OPERATOR'S MANUAL - EN

PCX SYSTEM



⚠ CAUTION

Read operator's manual carefully before operating this product. Keep this manual nearby for reference at all times while operating this product.

PCX® SYSTEM
250 LB CAPACITY

MODEL:
OZPCXS

P.O. Box 845, Winona, MN 55987
Phone (800) 749-1064
(507) 474-6250
Tech Support (507) 457-3346
sales@ozliftingproducts.com

OZ LIFTING PRODUCTS

FOREWORD:

The **PCX SYSTEM** by OZ Lifting Products, LLC® is designed and tested as a complete system and must only be used with components that are supplied or approved as part of the **PCX SYSTEM** by OZ Lifting Products, LLC®. The system shall only be used with a manual winch. The use of powered winches or non-approved accessories may compromise the safety and performance of the system.

To ensure safe and reliable operation, do not modify, alter, or substitute any part of the **PCX SYSTEM** by OZ Lifting Products, LLC®. Unauthorized modifications or the use of replacement parts not approved by OZ Lifting Products, LLC® may result in equipment failure, serious injury, or death, and will void any applicable warranties and certifications.

The **PCX SYSTEM** by OZ Lifting Products, LLC® is intended for installation and use on a solid, vertical-walled concrete parapet only. Use of the system on any other mounting surface or structure is not recommended and may create hazardous conditions. Installation MUST be approved to local standards by a Qualified Person.

The safety of operators and personnel depends on proper installation, operation, inspection, and maintenance of the equipment. Always follow the instructions and safety precautions provided in this manual and comply with all applicable workplace safety regulations.



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INTRODUCTION:

OWNER INFORMATION

Thank you for your decision to purchase the **PCX SYSTEM** by OZ Lifting Products, LLC®. To ensure maximum performance of your equipment, it is mandatory that you thoroughly study this operator's manual and follow the recommendations. Proper operation and maintenance are essential to maximize equipment life and prevent personal injury.

The purpose of this manual is to familiarize and instruct the operator.

Safety is of primary importance to the owner/operator and to the manufacturer. The first section of this manual includes a list of safety messages that, if followed, will help protect the operator and bystanders from injury or death. Many of the safety messages will be repeated throughout the manual. The owner/operator should know these safety messages and be aware of the hazards of operating and maintaining this equipment. Operate and maintain this equipment in a safe manner and in accordance with all applicable local, state, and federal codes, regulations and/or laws. Follow all on product labeling and instructions.

Make sure that all personnel have read this operator's manual and thoroughly understand safe and correct operating, installation and maintenance procedures.

It is the operator's responsibility to ensure that the product is used in accordance with all applicable local codes, regulations, and safety standards. OZ Lifting Products, LLC® assumes no liability for any damages or injuries resulting from the improper use of the product.

OZ Lifting Products, LLC® is continually working to improve its products. OZ Lifting Products, LLC® reserves the right to make any improvements or changes as deemed practical and possible without incurring any responsibility or obligation to make any changes or additions to equipment sold previously.

Although great care has been taken to ensure the accuracy of this publication, OZ Lifting Products, LLC® makes no warranty or guarantee of any kind, written or expressed, implied or otherwise with regard to the information contained within this manual. OZ Lifting Products, LLC® assumes no responsibility for any errors that may appear in this manual and shall not be liable under any circumstances for incidental, consequential or punitive damages in connection with, or arising from the use of this manual.

PXC® is a registered trademark of OZ Lifting Products, LLC®.

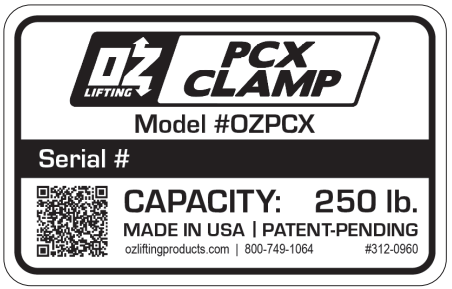
Keep this manual available for frequent reference. All new operators or owners must review the manual before using the equipment, and annually thereafter. This operator's manual is available on our website www.ozliftingproducts.com in digital and multi-language formats. Contact OZ Lifting Products, LLC® for assistance, information, or for additional copies of this manual.

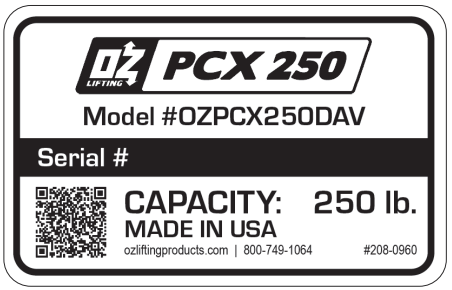
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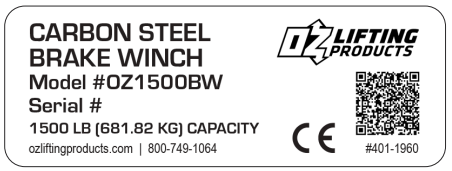
INFORMATION & LOCATIONS:

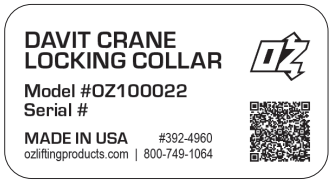
ID PLATE WITH QR CODE LOCATION

Please record your OZ Lifting Products information in the spaces provided below for future reference.









BEFORE USE, FILL IN THE INFORMATION BELOW:

OZPCX Serial No.: _____

OZPCX250DAV Serial No.: _____

OZ1500BW Serial No.: _____

OZ100022 Serial No.: _____

Purchase Date: _____

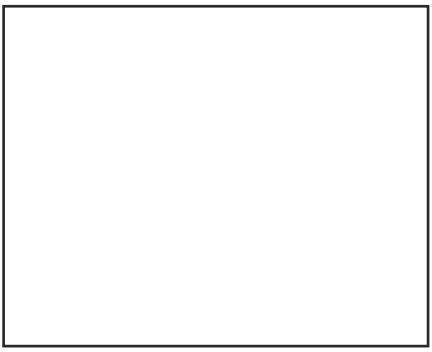


Figure 1.1

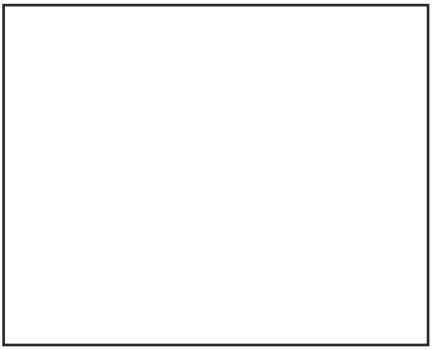


Figure 1.2

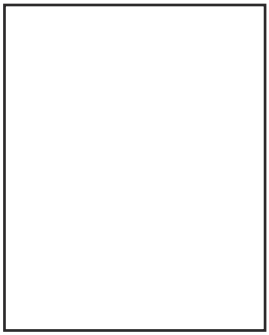


Figure 1.3

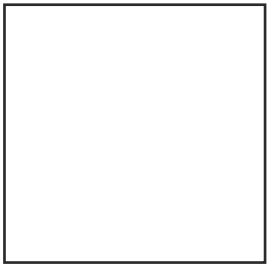


Figure 1.4

SAFETY:

GENERAL SAFETY INFORMATION

Guidelines

This general safety information serves as a guide to correctly operate OZ Lifting Products, LLC® equipment. Anyone operating this equipment must read and understand all of the manuals that are included with the **PCX SYSTEM** by OZ Lifting Products, LLC®.

Safety Symbols

The words DANGER, WARNING, CAUTION are used throughout the safety messages and decals in the manual or on the equipment. Statements with one of these words indicates a safety risk is involved. Be sure to observe the precautions indicated whenever a Safety Alert Symbol is present.



This symbol is used to call attention to instructions concerning personal safety. Be sure to observe and follow these instructions. Take time to be careful!

⚠ DANGER — **The signal word DANGER on the equipment and in the manual identifies a hazardous situation which, if not avoided, WILL result in death or serious injury.**

⚠ WARNING — **The signal word WARNING on the equipment and in the manual indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury.**

⚠ CAUTION — **The signal word CAUTION on the equipment and in the manual indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury. It may also be used to alert against unsafe practices.**

IMPORTANT — **This notice identifies procedures which must be followed to avoid damage to the equipment.**

SAFETY PRECAUTIONS

The information in this manual applies to the **PCX SYSTEM** by OZ Lifting Products, LLC®.

This manual contains general instructions for normal installation, operation, and maintenance of the product described herein. The information provided should not be expected to prepare the user for all possible circumstances.

This product should not be installed, operated, or maintained by any person who has not read all the contents of this manual. Failure to read and comply with these instructions, warnings, or limitations may result in bodily injury, death, or property damage.

It is the responsibility of the owner/user to install, test, maintain, and operate this product in accordance with OSHA regulations as well as all other federal, state, and local regulations. Only trained and qualified personnel shall operate and maintain this product.

Regularly inspect the **PCX SYSTEM** by OZ Lifting Products, LLC® for signs of wear, elongation of holes, surface cracks, gouges, damage or any abnormal conditions.

Product owners should schedule and keep record of regular inspection and maintenance performed. There is a maintenance chart included in the back of this book. Record your **PCX SYSTEM** by OZ Lifting Products, LLC® serial number and purchase date in this manual for reference.

Do not use the **PCX SYSTEM** by OZ Lifting Products, LLC® in conjunction with other equipment unless the necessary safety devices are in place. Modifications to this product is only authorized by the original manufacturer.

SAFETY WARNINGS

⚠ WARNING **Failure to read and comply with the following warnings may result in a hazardous situation that could lead to death, serious injury or property damage. Keep this manual near the equipment at all times. Do not remove, alter, or obscure the labels attached to the winch. Contact OZ Lifting Products, LLC® for replacement manuals and labels.**

⚠ WARNING **Each installation location MUST be approved to local standards by a qualified engineer.**

DO NOT operate a damaged or malfunctioning product.
DO NOT lift people.
DO NOT lift loads over people.
DO NOT operate until personnel are warned of approaching loads and are clear from the area.
DO NOT leave a suspended load unattended.
DO NOT put hands in areas with moving parts such as sheaves, wire ropes, and gears.
DO NOT operate if guards are improperly installed or removed.
DO NOT operate crane beyond rated load capacity. See load rating specifications on page 33.
DO NOT adjust crane so that it becomes overloaded during the lift.
DO NOT operate without at least four (4) anchor wraps of wire rope around the winch drum to prevent rope from loosening and the load from falling.
DO NOT lift more than the 250 lb. rated load of the **PCX SYSTEM** by OZ Lifting Products, LLC®.
DO NOT use additional cranes to move a load that is heavier than the load rating of a single crane being utilized. A load shift could overload the components.
DO NOT modify the equipment or use for different functions.
DO NOT use any unapproved rigging devices or methods with this crane.
DO NOT adjust the winch brake while load is suspended.
DO NOT remove, deface, or obscure warning labels.
DO NOT allow load to swing or jerk. Operate smoothly to avoid shock loads.
DO NOT lift any load that is not located directly below the crane. This product is not intended to drag a load sideways.
DO NOT assume the lynch pin is secure by visual inspection alone. Ensure a secure fit by listening for a snap as you close the lynch pin.
DO NOT operate without ensuring wire rope is securely attached to the winch drum.
DO NOT operate without checking for proper lubrication.
DO NOT use chains, cables, or rigid devices to lift crane. Nylon or other synthetic slings should be used instead.
DO NOT use with electric winch.
DO NOT use with components that are not a part of the **PCX SYSTEM** by OZ Lifting Products, LLC®.

⚠ WARNING **Re-torque main clamp screw prior to each use.**

⚠ WARNING **Ensure safety tether is in place, connected to both handles of OZPCX, prior to installation onto parapet wall.**

⚠ WARNING **Install with mast tube on operator side of parapet wall.**

⚠ WARNING **Ensure each cup point set screw is contacting parapet wall prior to setting torque.**

⚠ WARNING **Ensure LOCKING COLLAR is engaged prior to lift.**

⚠ WARNING **OZPCX is designed for use on solid concrete parapet walls. Check rigging plan with Qualified Person,**

⚠ WARNING **Only use pins supplied with equipment.**

⚠ CAUTION **OZPCX250DAV may only be used with OZPCX and OZ1500BW winch. Electric winches are prohibited with this system.**

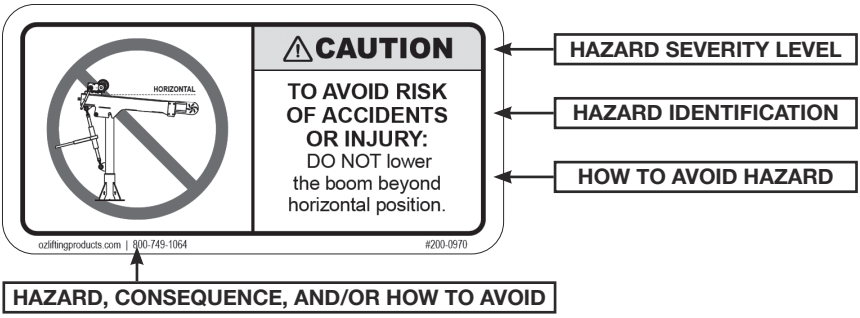
SAFETY LABELS

Label Identification

Safety labels are placed on the equipment to protect anyone working on or around this equipment, as well as the components of the equipment. All personnel operating or maintaining this equipment must familiarize themselves with the safety labels.

The safety labels are color coded to warn the operator of the various levels of machine hazards. The safety label example below defines a standard industry label.

Make sure all safety labels are in place and clearly readable. Replace any damaged or missing safety labels with a factory replacement label.



Danger Safety Labels

⚠ DANGER **Failure to read and comply with the following warnings may result in a hazardous situation that could lead to death, serious injury, or property damage.**

Warning Safety Labels

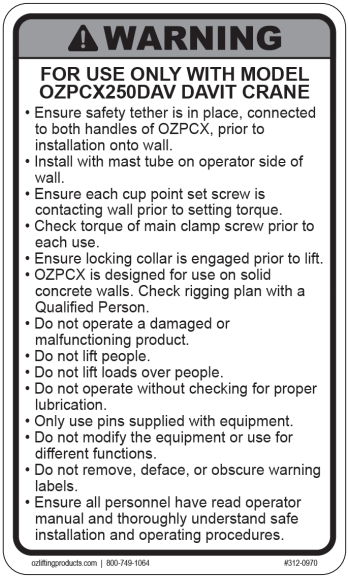
⚠ WARNING **The signal word WARNING on the equipment and in the manual indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury.**

Caution Safety Labels

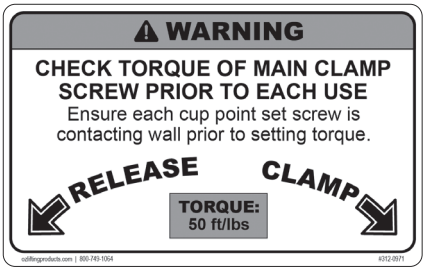
⚠ CAUTION **The signal word CAUTION on the equipment and in the manual indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury. It may also be used to alert against unsafe practices.**

Safety Label Locations

OZPCX













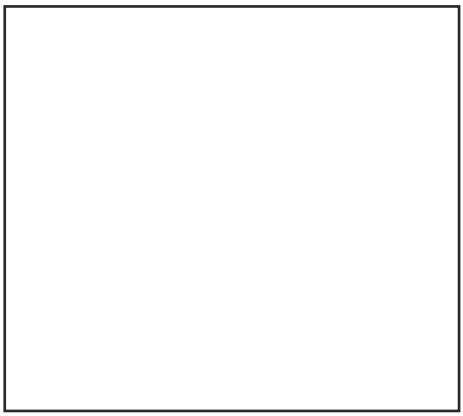


Figure 2.1



Figure 2.2

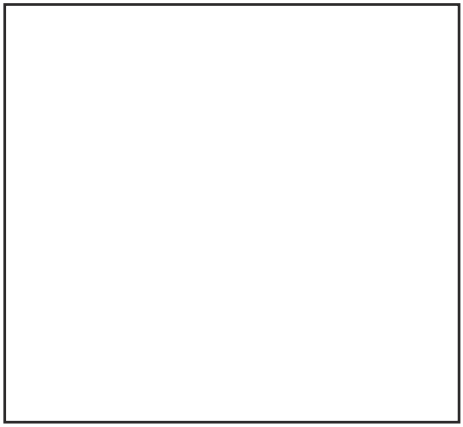


Figure 2.3

OZPCX250DAV







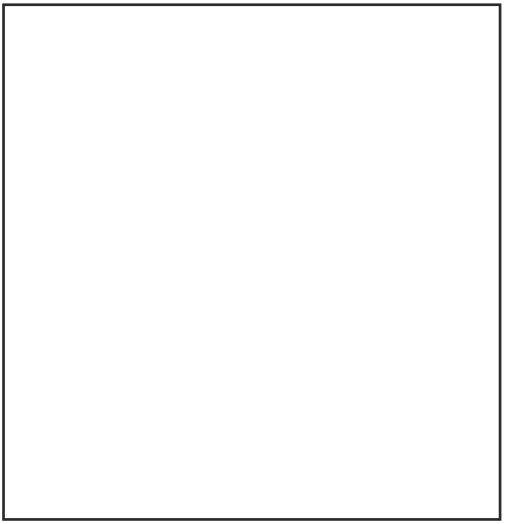


Figure 2.4



Figure 2.5

OZ1500BW



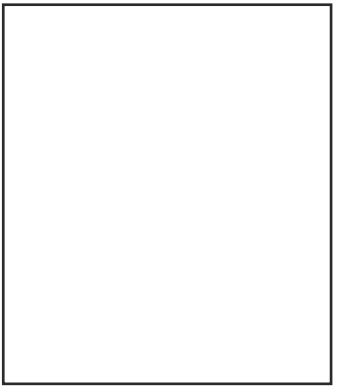


Figure 2.6


WARNING
FAILURE TO COMPLY WITH THE FOLLOWING WARNINGS MAY RESULT IN A HAZARDOUS SITUATIONS THAT COULD LEAD TO DEATH, SERIOUS INJURY, OR PROPERTY DAMAGE.
DO NOT operate a damaged or malfunctioning product.
DO NOT lift people.
DO NOT lift loads over people.
DO NOT operate until personnel are warned of approaching loads and are cleared from the area.
DO NOT do not leave a suspended load unattended.
DO NOT put hands in areas with moving parts including sheaves, wire rope, boom, and gears.
DO NOT operate if guards are improperly installed or removed.
DO NOT adjust crane beyond rated load capacity. See load rating decal for specifications.
DO NOT adjust crane so that it becomes overloaded during the lift.
DO NOT lower the boom past horizontal position.
DO NOT operate without assuring wire rope is securely attached to the winch drum.
DO NOT operate without at least four (4) anchor wraps of wire rope around the winch drum to prevent rope from loosening and the load from falling.
DO NOT lift more than the rated capacity of the crane or any attached component. Always follow the capacity of the lowest rated part of the lifting system.
DO NOT use additional cranes to move a load that is heavier than the load rating of a single crane being utilized. A load shift could overload the components.
DO NOT modify the equipment or use for different functions.
DO NOT use unapproved rigging devices or methods with this crane.
DO NOT adjust the winch brake while load is suspended.
DO NOT remove, deface, or obscure warning labels.
DO NOT assume compatibility of attachments.
DO NOT use chains, cables, or rigid devices to lift crane. Nylon or other synthetic slings should be used instead.
IF EQUIPPED ensure ratchet binder is centered and not adjusted beyond its travel limits.
SEE MANUFACTURER'S RECOMMENDATIONS AND ENSURE COMPLIANCE WITH LOCAL REGULATIONS FOR SAFE USE.
WARNING
TO AVOID RISK OF ACCIDENTS OR INJURY:
DO NOT lift people.
DO NOT lift loads over people.
WARNING
ENSURE LYNCH PIN SNAPS AGAINST SHAFT FOR PROPER SECURITY
CAUTION
DO position the load center line vertically from the crane's outer boom pulley.
DO operate smoothly to avoid shock loads.
DO NOT allow load to swing or jerk.
DO NOT operate with load pulling or dragging.
CENTER LINE
DO
CENTER LINE
DO NOT
ozliftingproducts.com | 800-749-1064
#200-0972

Figure 2.7

OZ LIFTING PCX CLAMP

OZ LIFTING PCX 250

OZ LIFTING PRODUCTS

MADE IN U. S. A.
#090-0980



Figure 2.8



Figure 2.9

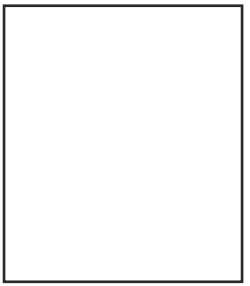


Figure 2.10

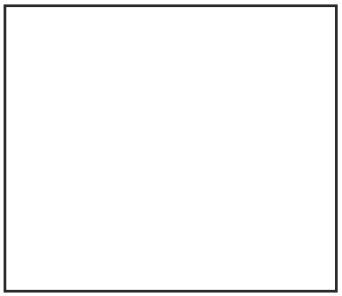


Figure 2.11

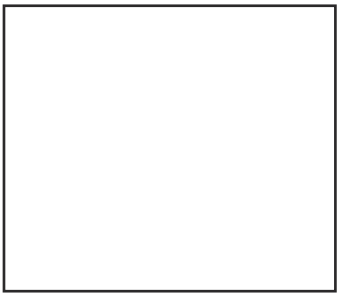


Figure 2.12

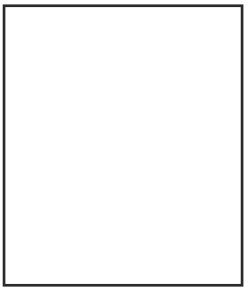


Figure 2.13

PRE-INSTALLATION INSPECTION:

Check for damage during shipment. Do not install or use a damaged product. Be sure to maintain records of product information and contact your OZ Lifting Products, LLC® dealer with any problems that arise. Refer to applicable codes and regulations before installing equipment. Contact a qualified professional to obtain structure and parapet wall specifications for product mounting.

Before installing, select a location where the crane is:

- Visible throughout its entire operation.
- Free of traffic and any possible operational interference.
- Positioned so the operator is clear of both the load and the path of the wire rope.
- Accessible for maintenance.
- Attached to a strong, level parapet wall within 6-18-inches, that can properly support it under all conditions.
- Removed from any corrosive, flammable, explosive, or potentially damaging materials.

Inspect the crane to ensure there are no missing or damaged parts. Do not discard the system's shipping containers as they can be reused if the crane needs to be repackaged. Contact your OZ Lifting Products dealer if any problems arise.

During assembly, perform an inspection of all components and resolve any issues. This will provide a benchmark comparison for later inspections.

Before installing the **PCX SYSTEM** check the following:

- Refer to inspection chart on pg. 32.
- Verify that all components are present and without damage.
- Verify the ball detent pins are tethered to the outer **PCX SYSTEM** handle.
- Confirm the main clamp screw rotates smoothly.

INSTALLING PCX CLAMP TO STRUCTURE:

Tools needed:

- 3/8” Hex Key
- 11/16” Socket
- Torque Wrench (capable of reading 55 ft/lb)

⚠ DANGER **Ensure the lanyards are in place and secured prior to placing the PCX CLAMP by OZ Lifting Products, LLC® on parapet wall. Lanyards should be arranged such that no piece can be dislodged from the assembly.**

⚠ CAUTION **When tightening fasteners, only use hand tools. The main clamp screw must be torqued using a calibrated torque wrench.**

1. Slide the outer clamp onto the inner tube. Ensure pins are in place, locking the outer tube and inner tube together in the widest position.

Fully back out the main clamp screw by rotating screw in the ‘release’ direction as indicated by decal.

Adjust the cup point set screws so that cup points are minimally protruding, and all eight extend roughly the same amount.

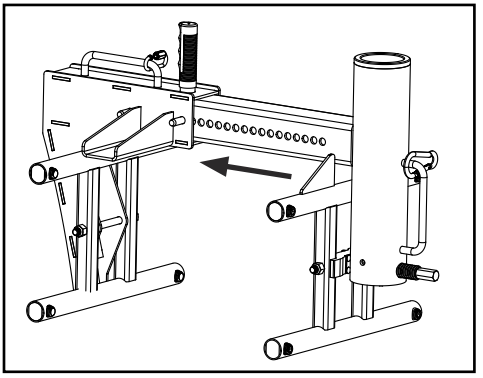


Figure 3.1

⚠ CAUTION **The black indicator decal shows the maximum wall-thickness adjustment. Do not adjust the PCX Clamp halves past this mark.**

2. Connect the tether between the inner and outer clamp handles.

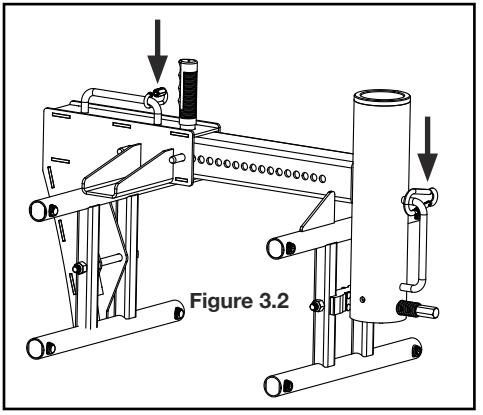


Figure 3.2

3. Lift the assembly onto the parapet wall, so that the clamp halves straddle the parapet wall. Ensure the mast tube is on the operator side of the parapet wall.

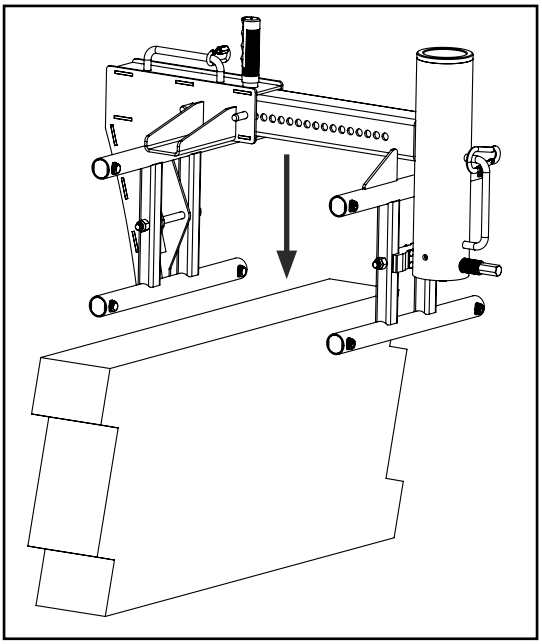


Figure 3.3

4. Position the clamp assembly so that the outer clamp is flush against the exterior of the parapet wall.

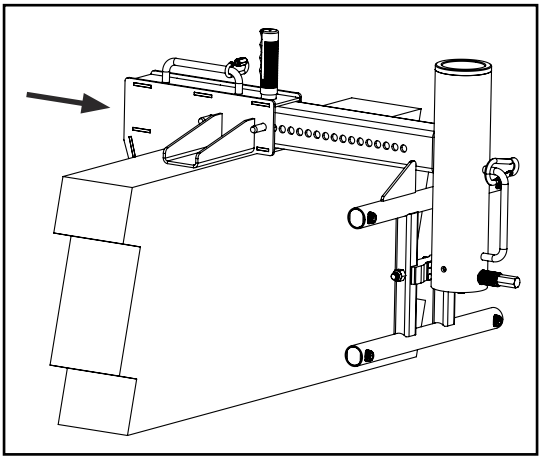


Figure 3.4

5. Remove the ball detent pins.

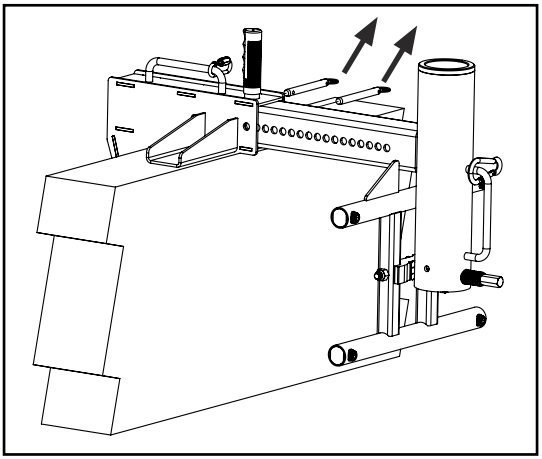


Figure 3.5

6. CAREFULLY slide the clamp halves together, closing the clamp, until the halves are both nearly touching the parapet wall.

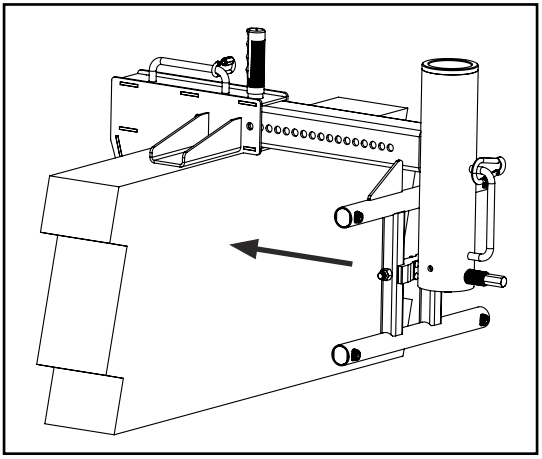


Figure 3.6

7. Re-insert the ball detent pins to the nearest set of holes.

⚠ CAUTION

The black indicator decal shows the maximum wall-thickness adjustment. Do not adjust the PCX Clamp halves past this mark.

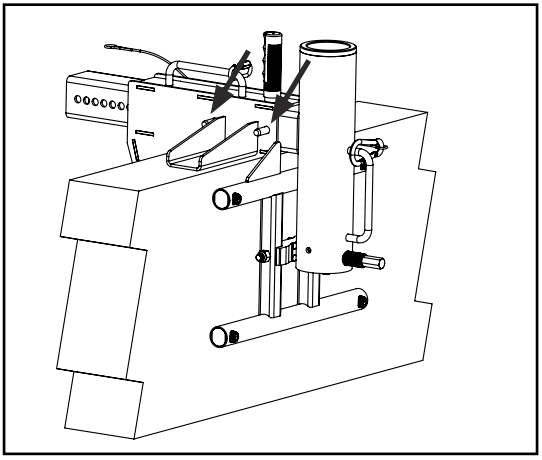


Figure 3.7

8. Rotate the main clamp screw until both halves contact the parapet wall.

TOOLS NEEDED:



TORQUE WRENCH W/
11/16" SOCKET
Capable of reading 55 ft/lb

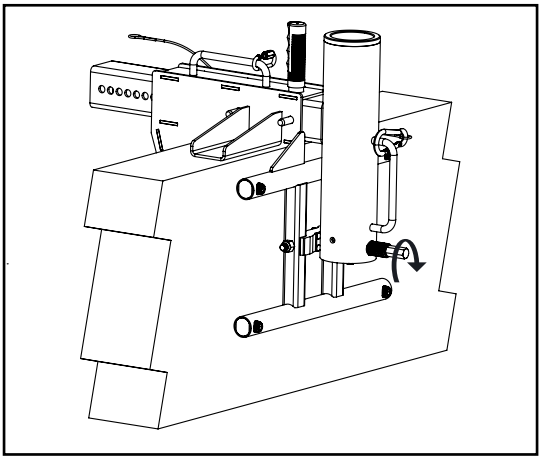
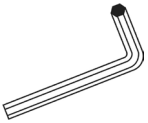


Figure 3.8

9. Verify that all eight (8) cup point set screws are in contact with the parapet wall, adjust as needed.

TOOLS NEEDED:



3/8" HEX KEY

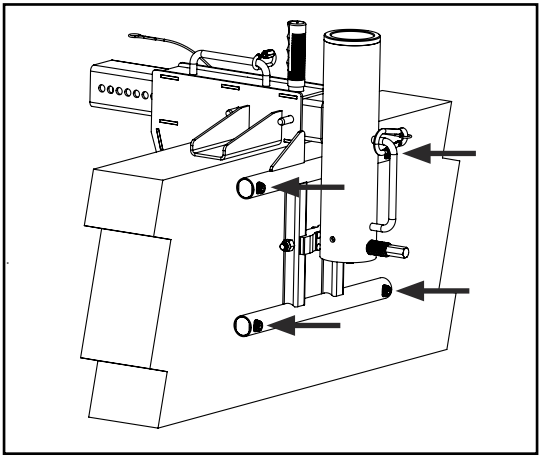


Figure 3.9

10. Proceed to tighten the main clamp screw to 50 ft-lbs.

TOOLS NEEDED:



TORQUE WRENCH W/
11/16" SOCKET
Capable of reading 55 ft/lb

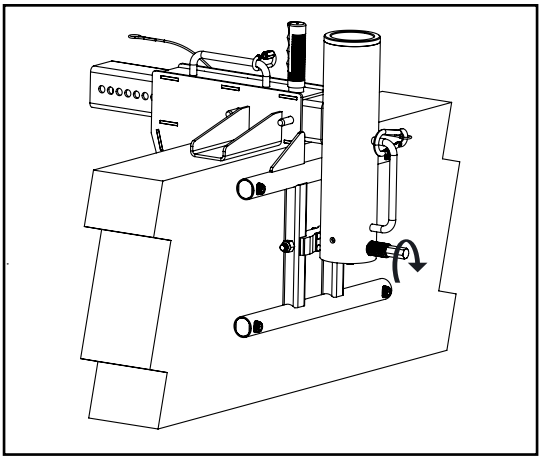


Figure 3.10

ASSEMBLING THE SYSTEM:

PRE-ASSEMBLY

Please refer to the Assembly Diagrams on pg. 19-26 before assembling the **PCX SYSTEM**.

Inspect all parts of the system to ensure there are no missing or damaged parts. Do not discard the shipping containers as they can be reused if the system needs to be repackaged. Contact your OZ Lifting Products, LLC® dealer if any problems arise.

During assembly, perform an inspection according to the procedures found on pg. 30-32. Document and resolve any issues. This will provide a comparison for later inspections.

ASSEMBLY

Clevis Pins (Actual Size)

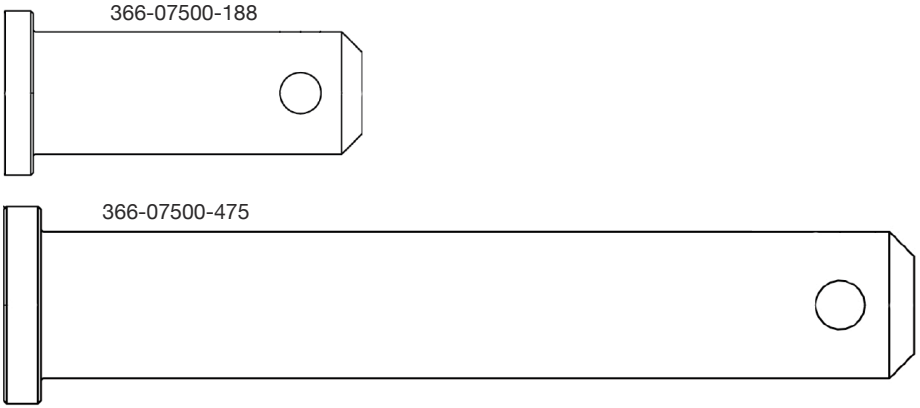


Figure 4.1

Installing the Davit Crane

Applies to: OZPCX250DAV

No Tools Needed

Once the **PCX CLAMP** has been installed, assemble the **PCX 250** davit crane with the following steps:

1. Ensure the base bushing is installed in the **PCX CLAMP** mast opening. Install the **PCX 250** davit crane mast into the **PCX CLAMP**. The mast will slide down easily (no tools are necessary). Ensure that the mast is properly positioned on the puck at the bottom of the **PCX CLAMP**. This can be confirmed by moving the mast from side to side to check for excessive play. The mast should fit snugly. Ensure that the height adjustment plate is toward the operator.

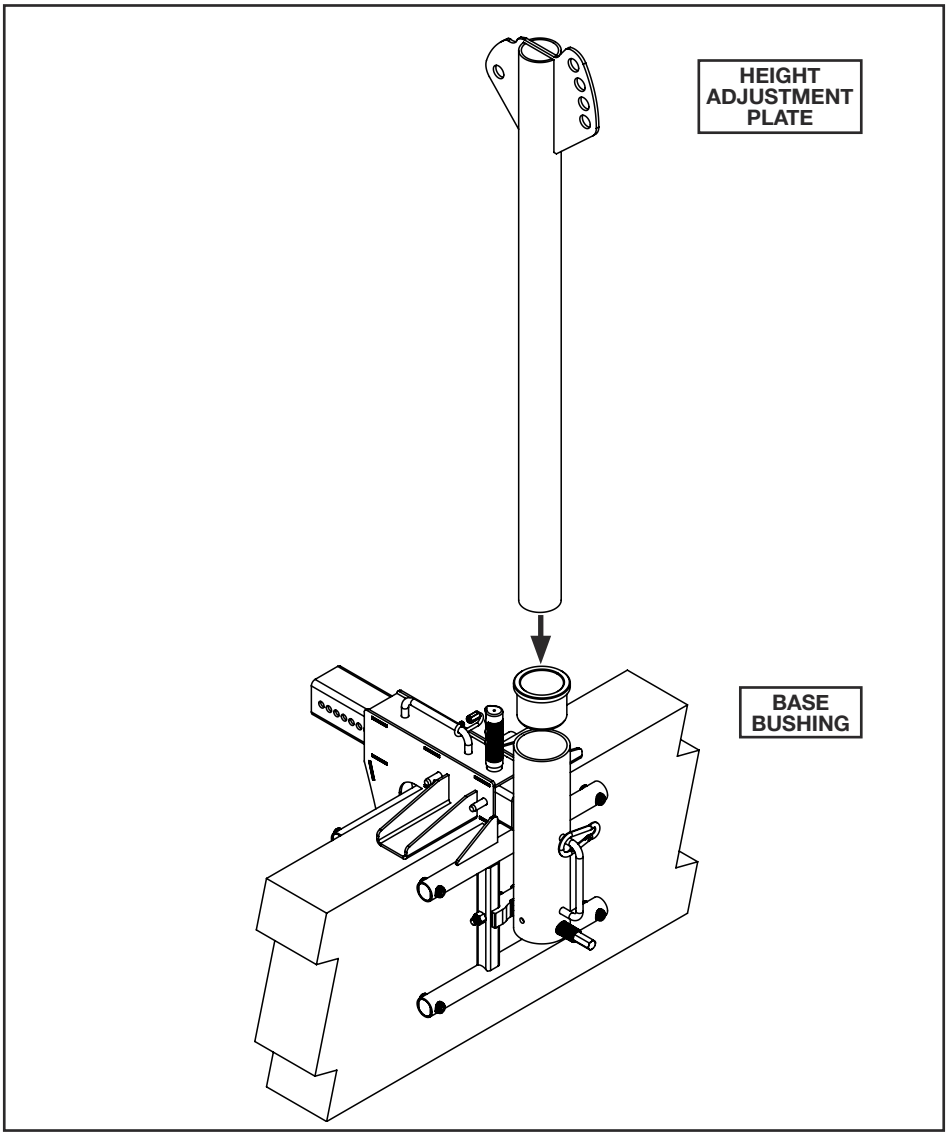


Figure 4.2

2. To set the boom on the mast, align the middle hole in the boom with the lowest hole in the height adjustment plate. Insert clevis pin (366-07500-475) into the hole. Secure with lynch pin.

NOTE: Slowly lower the boom as it gets to a resting point on the mast.

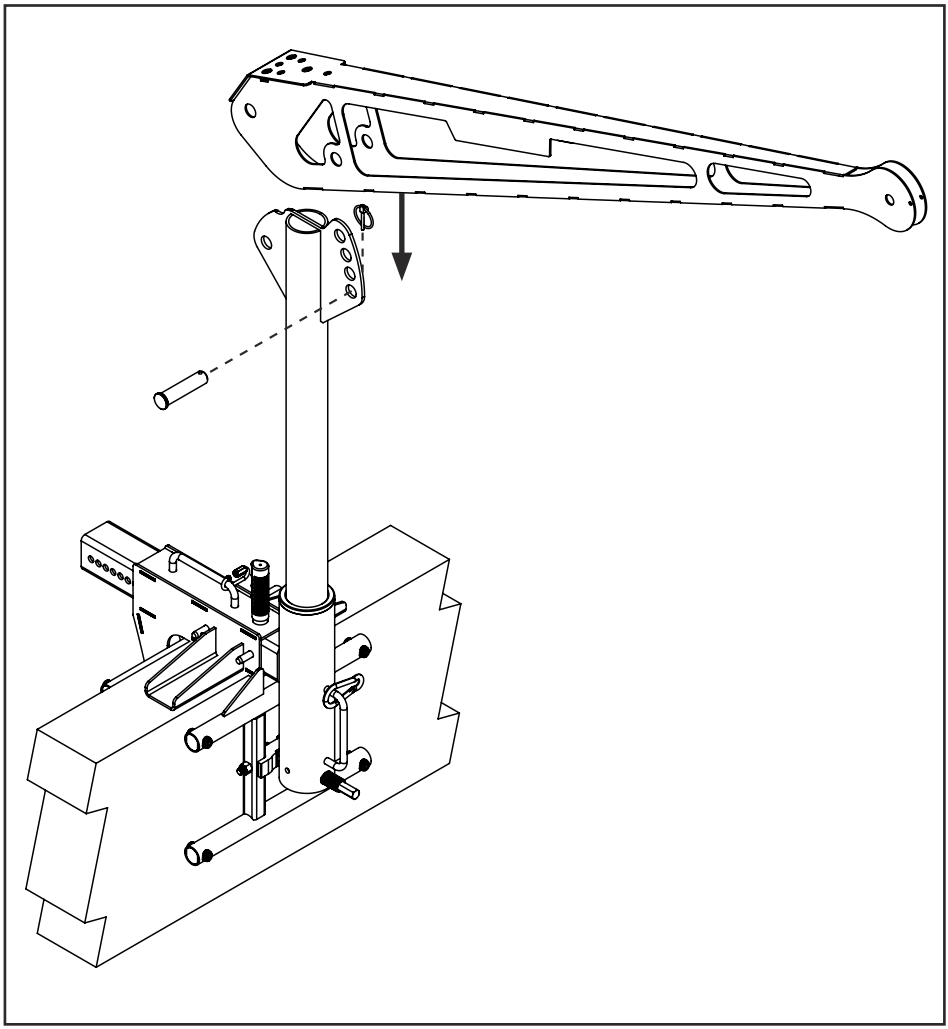


Figure 4.3

3. Insert second clevis pin (366-07500-475) through one side of the boom, then through one side of the handle, and lastly through the rear hole of the mast before pushing the pin the rest of the way through. Secure with a lynch pin.

NOTE: May need to lift the boom slightly as it gets to a resting point on the mast.

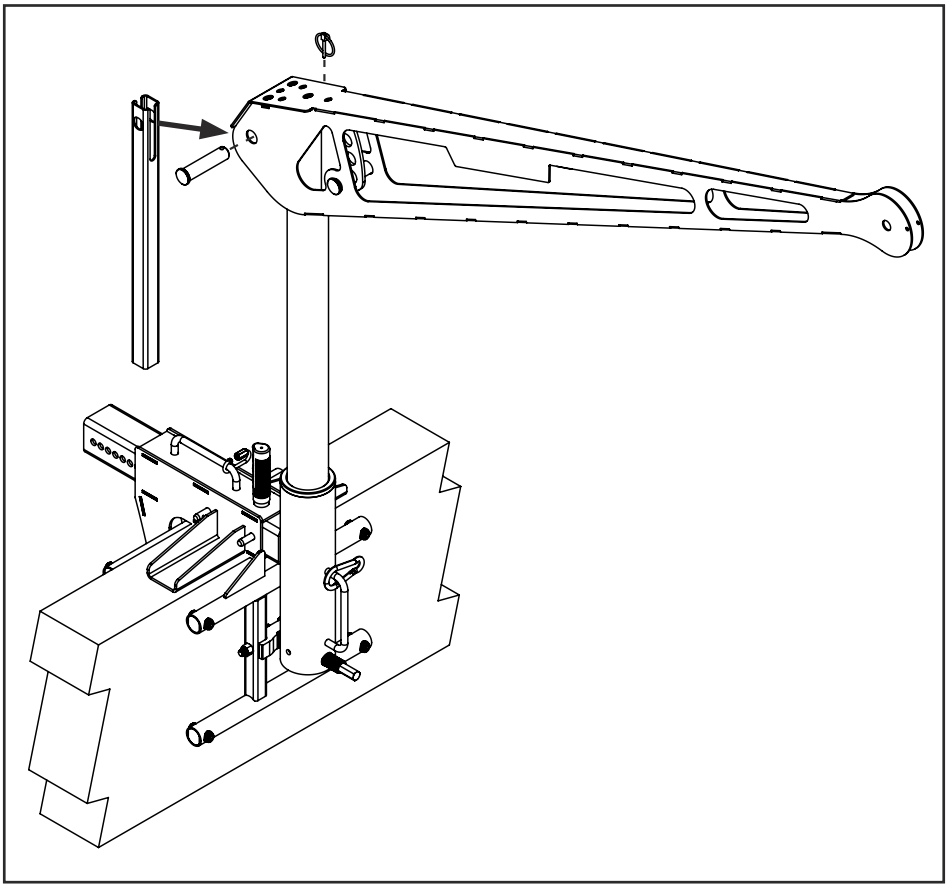


Figure 4.4

NOTE: The PCX 250 davit crane will ship from the factory partially assembled. The following step is for reference if the product must be reassembled.

4. Slide the sheave pulley into the boom cap. Align the holes on the sheave pulley with those on the boom. Insert clevis pin (366-07500-188) and secure the lynch pin. Insert the ball detent pin into the small hole at the end of the boom.

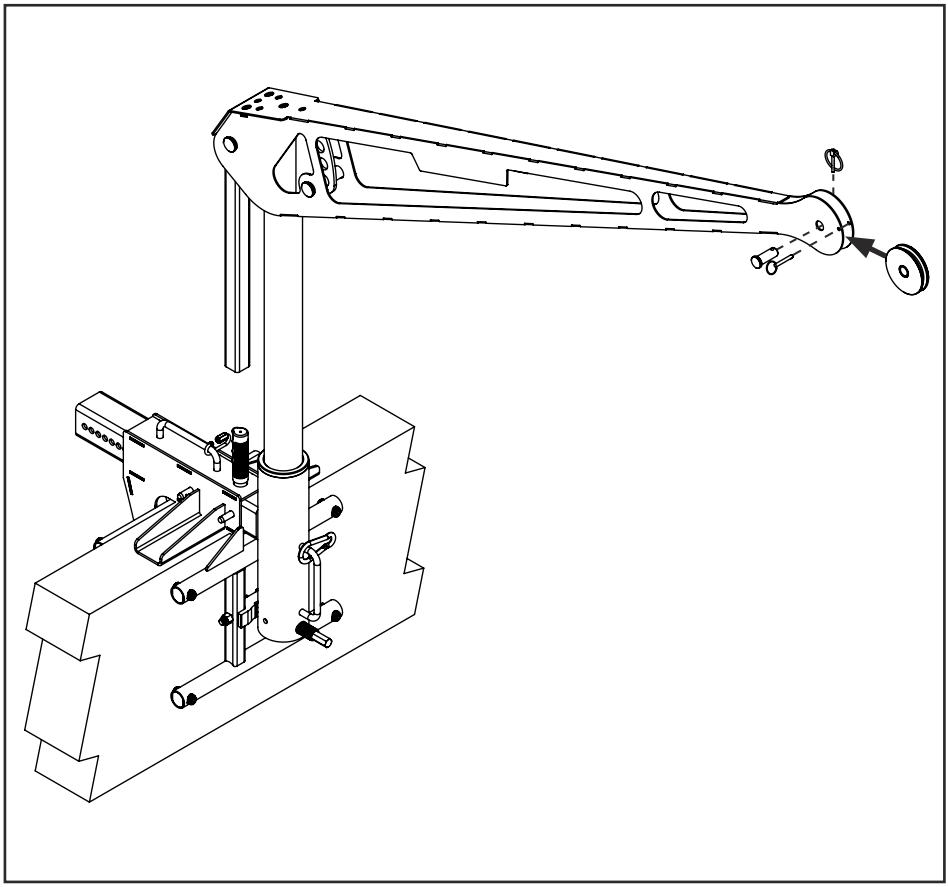


Figure 4.5

Installing a Manual Winch

Applies to: OZ1500BW

Tools Needed:

- 9/16” Wrench

Swivel the boom 180° so that the sheave faces away from the operator. Center the winch over the mounting holes on the top of the boom. The winch drum should be facing toward the sheave. Secure the winch to the boom using the front-most mounting position, the set of three (3) holes closest to the sheave, using the supplied fasteners. Fully tighten.

NOTE: Winch fasteners should not be over-tightened during assembly as this may strip the threads and lead to damage.

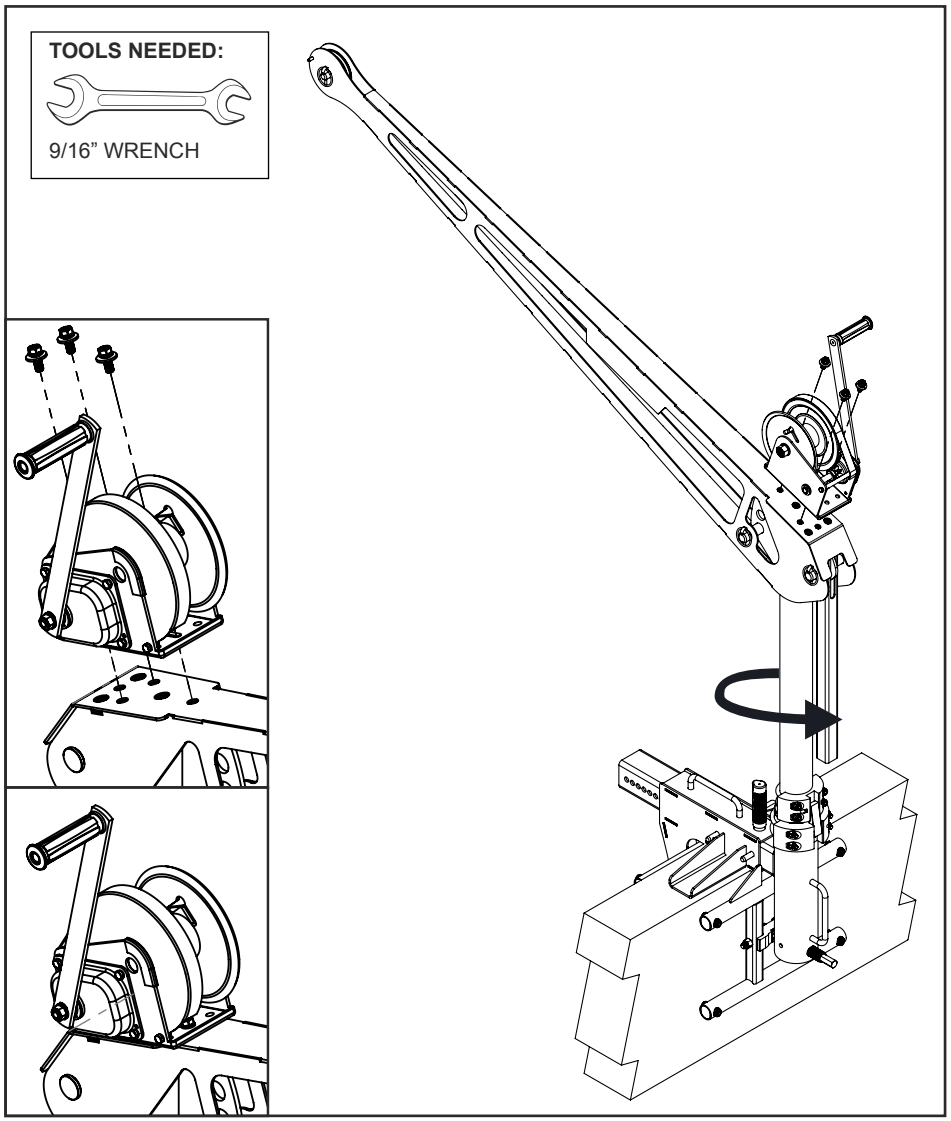


Figure 4.6

Installing the Single Position Locking Collar

Tools Needed:

- 9/16” deep well socket with a socket wrench

The **SINGLE POSITION LOCKING COLLAR** by OZ Lifting Products, LLC® is comprised of an upper and lower assembly. Both assemblies can be pre-assembled onto the **PCX 250** davit crane and **PCX CLAMP** respectively. Final adjustments must be made once the **PCX 250** davit crane is installed into the **PCX CLAMP**.

Applies to part numbers: OZ100022

1. Install the **LOCKING COLLAR** lower assembly onto the **PCX CLAMP.**

Rotate the assembly so that the locking mechanism ‘pocket’ is facing toward the operator.

Align top of the **LOCKING COLLAR** lower assembly to top of the mast tube, without interfering with base bushing.

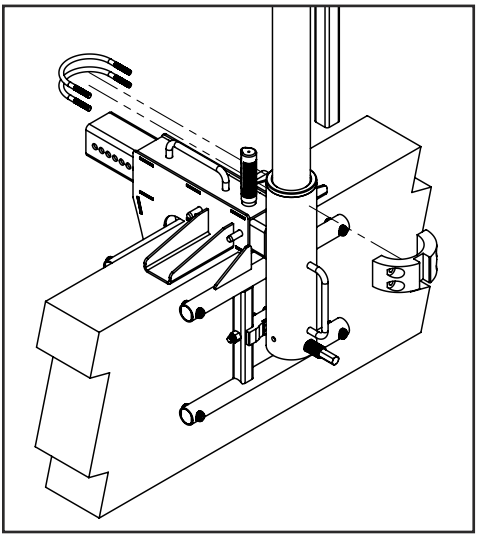


Figure 4.7

2. Install the **LOCKING COLLAR** upper assembly onto the **PCX 250** davit crane.

The **LOCKING COLLAR** must be placed on the upper half of the mast, with the locking mechanism facing toward the operator, and aligned with the “pocket” of the lower assembly.

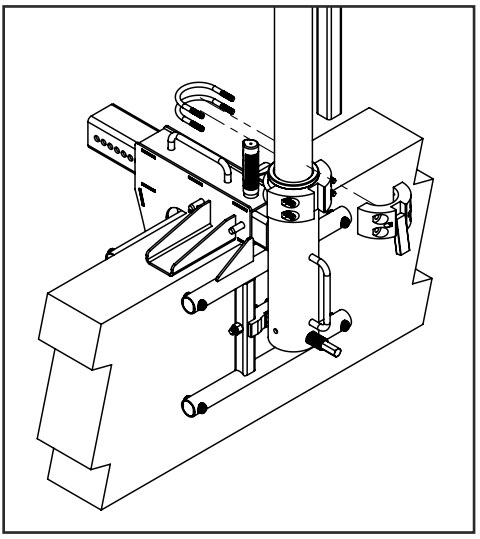


Figure 4.8

TOOLS NEEDED:



SOCKET WRENCH W/
9/16” DEEP WELL SOCKET

3. After installing the **PCX 250** davit crane into the **PCX CLAMP**, adjust the upper **LOCKING COLLAR** assembly to contact the lower **LOCKING COLLAR** assembly.

Install (8) nuts to the **LOCKING COLLAR** U-bolts and fasten securely.

Validate the davit boom end is perpendicular to the parapet wall when collar is locked in.

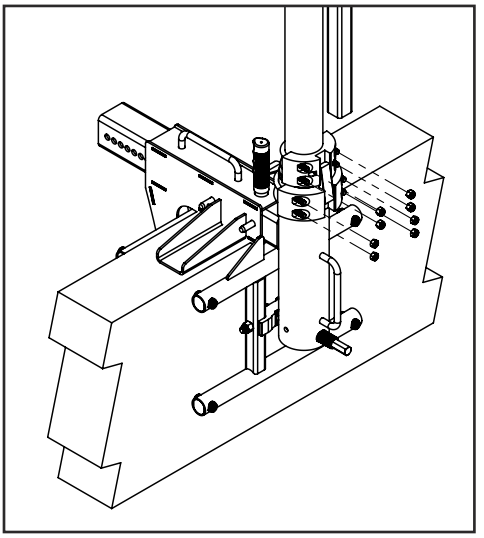


Figure 4.9

Installing a Headache Ball

Applies to: OZHB10 to wire rope installation

Tools Needed:

- 5/16” Allen Key

TOOLS NEEDED:



5/16” ALLEN KEY

Route cable through **HEADACHE BALL** down to hook end.

Secure **HEADACHE BALL** in place by tightening set screw against cable.

⚠ CAUTION **Ensure bottom of HEADACHE BALL is above and not touching cable sleeve and thimble.**

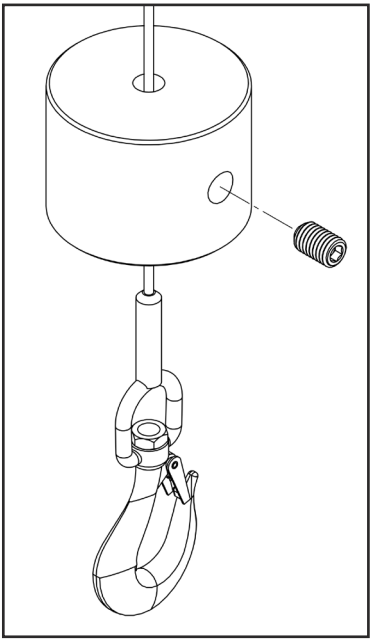


Figure 4.10

Installing a Wire Rope with a Ball End Fitting to a Manual Winch

Applies to part numbers OZ1500BW, when installing wire rope with a ball end fitting.

For use only with 3/16" galvanized wire rope.

1. Lay the cable out on a flat surface to ensure it is not knotted or looped.

2. Locate the ball end of the cable.

3. Locate the "keyhole" in the winch drum that accepts the ball end of the cable. (See Figure 4.11)

4. Thread the ball end of the cable over the sheave pulley and towards the winch. The cable retainer pin may need to be removed from the tip of the boom so the ball will pass over the sheave.

5. Insert the ball end fitting of the cable into the "keyhole" feature in the winch. (See Figure 4.11) Ensure that the ball end of the cable slides into the slot in the "keyhole" and cannot be pulled out.

6. Manually spool at least four full wraps of cable onto the winch drum. There must be at least four full anchor wraps of cable on the winch drum at all times. (See Figure 4.12)

7. Reinstall ball detent pin into the sheave by inserting into holes at the tip of the boom.

NOTE: To ensure the maximum amount of cable can be spooled onto the winch, the cable must be neatly spooled onto the winch drum. If the cable is not spooled neatly onto the winch drum, the cable capacity will be reduced and handle effort may increase. Cable that is not spooled neatly can consume 30% more space on the winch drum, reducing cable capacity.

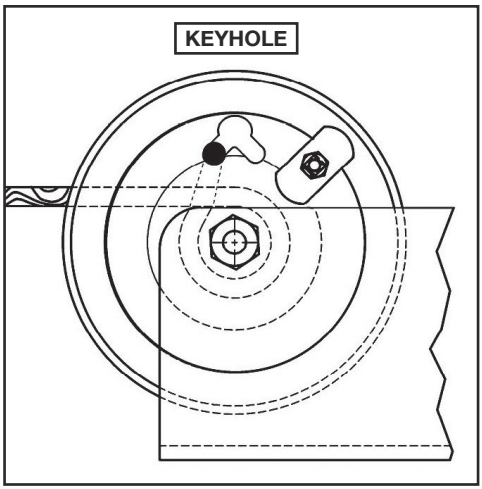


Figure 4.11

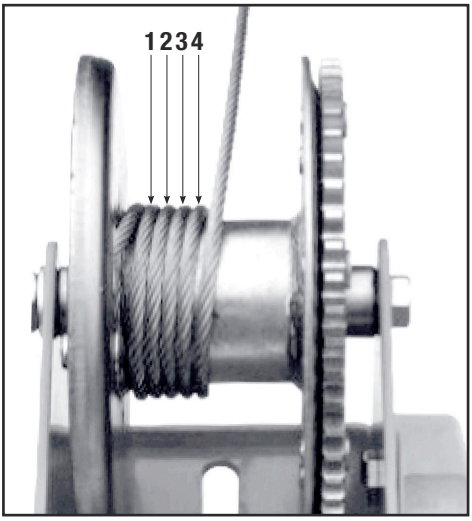


Figure 4.12

FIELD TEST:

There is no ASME standard for davit cranes. The **PCX SYSTEM** by OZ Lifting Products, LLC® has a minimum 3:1 design factor. We individually load test and certify every davit crane to 125% of the rated capacity. A test certificate is generated that includes the serial number.

If a load test is required on site, we recommend contacting a structural engineer to determine if the clamp has been properly mounted to a sound location. OZ Lifting Products, LLC® provides the information on the moment load experienced by the parapet wall. The end user must validate the integrity of the parapet wall to those moment loads.

CRANE REACTIONS/MOMENTS			
Model	Mast Moment (in-lb)	Mast Moment (N-m)	Suggested Anchor Size
OZPCXS	15,507	1,752	N/A
**Moment measured from mast centerline.*			

PREPARING FOR OPERATION:

WARNINGS & PRECAUTIONS

⚠ WARNING **Failure to read and comply with the following warnings may result in a hazardous situation that could lead to death, serious injury, or property damage.**

Operators should read and fully comprehend this entire manual and all warnings on the **PCX SYSTEM** by OZ Lifting Products, LLC® before beginning crane operation. If this manual is not read and followed completely, injuries and damage may occur. For questions regarding operation, please contact your OZ Lifting Products, LLC® dealer.

Before operating the crane, be sure all parts are clean and properly lubricated. The crane must be in proper working condition and maintenance records must be up to date to proceed with operation. The area of operation must be clear of all flammable materials.

It is important to maintain secure footing while operating the crane. Confirm that the crane is attached securely to a strong, level, solid parapet wall before operation. Slowly take up a load, verifying that it is well supported and balanced before proceeding with operation.

All operators **MUST:**

- Be trained in proper crane operation and in dealing with potential malfunctions.
- Abstain from use of alcohol, medications, or drugs while operating.
- Avoid operation while tired or distracted.
- Avoid operation if they have a history of seizures or other medical issues that may interfere with crane operation.
- Have proper coordination and vision.

OPERATING GUIDELINES:

The **OZPCX250DAV** by OZ Lifting Products, LLC® has a maximum operating load rating of 250 lb.

The **PCX SYSTEM** by OZ Lifting Products, LLC® and winches supplied are capable of generating forces that are in excess of this maximum load rating, but this should not be attempted.

⚠ WARNING **It is the responsibility of the user to ensure that the loads being handled are within the operating limits of the PCX SYSTEM by OZ Lifting Products, LLC® at all times. Shock loads must be minimized as they can lead to higher forces than the rated capacity of the PCX SYSTEM by OZ Lifting Products, LLC®.**

⚠ WARNING **Cup point set screws must leave impressions on the parapet face. If the cup point set screws begin to peel or scrape the parapet wall during use, stop immediately, lower the load in a controlled manner, and inspect the PCX CLAMP installation before continuing.**

⚠ WARNING **Re-torque main clamp screw prior to each use.**

⚠ WARNING **The single-position LOCKING COLLAR must be engaged prior to any lift and must remain engaged while a load is suspended.**

BOOM HEIGHT ADJUSTMENT

Never attempt to adjust boom height or boom angle while under load. Set boom height with no load on the hook, using the height adjustment plate and the included clevis pins.

LOCKING COLLAR

The **LOCKING COLLAR** is a single-position rotation lock. Ensure the **LOCKING COLLAR** is engaged prior to lifting a load.

Unlock the **LOCKING COLLAR** only to rotate the davit with no load, or with the load held just clear of the landing and under full control. Rotate boom slowly. Do not allow the load to swing or jerk.

ABNORMAL NOISE OR MOTION

The **PCX SYSTEM** by OZ Lifting Products, LLC® has a main structure made from steel. At no time should the davit crane or clamp emit any abnormal noises during use. Any abnormal sound, unexpected movement of the clamp on the parapet, or peeling of the cup point set screws on the wall is cause to stop use, lower the load if it is safe to do so, and inspect the system before returning it to service.

Sources of abnormal noise or motion include, but are not limited to:

- Cable that is not spooled neatly under tension when load is applied
- Severe overload
- **PCX CLAMP** not fully seated or not properly torqued
- Worn or poorly contacting cup point set screws
- **LOCKING COLLAR** not engaged
- Damage from abuse or mishandling

This list is not exhaustive and does not cover all possibilities.

AMBIENT OPERATING TEMPERATURE

The **PCX System** may be used at ambient temperatures of -20°F (-29°C) to 120°F (49°C). Do not use in applications involving extended exposure to ambient temperatures below -20°F (-29°C) or above 120°F (49°C).

MAINTENANCE:

MAINTENANCE SAFETY INFORMATION

⚠ WARNING **Instructions are necessary before maintaining or servicing OZ Lifting Products, LLC® equipment. Read and understand the operator's manual. Follow warnings and instructions in the operator's manual when making repairs, adjustments, or servicing. Check for proper operation after adjustments, repairs, or service. Untrained operators and failure to follow instructions can cause injury or death.**

⚠ WARNING **Replace any components that are worn or damaged.**

⚠ WARNING **Improper maintenance can cause damage or failure of the machine. Possibly causing property damage and/or severe injury or death to nearby individuals.**

⚠ CAUTION **Do not drill, weld, or modify OZ Lifting Products, LLC® components. Any modifications will void the warranty.**

⚠ WARNING **It is the responsibility of the user to determine the maximum amount of cable that will be spooled onto the winch at any given time during the lift and size the load to be lifted accordingly.**

LUBRICATION

Some components are minimum maintenance and do not require service. Follow the chart for the components that require set service lubrication intervals.

Component(s)	Maintenance Task	Lubrication Type	Recommended Lubricant	Interval
Main Clamp Screw	Apply Grease Through Zerk Fitting	Grease	High-Pressure Moly Grease	20 Tightening Cycles **OR** 6 Months *(Whichever Comes First)*
Main Clamp Screw - Load Pin Adapter	Disassemble and Apply Grease to Clamp End of Lead Screw	Grease	High-Pressure Moly Grease	40 Tightening Cycles **OR** 12 Months *(Whichever Comes First)*
**Refer to Parts Breakdown diagram on page 39 for zerk fitting locations.*				

CLEANING THE PCX SYSTEM

The **PCX SYSTEM** by OZ Lifting Products, LLC® should be periodically cleaned to preserve its appearance and to prevent corrosion, especially when exposed to salt or chlorinated water spray. The **PCX SYSTEM** by OZ Lifting Products, LLC® will last longer and perform better when it is clean and lubricated.

⚠ CAUTION **The frame and component finishes are not warranted if equipment is installed in a wet environment or exposed to harsh cleaners or high-pressure wash downs.**

Cleaning Instructions:

⚠ CAUTION **No lubricants, solvents, or detergents of any kind should be applied to the brakes in the winch. If the brake pads get contaminated with oil, they may slip.**

1. Wipe the surfaces of the crane/clamp with a wet cloth. Detergents are not necessary.
2. The steel surfaces should have a light film of oil applied to them to prevent corrosion.
3. Remove any excess oil with a clean cloth.
4. Lubricate the bushing in the load sheave with a light coat of grease.
5. Lubricate the shaft bearing surfaces on the winch with a light coat of grease, taking care not to get any oil on the brake pads of the winch.

INSPECTING THE SYSTEM:

In order to maintain quality operation of the product, a regular inspection schedule should be followed by each operator. All inspections should be reported and maintained in a dated record log. These records should be available to all personnel involved with the product and should be made available to OZ Lifting Products, LLC® when a warranty issue is in question.

DEFINITIONS

Operator - The person(s) trained and approved to be in a specific hazardous area or perform specific tasks related to the operation of the equipment.

Designated Person - The person who is selected or assigned as being competent to perform specific duties.

Qualified Person - The person that—by possession of a recognized degree or certificate of professional standing, or through extensive knowledge, training, and experience—has successfully demonstrated they are able to resolve problems relating to the subject matter and work.

Normal Service - Service that involves operations with randomly distributed loads within the rated load limit, or uniform loads less than 65% of rated load for not more than 15% of the time.

Heavy Service - Service that involves operation within the rated load limit and exceeds normal service.

Severe Service - Service that involves normal or heavy service with abnormal operating conditions. This also includes service that involves shock loading.

INSPECTION CLASSIFICATIONS

Frequent Inspections - Completed by the operator or designated person. Performed by doing a visual examination and listening for unusual sounds during operation. These inspections are usually performed before each operation, every few hours during operation, and if problems arise.

Periodic Inspections - Completed by a designated person. Performed, with more detail than a frequent inspection, by doing visual examinations of internal and external conditions. These inspections are done on the following schedule:

- Normal Service - Semi-annually
- Heavy Service - Quarterly
- Severe Service - Immediately after completion of lift
- Following prolonged storage or if operation issues arise.

IMPORTANT **Label crane as "Out of Service" if an inspection deems it damaged or if maintenance is required. Do not remove this label until a qualified person has resolved the issue. Discontinue use of wire rope and equipment if damage or overloading occurs.**

IMPORTANT INSPECTION NOTES

IMPORTANT **Brake winches require more than audible and visual inspection. Check brake winches daily by operating the crane with and without a load and by stopping at various positions to ensure safe operation. If the load coasts or creeps, contact the factory for friction disc replacements.**

IMPORTANT **Proper inspection may require disassembly of some parts. Contact the OZ Lifting Products, LLC® factory before doing so or the applicable warranty may be voided.**

IMPORTANT **For wire rope inspections, please contact the specific manufacturer of the rope. For wire rope assemblies by OZ Lifting Products, LLC®, refer to the applicable operator manual on our website - www.ozliftingproducts.com. The inspection provided in the following chart is for a general inspection only and is in no way the complete inspection required.**

IMPORTANT **Before operation, ensure all deficiencies on the inspection chart are resolved and inspections are up to date. Refer to the troubleshooting chart for further assistance.**

IMPORTANT **Be aware of applicable codes and regulations for crane inspection.**

IMPORTANT **See specific winch operator's manual for instructions and complete inspection instructions.**

INSPECTION CHART

NOTE: Disassemble crane and clamp, including boom and winch, periodically to inspect each for damage. Use the following chart to determine what type of inspection is necessary. Frequent Inspection (F) and Periodic Inspection (P).

INSPECTION CHART			
Location	**Check For**	**F**	**P**
OZPCX250DAV	Damage, cracks, dents excess wear, or corrosion.	X	
	Unusual sounds	X	
	Smooth load movements	X	
	Equipment properly lubricated	X	
	Signs of overloading (cracks, dents, or damage)		X
	Proper function when operated with a load equal to the load rating		X
OZPCX	Good condition/supports the crane under all conditions	X	
	Mast level; boom does not auto-rotate	X	
	Cracks, corrosion, damage check by removing clamp from parapet wall		X
Fasteners (including mounting fasteners)	Properly installed and tightened	X	
	Damaged threads, bent, or damage (check by removing from parapet wall)		X
	No excessive wear to cup point set screws contact face	X	
	Ball detent pins not damaged or bent	X	
	Ball detent pin tethers in place and not damaged	X	
	Grease present on main lead screw threads	X	

NOTE: Please refer to applicable winch and wire rope operator manuals for inspection charts.

STORAGE:

For optimal performance and longevity, store the **PCX SYSTEM** in a suitable environment.

• Select a clean, dry, and non-corrosive environment for storing the crane. Avoid damp locations, areas with high levels of dust or debris, or spaces where the crane might be exposed to chemicals. These conditions can accelerate corrosion and damage critical components.

• If storing the crane outdoors, it requires protection from the elements. Use a weatherproof crane cover designed to shield the crane from rain, snow, sun exposure, and wind. Leaving the crane exposed can lead to rust formation, deterioration of painted surfaces, and seizing of moving parts.

NOTE: There is not a weatherproof cover available for the PCX CLAMP.

• Pay particular attention to the moving parts of the crane, such as the boom, winch handle, and hook. Consider covering these areas with a suitable cloth or utilizing manufacturer-recommended storage accessories to minimize dust accumulation and potential damage during storage.

Following these storage recommendations will help ensure the **PCX SYSTEM** remains in optimal condition and functions reliably when needed.

REPAIRS:

All repairs must have factory authorization. Contact OZ Lifting Products, LLC® to prevent voiding of the one-year warranty and potential damage. Perform recommended inspections to identify which parts should be replaced. Only use OZ Lifting Products, LLC® replacement parts. To order replacement parts, contact your local OZ Lifting Products, LLC® dealer. Please have the serial number, part number, and a description available when calling.

TROUBLESHOOTING CHART

TROUBLESHOOTING CHART		
Problem	**Possible Cause**	**Correction**
Cup point set screws do not hold clamp in place on parapet wall	Cup point set screws worn	Replace cup point set screws
	Improper torque at main lead screw	Grease main lead screw
Main lead screw does not turn freely	Worn or damaged bronze nut	Replace bronze nut
	Insufficient grease on end or threads of lead screw	Grease main lead screw
Ball detent pins do not fit through holes	Bent or damaged pin	Replace pin assembly
Winch brake distance too long	Discs are worn, damaged, or over lubricated	Replace
	Disc brake ratchet pawl damaged or worn.	Replace
	Minimum load requirement not met.	Add weight
Excess wear on gears or bearings	Overloaded	Reduce load
	Improper lubrication	Re-lubricate
High pitched squeak	Improper lubrication	Re-lubricate
Winch grinding noise	Poorly spooled cable, cable diving into drum	Re-spool cable evenly under tension
	Dirty brakes or gears	Clean
	Broken gears or bearings	Replace winch
Rattling noise	Loose bolts, screws, fasteners	Tighten
Boom bounces	Overloaded	Reduce load and inspect crane for damage
	PCX Clamp not fully-seated on parapet wall	Reinstall using proper installation procedures.

LOAD RATING:

OZPCXS	
ALL POSITIONS	250 lb [113 kg]
**Based on 3/16 inch galvanized wire rope.*	

IMPORTANT **PCX SYSTEM by OZ Lifting Products, LLC® is designed for use with 3/16 inch galvanized wire rope.**

SPECIFICATIONS:

OZPCXS-50, OZPCXS-80, OZPCXS-120

OZPCX250DAV
Net weight (excluding winch): 54 lb [24 kg]
Boom weight (excluding winch): 27 lb [12 kg]
Mast weight: 27 lb [12 kg]

OZPCX
Net weight: 68 lb [30kg]
Clamp outer weight: 30 lb [13 kg]
Clamp inner weight: 38 lb [17 kg]

OZ1500BW winch net weight (excluding wire rope): 20 lb [9 kg]

OZHB10 headache ball net weight: 10 lb [5 kg]

OZ100022 locking collar net weight: 4 lb [2 kg]

PCX System net weight (excluding wire rope): 146 lb [66 kg]

Figure 5.1

NOTE: All measurements are listed in inches [millimeters]. Dimensions are for reference only and subject to change without notice.

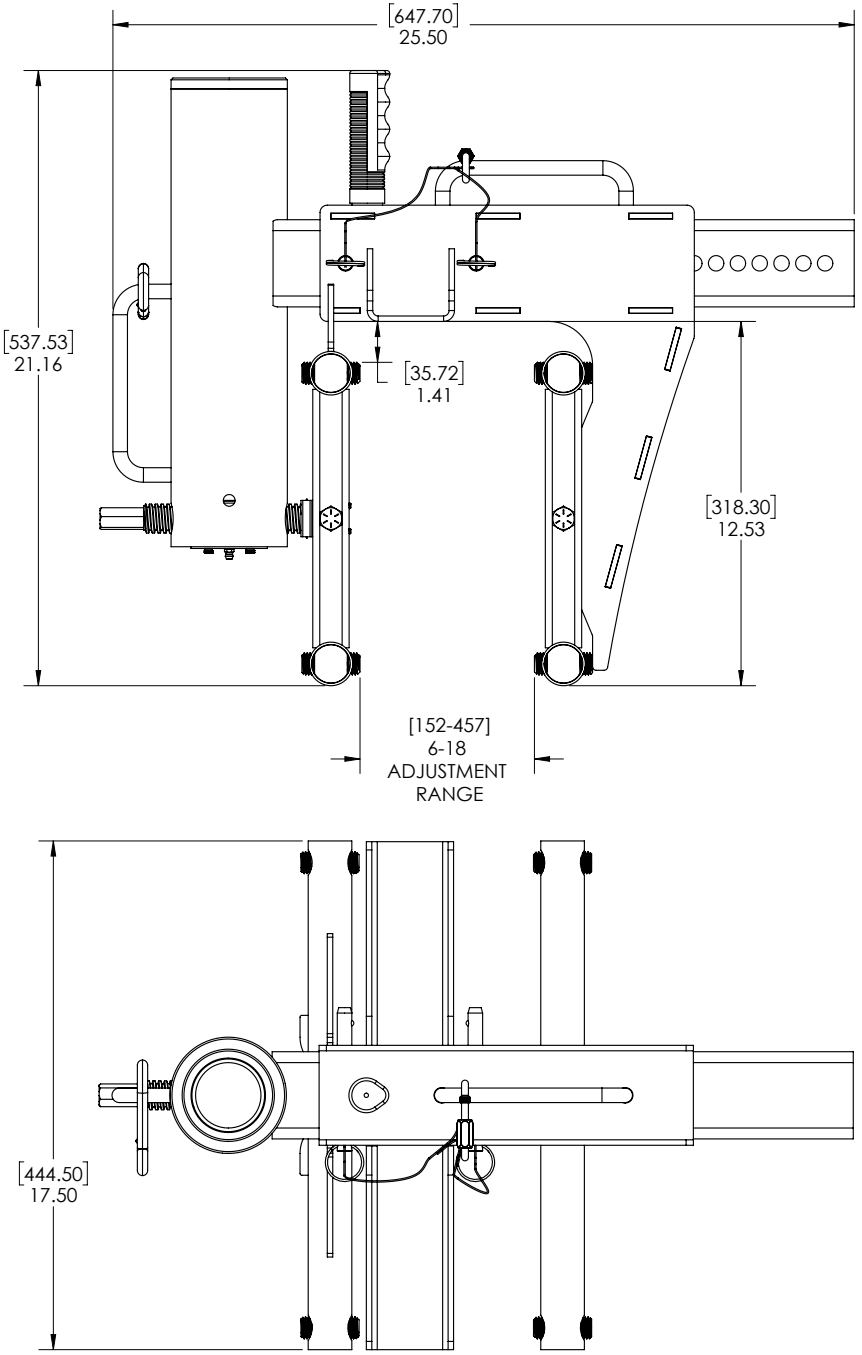
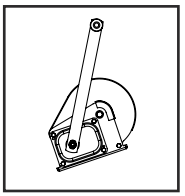


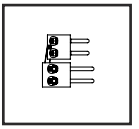
Figure 5.2

NOTE: All measurements are listed in inches [millimeters]. Dimensions are for reference only and subject to change without notice.

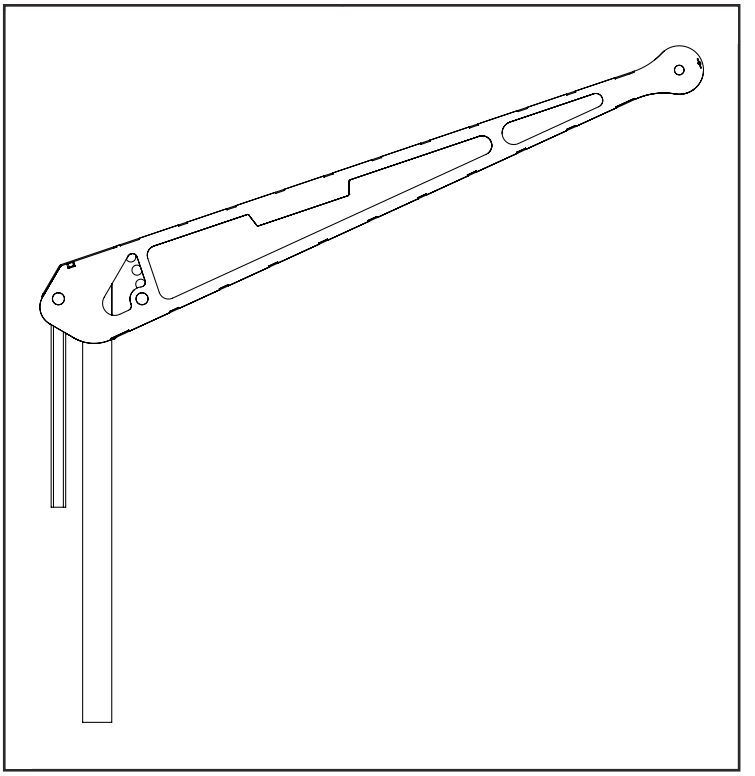
PARTS BREAKDOWN:



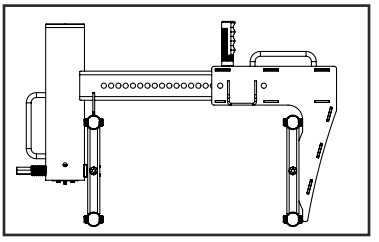
OZ1500BW
See page 37



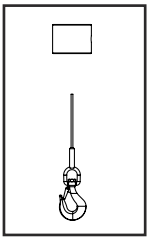
OZ100022
See page 37



OZPCX250DAV
See page 38

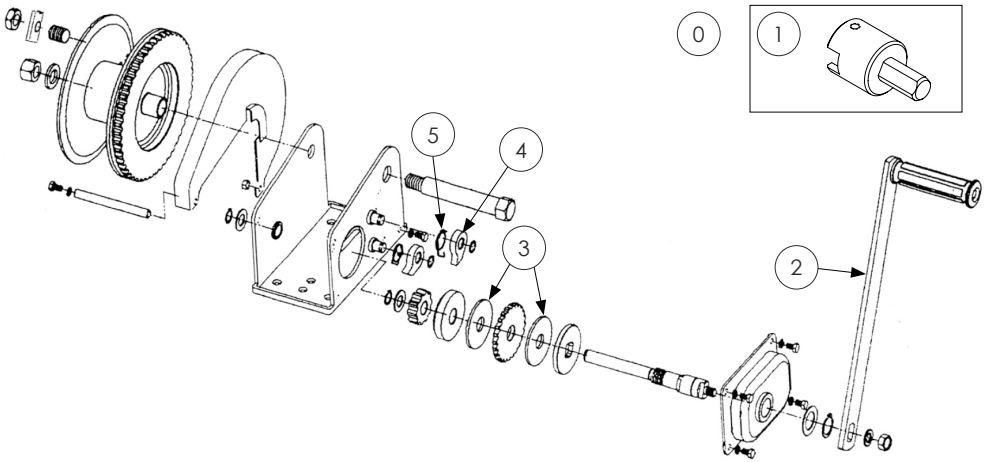


OZPCX
See page 39



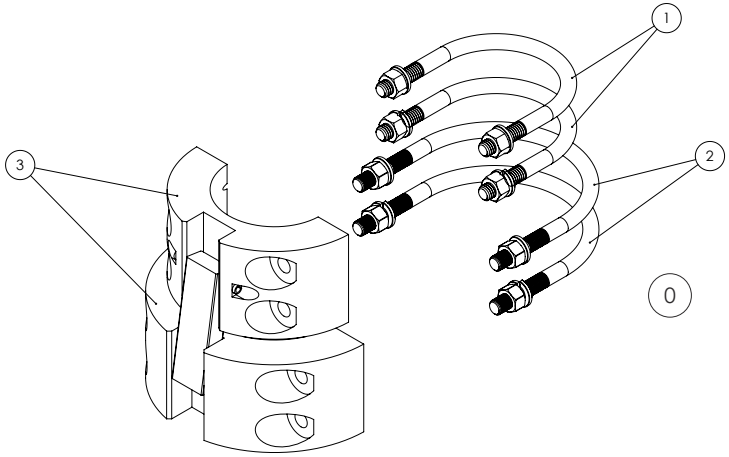
OZHB10 & OZGAL.19-XXB
See page 40

OZ1500BW

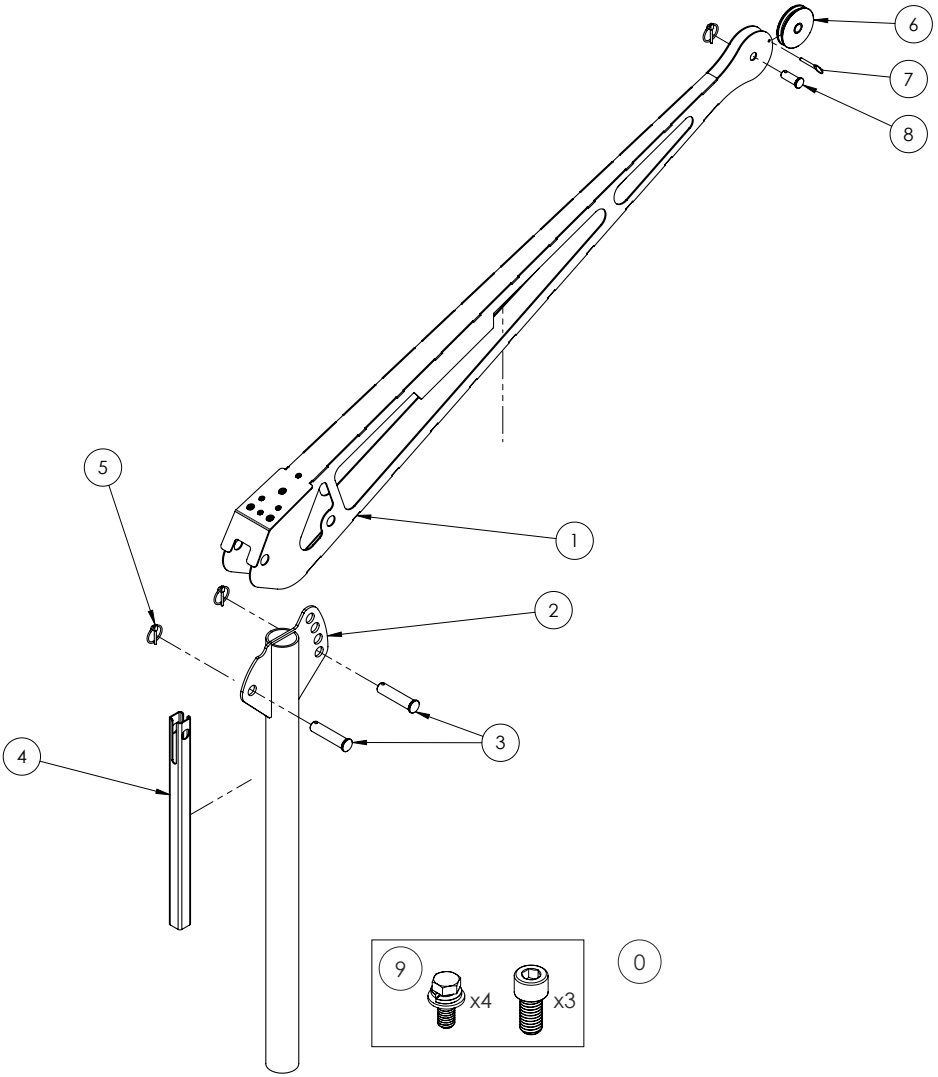


Item No.	Part No.	Description	Quantity	Replacement Part
0	401-0090	OZ1500BW, Label Assembly	1	YES
1	OZ152BWDD	Winch Drill Drive Adapter	1	YES
2	BW1500-28	Winch Handle	1	YES
3	BW1500-11	Friction Disc	2	YES
4	BW1500-7	Ratchet Pawl	2	YES
5	BW1500-6	Snap Ring (Pawl Spring)	2	YES

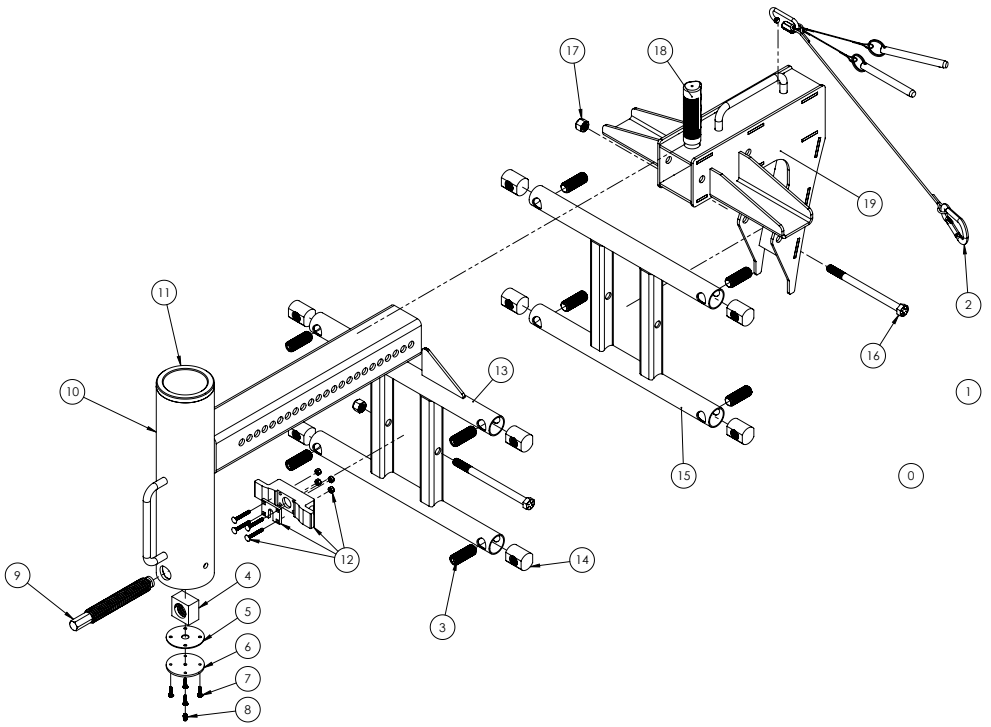
OZ100022



Item No.	Part No.	Description	Quantity	Replacement Part
0	392-4960	OZ100022, Label Assembly	1	YES
1	150-03816-300	Upper U-Bolt, 3.00” ID, Hardware Incl.	2	YES
2	150-03824-400	Lower U-Bolt, 4.00” ID, Hardware Incl.	2	YES
3	392-0002	Locking Brackets	1	NO

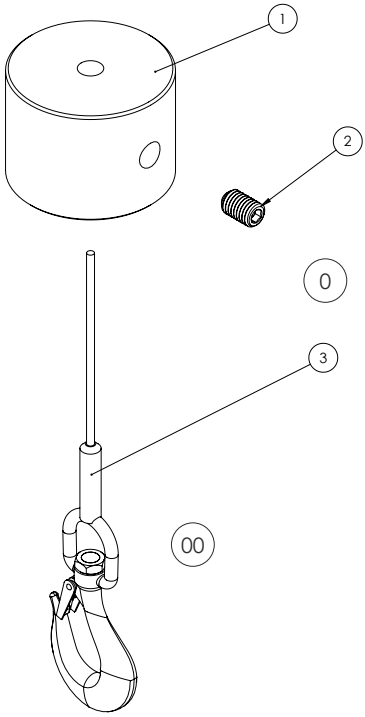


Item No.	Part No.	Description	Quantity	Replacement Part
0	208-0090	PCX250, Label Assembly	1	YES
1	206-0041	PCX250, Boom Weldment	1	NO
2	206-0040	PCX250, Mast Weldment	1	NO
3	360-10000-375	Pin, Clevis, Zinc, 1.00x3.75	2	YES
4	207-0100	PCX250, Handle	1	YES
5	301-01900-175	Pin, Lynch, Yllw Znc, 0.19x1.75	3	YES
6	290-0000	Sheave Assembly, 4.00” Dia	1	YES
7	310-02500-150	Pin, Ball Detent, Zinc, 0.25x1.50	1	YES
8	360-07500-150	Pin, Clevis, Zinc, 0.75x1.50	1	YES
9	292-0000	Winch Bolt Kit - OZTPDSKIT1	1	YES



Item No.	Part No.	Description	Quantity	Replacement Part
0	312-0090	PCX Clamp, Label Assembly	1	YES REBUILD KIT OZPCX-RBK
1	393-0400	Lubricant	1	
2	312-0010	PCX, Tethered Pins, Assembly	1	
3	164-07510-200	Cup Point Set Screw, BO, 0.75-10x2.00	8	
4	263-10005-100	ACME Nut, 1.00-05	1	
5	312-0800	PCX, Grease Zerk Gasket	1	
6	312-0205	PCX, Zerk Retainer Plate	1	NO
7	M110-04070-015	Bolt, SHCS, Zinc, M04-0.70x015	4	NO
8	200-0400	TP, Grease Fitting, Straight, 1/4”-28	1	NO
9	312-0301	PCX, 1.00-5 ACME RH Shaft	1	NO
10	312-0040	PCX, Main Weldment	1	NO
11	390-0391	Base Bushing, Series 2&3	1	YES
12	312-0303	Load Pin Adapter Assembly	1	NO
13	312-0004	PCX, Mast Clamp Tube Weldment	1	NO
14	312-0302	PCX, Set Screw Nut	8	YES
15	312-0005	PCX, Back Clamp Tube Weldment	1	NO
16	101-05013-700	Bolt, Hex, Yllw Znc, 0.50-13x7.00	2	NO
17	211-05013-000	Nut, Nylon, Yllw Znc, 0.50-13	2	NO
18	312-0404	PCX, Hand Grip	1	NO
19	312-0041	PCX, Fixed Clamp Weldment	1	NO

OZHB10 & OZGAL.19-XXB



Item No.	Part No.	Description	Quantity	Replacement Part
0	095-0981	OZHB10, Label Assembly	1	YES
00	779-0960	OZGAL.19-XXB, Label Assembly	1	YES
1	169-06311-100	Set Screw, Nylon, 0.63-11x1.00	1	YES
2	OZHB10	Wire Rope Headache Ball, 10lbs	1	NO
3	OZGAL.19-50B	3/16" Galvanized Cable Assemby, 50' Lift	1	YES
	OZGAL.19-80B	3/16" Galvanized Cable Assemby, 80' Lift	1	YES
	OZGAL.19-120B	3/16" Galvanized Cable Assemby, 120' Lift	1	YES

OZ LIFTING PRODUCTS ONE YEAR WARRANTY:

OZ Lifting Products, LLC® guarantees this product to be free of defects in materials and workmanship for one year from the date of shipment.

This Warranty Does NOT Cover:

This warranty does not apply to products that show signs of misuse, overloading, alteration, improper maintenance or negligence. The normal wear and tear of moving parts is excluded from the warranty. Moving parts are defined as brake discs, wire rope and other wear components that are subject to use conditions. This warranty does not cover any costs related to removal of this product, lost time, or any other incidental or consequential damages/costs resulting from the claimed defects.

Warranty Disclaimers/Limitations:

If this product fails during the first year of operating due to defective materials or workmanship, it will be repaired or replaced at the discretion of OZ Lifting Products, LLC®.

Any product subject to a warranty claim must be returned, prepaid, to an authorized OZ Lifting Products, LLC® warranty depot along with proof of purchase. Upon repair, the product will be returned to the customer free of charge. If no defect is found, the customer will be responsible for return shipping costs. The product's warranty will be effective for the remainder of the original warranty period (one years from shipment date).

All OZ Lifting Products, LLC® manual and electric winches are subject to a one year limited warranty.

It is the operator's responsibility to ensure that the product is used in accordance with all applicable local codes, regulations, and safety standards. OZ Lifting Products, LLC® assumes no liability for any damages or injuries resulting from the improper use of the product.

OZ Lifting Products, LLC® will not be held liable for the following arising from the use of this product: injuries to persons or property, death, incidental, consequential, or contingent damages, whether negligent or deliberate. It is the sole responsibility of the owner to install and operate the product properly and safely.

This is OZ Lifting Products, LLC®'s only written warranty. This warranty is in lieu of all other warranties implied by law such as merchantability and fitness. The sale of products from OZ Lifting Products, LLC® under any other warranty or guarantee, expressed or implied, is not authorized.

NOTE: OZ Lifting Products, LLC® has the right to alter the design of or discontinue the production of any product without prior notice.

For more information please contact:

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Tech Support (507) 457-3346
sales@ozliftingproducts.com • www.ozliftingproducts.com

MAINTENANCE RECORD

MODEL NO. _____ **SERIAL NO.** _____

DATE	SERVICE PERFORMED

MAINTENANCE RECORD

MODEL NO. _____ **SERIAL NO.** _____

DATE	SERVICE PERFORMED

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