD

Failure to observe these instructions could lead to serious injury or death.

#### General Safety:

- Always remove jewelry and wear eye and ear protection.
- · Always wear gloves, eye and ear protection.
- Always keep hands clear of wire rope, hook loop, hook and fairlead opening during installation, operation and when spooling in or out.
- Always keep hands and clothing clear of the rope, hook and fairlead opening during operation and when spooling.
- · Never let rope slip through your hands.
- Always Know Your Pulling Tool. Take time to fully read the Instructions and/or Operations Guide, in order to understand your pulling tool and its operations.
- Never operate this pulling tool when under the influence of drugs, alcohol or medication.
- Never run the PullzAll while carrying it at your side.
- Always be aware battery operated units are continually in an operative condition.

#### Operational Safety:

- Always wear heavy leather gloves when handling rope.
- Always stand clear of rope and load and keep others away while pulling/lifting.
- Always remove any element or obstacle that may interfere with safe operation of the pulling tool.
- Never leave the pulling tool power cord plugged in when installing, rigging, servicing or when the pulling tool is not being used.
- Always use supplied hook strap whenever spooling rope in or out, during installation and during operation.
- Always use extreme caution when handling hook and rope during spooling operations.
- Never operate or install a pulling tool without reading or understanding the operator's manual.
- Never operate this pulling unit if you are under 16 years of age.

# 4

## **WARNING**





## MOVING PARTS ENTANGLEMENT HAZARD

Failure to observe these instructions could lead to serious injury or death.

#### Pulling Safety:

- Always keep pulling tool and pulling/lifting load in sight during pulling/lifting operation.
- Always require operators and bystanders to be aware of rope and load.
- Always be aware of stability of load during pulling/ lifting, keep others away. Alert all bystanders of any unstable condition.
- Never touch rope or hook while someone else is at the control switch or during pulling/lifting operation.
- Never touch rope or hook while in tension or under load.
- Always inspect rope, hook, and slings before operating pulling tool. Frayed, kinked or damaged wire rope must be replaced immediately. Damaged components must be replaced before operation. Protect parts from damage.
- Always tightly wind wire rope onto drum after each use. During spooling in or out, rope direction can unexpectedly switch if rope is in layers on drum.
   Tightly wound rope reduces chance of binding.

## 4

### WARNING





#### **CUT AND BURN HAZARD**

Failure to observe these instructions could lead to serious injury or death.

#### To avoid injury to hands and fingers:

- Always wear gloves, eye and ear protection.
- Never insert battery into charger if battery case is cracked or damaged. Battery short or fire may result.
- Never short battery terminals, because it may cause sparks or burns.

#### **GENERAL SAFETY PRECAUTIONS**



## **CAUTION**



## MOVING PARTS ENTANGLEMENT HAZARD

Failure to observe these instructions could lead to minor or moderate injury.

#### To avoid injury to hands or fingers:

- Never let rope slip through your hands.
- Always select an anchor point as far away as possible. This will provide the pulling tool with its greatest pulling power.



## **CAUTION**



#### **CRUSHING HAZARD**

Failure to observe these instructions could lead to minor or moderate injury.

 The Corded 230 VAC PullzAll has some delay in the trigger control. Use the slow spooling speed and release the trigger early to prevent from spooling the hook loop into the fairlead.







#### **CUT AND BURN HAZARD**

Failure to observe these instructions could lead to minor or moderate injury.

- Always be aware of possible hot surfaces at pulling tool motor or battery during or after pulling tool use.
- Always charge PullzAll NiMH type battery pack only. Other types of batteries may burst causing damage and injury to person.
- Always read all instructions and cautionary markings on battery charger, battery pack and cordless pulling tool.

## **NOTICE**

## AVOID PULLZALL AND EQUIPMENT DAMAGE

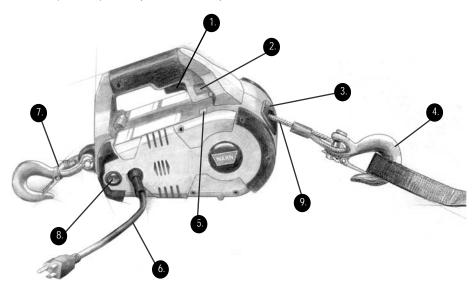
- Always avoid over heating the pulling tool motor.
   For extended pulling/lifting, stop at reasonable intervals to allow the pulling tool motor to cool down. See table for run time/duty cycle quidelines.
- Always store the pulling tool in a protected, clean, dry area.

#### **PULLZALL SPECIFICATIONS**

#### The Corded WARN® PullzAll consists of the following features:

The Corded WARN PullzAll is a powerful pulling tool. Powered by a 230 volt AC power source this compact tool has a pulling capacity of 1000 pounds (454 kilos).

The unit has a variable speed trigger for power-in and power-out operation, 15 ft (4.6 m) of 7/32 inch (0.56 cm) wire rope and two clasp hooks.



Variable Speed Trigger	6. Power Cord	
2. Directional Switch	7. Swiveling Anchor Hook	
3. Fairlead	8. On/Off Power Switch	
4. Hook with Latch and Hook Strap	9. Wire Rope	
5. Ready/Overload Indicator		

#### Specification Data for the Corded WARN PullzAll

15lb (6.8 kg)

Max Pulling Capacity 1000 lbs. (454 kg) Wire Rope Diameter 7/32 in (0.56 cm) **Power Source** 230 VAC Power Input 1200 W (5A)

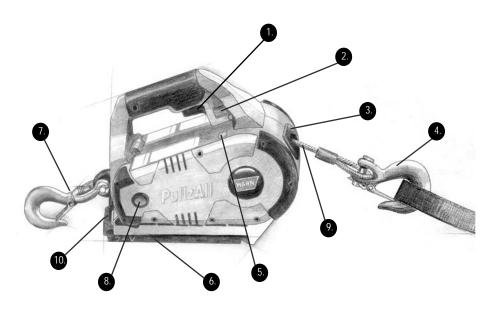
Weight:

#### **PULLZALL SPECIFICATIONS**

#### The CordlessWARN® PullzAll consists of the following features:

The Cordless WARN PullzAll is a powerful pulling tool. Powered by a 24 volt rechargeable battery this compact tool has a pulling capacity of 1000 pounds (454 kilos).

The unit has a variable speed trigger for power-in and power-out operation, 15 ft (4.6 m) of 7/32 inch (0.56 cm) wire rope and two clasp hooks.



Variable Speed Trigger	6. Rechargeable Battery	
2. Directional Switch	7. Swiveling Anchor Hook	
3. Fairlead	8. On/Off Power Switch	
4. Hook with Latch and Hook Strap 9. Wire Rope		
5. Ready/Overload Indicator 10. Battery Release Button		

#### Specification Data for the Cordless WARN PullzAll

Max Pulling Capacity 1000 lbs. (454 kg) Wire Rope Diameter 7/32 in (0.56 cm) Power Source 24V DC Battery (NiMH)

Power Input 720 W (30 A) Weight: 18lbs (8.2 kg)

#### UTILITY PULLING INTRODUCTION

So, you have your WARN PullzAll and you are ready to put it to use.

This guide provides you with a basic understanding of vour PullzAll and teaches vou the basics of proper pulling/ lifting techniques. Before we get started, we must emphasize that the information in this guide is general in nature. Because no two situations are alike, it would be nearly impossible to review them all. We will, however, provide you with the general principles and techniques to use this tool safely and effectively. Then it is up to you to take the time to analyze the situation and apply the proper technique.

Along with a little common sense, the information laid out in this guide can help you lift and pull safely. Just remember to think through each lifting or pulling situation before you act.

To Go Prepared<sup>™</sup>, the following instructions will help you understand the operation of the PullzAll.

#### **▲** WARNING

Never operate a PullzAll without reading or understanding the operator's manual.

#### HOW THE PULLZALL WORKS

To begin, you should familiarize yourself with your PullzAll and each of its components:

Motor The motor provides torque to the gear train, which turns the PullzAll drum and winds the wire rope.

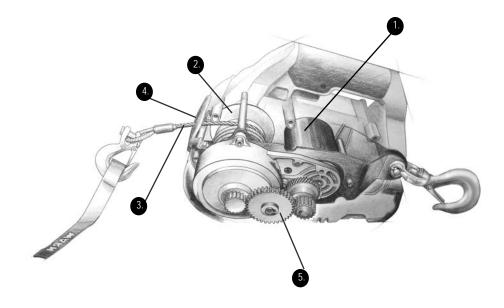
2 Spooling Drum The PullzAll drum is the cylinder from which the wire rope winds. The drum is driven by the gear train and motor. Its direction can be changed using the directional selector switch. The wire rope unwinds off the top of the drum.

3 Wire Rope The rope's diameter and length are determined by the PullzAll's load capacity and design. Wrapped around the PullzAll drum and fed through the fairlead, the rope is looped at the end to accept the hook's clevis pin.

Fairlead When using the PullzAll at an angle, the fairlead acts to guide the wire rope onto the top of the spooling drum. It minimizes damage to the rope while it goes through the PullzAll mount.

Gear Train The reduction gears convert the PullzAll motor torque into a large pulling force. The gear train design makes it possible for the PullzAll to be light and compact.

6 Load Limiter (not shown) Is a device that automatically interrupts the power whenever the circuit becomes overloaded. The ready/overload indicator LED turns red under extreme loads and flashes red when maximum load has been exceeded.



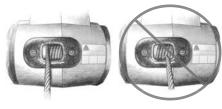
#### **HOW THE PULLZALL WORKS**

Before using your WARN PullzAll to pull or lift a load it is important to understand how it works. The major advantage of the PullzAll is its handheld convenience for performing numerous recreational and work tasks. Thinking through how you intend to use your PullzAll now could save you a big headache later.

#### Control of Your PullzAll

The PullzAll tool has an On/ Off power switch and is controlled by a directional switch and a variable speed trigger control.

The directional switch provides control of the forward and reverse rotation of the spooling drum. Keep tension on the wire rope when winding in or out to prevent "bird nesting" that can bind and entangle the wire rope causing damage to it and the PullzAll. When you see the red paint on the wire rope, do not spool out any further. Doing so, can cause the wire rope to spool on the drum in the wrong direction. This can damage the wire rope and fairlead. The direction selection arrow should always match the direction of the wire rope when it is spooling in or out.

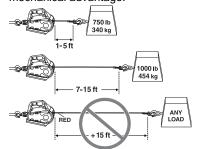


The variable speed trigger switch has two general modes of operation:

- 1) Variable speed mode for fine load positioning.
- 2) Full speed mode for long distance.

#### How the PullzAll Reacts to Load

The PullzAll is rated by pulling capacity. The maximum pulling torque occurs when there is only one layer of wire rope on the drum. As the layers of wire rope on the drum increase, the pulling power decreases. This is the basics of mechanical advantage.



## Always keep

Always keep
PullzAll and
pulling load in
sight during
pulling operation.

# Never spool out past the red paint on wire rope.

#### **Load Limiter**

Exceeding the PullzAll capacity will cause the load limiter to trip, which interrupts the power to the motor. This prevents overheating and potential motor damage. At 90% of pulling capacity the overload indicator turns red. When 100% of pulling capacity is reached the load limiter will cause the overload indicator to flash red and the PullzAll motor to stop. When this occurs, release the load by spooling out. Do not attempt to apply the same load if the load limiter has tripped, as this can be harmful to the unit. If the load limiter fails to reset contact an authorized service center.

If the load limiter continues to trip, perform the following actions:

- 1) Reduce the weight of the load.
- 2) Increase the distance of the anchor point.
- 3) Rig a double line pull.

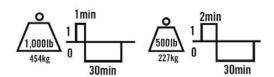
For details: See "Rigging Techniques" section in this manual.

NOTICE
The PullzAll
is controlled
by the variale
speed trgger
and direction
selection switch.

#### **HOW THE PULLZALL WORKS**

#### **PullzAll Mechanics**

It is important to understand that the longer the pull, the more heat gets created within the motor. Spooling out the rope also generates heat. Let the motor cool between pulls because prolonged use without cooling the PullzAll will damage the motor.



#### **Run Time/Duty Cycle**

The PullzAll is rated for intermittent duty. It should not be operated for long periods with the motor at low RPMs. When the motor approaches stall speed a very rapid heat build up occurs which may cause motor damage. Follow the recommended run times and cooling times in the table shown. If the unit does not function after it is allowed to cool, call a Warn authorized service center.

#### RUN TIME/DUTY CYCLE TABLE

LOAD	500 lbs. (227 kg)	1000 lbs. (454 kg)
RUN TIME	2 min	1 min
COOL TIME	30 min	30 min

The PullzAll is available in both corded and cordless models. Each model has its own benefits. Ensure the power source is connected properly following these instructions:

#### Corded 230 VAC PullzAll

#### **Properly Grounded Plug**

Ensure the PullzAll power cord is connected to a properly grounded, 3-prong electrical socket with a Ground Fault Circuit Interrupter (GFCI).

#### Minimum Amperage

If using an extension cord and/or generator, make sure that it is rated to handle a minimum of 15 Amps, the current required to run the PullzAll at full capacity.

#### Cordless 24V DC PullzAll

#### **Battery Care**

Always turn On/Off power switch off when not in use. Permanent battery damage may occur if the unit is allowed to self-discharge in the 'On' position. Store battery and charger in locations where temperatures will not exceed 120°F (49 °C).

When noticeable loss of performance is observed, replace battery pack with a fully charged battery. Avoid running the battery completely dead. This can cause permanent damage to the battery pack.

#### **Installing the Battery Pack**

- 1) Verify the power switch is in the 'Off' position.
- 2) Slide the battery pack into the body, making sure that the latch is fully engaged. The battery release button must be in the top position.

#### **Removing the Battery Pack**

- 1) Verify the power switch is in the 'Off' position.
- 2) Push down the battery release

button at the back of the battery and slide the battery away from the PullzAll body.



#### Charging the Battery Pack

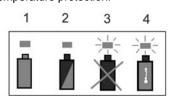
Plug charger's power cord into a standard power outlet, then insert the battery charging plug from the charger into the battery. The charger's red LED indicator light will be solid, indicating charging.



A fully discharged battery should charge in approximately two hours. Charging will automatically stop when charging is complete. For best performance, unplug the charger and allow the battery to cool to room temperature before use in the PullzAll.

The battery charger indicator light signifies:

- 1) Green LED on: Fully charged
- 2) Red LED on: Charging
- 3) Red LED flashing: A fault condition is present.
- 4) Green LED flashing: Over temperature protection.



If the red LED is flashing, stop charging the battery and follow the charger safety rules below. If the problem persists, contact a Warn authorized service center.

#### **▲** WARNING

Never leave the PullzAll power cord plugged in or the battery in unit when installing, servicing or storing.

#### NOTICE

Always let battery cool before using in tool and before charging.

#### **▲** WARNING

Never attempt to disassemble the battery or remove any component.

# Always avoid contact with battery leakage, which may occur under extreme usage or temperature

conditions.

#### **Charger Safety Rules**

Follow these important safety instructions and review the cautionary markings on the battery charger, battery pack, and the Cordless PullzAll tool before using the Cordless PullzAll battery charger. Remove charger from power source when battery is fully charged.

Use only the charger that accompanies the Cordless PullzAll or an Official WARN charger accessory. Only charge WARN Cordless PullzAll rechargeable batteries, other types of batteries may burst causing personal injury and damage.

Do not charge the battery in damp or wet environment.

Do not disassemble the charger. Take it to a Warn authorized service center when service is required.

#### **Important Charging Notes**

- 1) The battery pack accepts only about 80% of its maximum capacity with its first few charge cycles. However, after the first few charge cycles and normal usage, the battery will charge to full capacity.
- 2) The charger was designed to fast charge the battery, only when the battery temperature is between 32°F (0°C) and 120°F (49°C). If the battery pack is too hot or too cold, the battery pack should not be charged. (This may happen if the battery pack is hot from heavy use.) Wait until the battery returns to room temperature before charging.
- 3) A substantial drop in operating time per charge may mean that the battery pack is nearing the end of its life and should be replaced.

- If the battery does not charge properly:
- Check for voltage at the outlet by plugging in some other electrical device.
- Verify charger voltage is approximatly 30vdc. Refer to charger plug pinout here or on charger label.



- Check battery pack terminals for dirt. Clean with a cotton swab and alcohol if necessary.
- d. If you still do not get proper charging, contact Warn customer service.

#### **Battery Disposal**

The PullzAll battery uses
NiMH technology. Check your local
ordinances/regulations for disposal
or recycling regulations. Prior to
disposal, protect exposed terminal
with heavy insulating tape to prevent
shortage.





Chemical First Aid: If leakage from battery comes in contact with skin, wash with soap and water. If liquid gets into eyes, flush with water for 15 minutes.

#### **OPERATING THE PULLZALL**

Practice using your PullzAll before you pull or lift a load. A real situation is no time to be learning how to use your PullzAll.

Knowing the proper pulling and lifting techniques can help keep you and others around you safe. And perhaps the most important part of the pulling process, regardless of the situation, is what you do before you pull.

In this guide, you are shown the basic fundamentals for effective pulling/lifting. However, it is up to you to analyze the situation and make the decisions necessary for the proper use of your PullzAll. Apply your knowledge of your PullzAll and the basic fundamentals you have practiced to adjust your techniques to each unique situation.

Some keys to remember when using your WARN PullzAll:

- 1. Always take your time to assess your situation and plan your pull or lift carefully.
- 2. Always take your time when using a PullzAll.
- 3. Use the right equipment for your situation.
- 4. Always wear leather gloves and do not allow the wire rope to slide through your hands.
- 5. Only one person should operate the PullzAll while pulling a load.
- 6. Think safety at all times.
- 7. Practice. Practice and practice the steps.

#### Pulling or Lifting Procedure

The following steps describe how to pull or lift using a single line rigging technique. Double or multiple line rigging techniques follow the same basic steps but use a snatch block to assist the process. For details, see the "Rigging Techniques" section in this manual.

Step 1: PUT ON GLOVES AND ATTACH HOOK STRAP. Ensure the hook strap is attached to the hook with latch on the wire rope, not the swiveling anchor hook.



#### Step 2: CONNECT TO POWER SOURCE.

#### Corded 230 VAC PullzAll

- 1) Connect the PullzAll power cord to a properly grounded. 3-prong electrical socket.
- Verify that power cords and extension cords are positioned so that the wire rope or moving load will not damage the cords.
- Verify that extension cords are rated for 15 Amps.

#### Cordless 24V DC PullzAll

- 1) Ensure the battery pack is fully charged.
- 2) Verify the power switch is in the 'Off' position.
- Slide battery pack into the body, making sure that the latch is fully engaged. The battery release button must be in the top position.

#### when spooling rope in or out.

**▲** WARNING

strap to hold hook

Always use

supplied hook

#### WARNING Always use

properly grounded 230Vac 50 Hz single phase receptacle protected by a ground fault circuit interrupter (GFCI). Never remove ground pin from pluq. Never operate this AC product in a wet environment. Never route electrical cables across sharp edges. Never route electrical cables through or near moving parts. Never route electrical cables near parts that become hot.

#### OPERATING THE PULLZALL

#### **▲** WARNING

Always use suitable anchor point capable of handling load.

**₩** WARNING

Never spool out

past red paint on

**▲** WARNING

Always keep

hands and

and fairlead

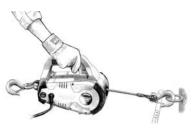
operation and

when spooling.

wire rope.

Step 3: POWER ON THE **PULLZALL.** Flip the power switch to the 'On' position. Always leave the power switch in the 'Off' position when the PullzAll is not in

Step 4: SPOOL OUT WIRE ROPE TO LOAD. Press the directional switch to 'spool out'. Always keep tension on the wire rope while spooling in and out. The wire rope may unwind inside the PullzAll unit causing bird nesting and binding, leading to wire rope damage.



clothing clear of the rope, hook **Spooling Alone**: Attach the hook with latch to an anchor point and opening during

#### **▲** WARNING

Never hook wire rope back onto itself. This damages the rope.

#### **▲** CAUTION

The Corded 230 VAC PullzAll has some delay in the trigger control use the slow spooling speed and release the trigger early to prevent from spooling the hook loop into the fairlead.

walk the PullzAll away from the load. Spooling with an Assistant: Have

the person handling the rope hold the hook strap and walk the wire rope away from the PullzAll while spooling out the wire rope.

NEVER spool the wire rope out past the red paint on the wire rope. The red paint is visible when 13 ft. (3.9 m) of wire rope is unwound. Doing so can cause the wire rope to spool on the drum in the wrong direction. This can damage the wire rope and fairlead.

Step 5: ATTACH TO ANCHOR POINT. Attach the PullzAll to an anchor point using the swiveling anchor hook. That is capable of handling the load.

Step 6: PLAN TO PULL. Line up your pull as straight ahead as possible. This prevents side pulls that can allow the wire rope to rub on the fairlead. Also, side pulls cause the wire rope to stack up at one end of the drum. This can damage the wire rope or the PullzAll.

Step 7: SECURE TO THE LOAD. Establish a load point. Often a load does not have a secure load point. It may be necessary to secure the load with a choker chain or a load strap.

Step 8: ATTACH THE CLEVIS/D-SHACKLE. Attach the shackle to the two ends of the strap or chain being careful not to over tighten the shackle (tighten and back-off 1/2 turn). Secure the shackle into the throat of the PullzAll hook.

Step 9: PUT WIRE ROPE UNDER TENSION. Press the directional switch to 'spool in' wire rope. Use the trigger control to slowly wind the wire rope until no slack remains. Tension in the wire rope will keep it from bird nesting and binding. Once the wire rope is under tension, stand well clear, and never step over the wire rope.

Step 10: CHECK YOUR LOAD. Ensure all connections are secured and free of debris before continuing with the procedure.



#### OPERATING THE PULLZALL

#### **Begin Pulling or Lifting** the Load

The following steps describe how to operate the PullzAll after it has been properly rigged.

Step 11: LAY SOMETHING OVER THE WIRE ROPE. In the interest of safety consider hanging a dense fabric midway between the PullzAll and the load point to absorb energy should the wire rope or load point snap loose. For example use a heavy blanket, heavy jacket, chain or a back pack.

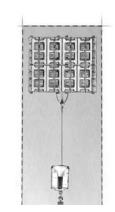
#### Step 12: MAKE YOUR INTENTIONS CLEAR. Be sure that everyone in the immediate vicinity surrounding the pulling operation is completely aware of your intention before you pull or lift.

Declare where the spectators should not stand-never behind, in front of, or under the load and never near the wire rope or snatch block. Your situation may have other "no people" zones.

#### **▲** WARNING

Never use pulling tool to lift or move persons. Never use pulling tool to lift over persons.

#### Establish "no people" zones

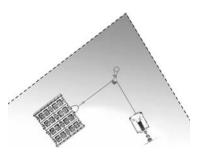


#### **Troubleshooting**

If the PullzAll will not spool in or out, ensure that the On/ Off power switch is in the 'On' position. Verify that the overload indicator is not flashing and the green power indicating light is

On the Corded PullzAll unit. ensure that the power cord is plugged in and the circuit has power.

On the Cordless PullzAll unit ensure that the battery is charged. Then try spooling the rope. If this does not solve the problem, contact a Warn authorized service center.



#### OPERATING THE PULLZALL

#### NOTICE Avoid over

heating the PullzAll motor. For extended pulling, stop at reasonable intervals to allow the PullzAll motor to cool down. See table for run time guidelines.

#### **▲** CAUTION

The Corded 230 VAC PullzAll has some delay in the trigger control. Use the slow spooling speed and release the trigger early to prevent from spooling the hook loop into the fairlead.

#### NOTICE

Always avoid side pulls which can pile up rope at one end of the drum. This can damage wire rope or PullzAll.

#### **▲** WARNING

Always keep hands and clothing clear of the rope, hook and fairlead opening during operation and when spooling.

#### Step 13: BEGIN PULLING/ **LIFTING.** Press the directional switch to 'spool in' wire rope. With light tension already on the wire

rope, begin spooling in slowly and steadily.

#### What to look for under load

The rope must always be spooled onto the drum.

As you spool in, make sure the rope winds evenly and tightly on the drum. This prevents the outer wire wraps from drawing into the inner wraps, "bird nesting" and binding can damage the wire rope and PullzAll.

During side pulls the wire rope tends to stack up at one end of the drum. To prevent stacking the wire rope on one side of the drum, line up the pull as straight ahead as possible.

#### Step 14: SECURE LOAD.

Once movement of the load is complete, be sure to secure the load completely. Only then should you release tension in the wire rope.

Step 15: DISCONNECT WIRE **ROPE.** Reverse directional switch and spool out a short length of wire rope. Disconnect hook with latch from the load whenever possible.

Step 16: DISCONNECT FROM ANCHOR. Disconnect the swiveling anchor hook from the anchor point.

#### Step 17: REWIND WIRE ROPE.

Reverse directional switch to 'spool in' wire rope. Be sure any wire rope already on the spooling drum is wound tightly. Arrange the wire rope so it will not kink or tangle when spooled. Always keep the wire rope under tension when spooling the wire rope back onto the drum. Do not let the wire rope slide through your hand.

If alone, attach the hook with latch to an anchor point, apply light tension to the wire rope and slowly walk the PullzAll towards anchor point as wire rope winds on drum.

If a person is handling the rope, keeping tension, they should walk the wire rope in, using the hook strap. If you do not have the hook strap, use a length of cord or something similar. To prevent serious injury. NEVER put your fingers inside the hook area as you are spooling in.

DO NOT use the load limiter to stop the hook against the fairlead; the hook should not spool into the unit.

#### Step 18: TURN OFF THE PullzAll Flip the power switch to the 'Off' position. Store the PullzAll in a

Pulling operations are now

clean and dry place.

complete.

#### **ACCESSORIES**

The PullzAll is a convenient handheld pulling tool. Some of the following accessories are vital to the safe operation of the PullzAll, while others offer added versatility and convenience.

Gloves: Wire rope, through use, will develop "barbs" which can slice skin. It is extremely important to wear protective gloves while operating the PullzAll or handling the wire rope. Avoid loose fitting clothes or anything that could become entangled in the wire rope and other moving parts.



Hook Strap: Used to hold the hook and keep fingers away from the fairlead as the rope is being spooled in and out. Pulling tools develop tremendous forces and can easily remove fingers and limbs that are placed in pinch points. Put the hook into the loop and hold the strap between the thumb and forefingers.



**Choker Chain:** Can be used to hook-up a load.



**Snatch Block:** Used properly, the multi-purpose snatch block allows you to: (1) increase your PullzAll's pulling power, and (2) change your pulling direction without damaging the wire rope. Proper use of the snatch block is covered in the "Rigging Techniques".



Clevis/D-Shackles: The D-Shackle is a safe means for connecting the looped ends of straps and snatch blocks. The shackle's pin is threaded to allow



easy removal.

**Strap:** Typically made of tough, high-quality nylon, it provides the operator an attachment method for connecting the PullzAll wire rope to a load or anchoring point.



Accessory kits are available for the PullzAll. Contact Warn customer service to learn more.



#### e of the

A CAUTION

Never attach a

recovery strap to

the PullzAll hook

to increase the

length of a pull.

bungee straps

that develop

tremendous

dangerous

and potentially

amounts of force

when stretched.

Never use

Never spool out past red paint on wire rope.

**▲ WARNING** 

tool to lift or move persons. **Never** use pulling

tool to lift over

persons.

**▲** WARNING

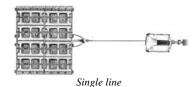
#### **RIGGING TECHNIQUES**

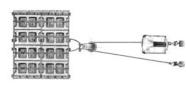
Various pulling situations will require application of other pulling techniques. These could range from too little distance to achieve maximum pull/lift using straight line rigging, increasing pulling power, or maintaining a straight line pulling situation. You will have to assess what technique is correct for you situation. Think "safety" at all times. Think through each situation before you act.

## Increasing Pulling Power & Duration

In some cases, you may find yourself needing more pulling power. The use of snatch blocks increases mechanical advantage and increases your pulling power:

Pallet Pulling Example:





Never use pulling Double line

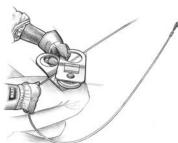
#### **Double Line**

Because pulling power decreases with the number of layers of rope on the PullzAll drum, you can use a snatch block to double line out more rope. This decreases the number of layers of rope on the drum, and increases pulling power.

Start by spooling out the wire rope. Attach the hook to an anchor and run the rope through a snatch block.

Using the snatch block, spool out enough wire rope to reach your load point. DO NOT spool out past the red wire rope. Doing so can cause the wire rope to spool on the drum in the wrong direction. This can damage wire rope and fairlead.

Secure to the load point with a strap or choker chain. Attach the clevis/shackle. Attach the shackle to the two ends of the strap/chain, being careful not to over tighten (tighten and back-off 1/2 turn).



#### Lifting

Anchor the PullzAll so that it is offset and not inline with object to be lifted. Do not attempt to lift an off-center load, this can cause the load to swing dangerously. Never allow the load to swing or twist.



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#### Maintenance

Inspect the wire rope and hooks for signs of wear or damage before and after each operation. Worn and damaged parts must be replaced. Do not attempt to lengthen the wire rope or repair a damaged rope.

Keep the wire rope and hooks free from contaminants. Use a clean towel to remove dirt & debris. Using light oil on the wire rope and hooks can prevent corrosion from forming. When cleaning the Cordless PullzAll tool be sure to keep clear of electrical terminals on battery pack and verify that the battery is not cracked or otherwise damaged.

Any hook that has twisted components or excessive opening may indicate over-loading of the product. Contact a Warn authorized service center for repairs, replacement parts or accessories.

#### **Examples of Wire Rope Damage:**

Kinks, cuts, knots, mashed or frayed portions, and broken strands

#### **Examples of Hook Damage:**

Cracks, twisted components, excessive opening, seat wear, loose or unclosed latch, and corrosion.

#### **Final Comment**

This guide to proper pulling techniques cannot cover all the possible situations in which you may need to use a PullzAll. In the final analysis, the decisions you make will determine the final outcome. So think through each situation and each step of use. Always be mindful of your own safety and the safety of others. Pay attention and you'll have fun.

#### **▲** WARNING

Never leave the PullzAll power cord plugged in or the battery in unit when installing, servicing or storing.

#### **▲** WARNING

Always use Warn Industries Replacement Parts when the product needs to be serviced. Contact the Warn Customer Service department to find the proper replacement part numbers (contact information listed in Warranty information).