



OPERATIONS MANUAL

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1/2-TON & 1-TON

# DAVIT CRANES

# IMPORTANT!

PRIOR TO INSTALLING, USING OR PERFORMING MAINTENANCE ON THIS EQUIPMENT, PLEASE READ THIS MANUAL THOROUGHLY AND CAREFULLY. KEEP THIS MANUAL AND ALL OTHER INSTRUCTIONS ACCESSIBLE AT ALL TIMES.

Although this manual will help you become familiar with the required safety and operating procedures, it is by no means a substitute for proper training and safe use of this equipment.

Because owners and operators are solely responsible for determining whether a particular usage is acceptable, only individuals trained in the proper use of this product should operate this equipment.

The typical operational environment of this equipment includes high forces, and the potential hazards associated with these forces should not be underestimated. Improper installation or misuse of this equipment may result in injury to persons or cause equipment failure or other damage.

**THIS EQUIPMENT IS NOT RATED TO LIFT, LOWER, OR MOVE PEOPLE —  
OR LIFT, LOWER, OR MOVE LOADS OVER TOP OF PEOPLE.**




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**THANK YOU FOR  
CHOOSING PATTERSON.**





We are committed to:

# SAFETY PRECISION IN PRODUCTION COLLABORATIVE INNOVATION PRACTICES

Let us know if you need help  
optimizing a build-out or increasing  
operational productivity.

We are ready to put our team's  
expertise and smart, hard-working  
equipment to use for you.



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# THE PATTERSON DIFFERENCE

AT PATTERSON MANUFACTURING, WE MAKE PRODUCTS THAT MAKE A DIFFERENCE FOR MARKET LEADERS AND FRONT LINE OPERATORS IN THE MARINE, CONSTRUCTION, AND MINING INDUSTRIES.

For over 160 years, we have been designing and manufacturing equipment for heavy-duty towing and lifting operations, building a genuine tradition of safety-focused innovation. Our reliable, thoroughly-tested products, and customization capabilities have helped to improve customers' bottom lines by reducing maintenance, unplanned downtime, workers' injury claims, and the frequency of machinery replacements. Our claim of "safer, easier, and faster," is proven daily by our customer satisfaction ratings, SRI ISO 9001:2015 certification, and our product performance records, like that of the revolutionary YoYo Winch.

**ISO 9001:2015  
Certification Earned:**



**Proudly Affiliated With:**



**RiverWorks  
Discovery**



# THE PATTERSON WARRANTY AND RETURN POLICY

## Limited Warranty

Subject to its standard Terms and Conditions, W.W. Patterson Company ("Seller") warrants that its winches, under normal use and service, will be free from defects in materials and/or workmanship for a period of 180 days from the date the winch is shipped to the end-user and warrants that its jacks, turnbuckles, tensors and any other product manufactured by or on behalf of Seller, under normal use and service, will be free from defects in materials and/or workmanship for a period of 90 days from the date the Product is shipped to the end-user. As used herein, "Products" shall collectively mean the winches, jacks, turnbuckles, tensors and other products manufactured by or on behalf of Seller.

This warranty is limited to the repair, or at Seller's sole option, the replacement of any Product(s) or component(s) found to be defective. This limited warranty (a) does not cover damage caused by improper use, storage, handling or normal wear and tear, including but not limited to any effects of weathering, misuse, alteration or neglect, (b) does not apply to defects arising from the buyer's faulty maintenance or unauthorized modification or alteration of the Product, (c) does not cover damage from handling in shipment and (d) does not cover damage from accident, disaster or event of force majeure. [Any equipment or components of the Products not manufactured by or on behalf of Seller are sold only under such warranty as the manufacturer thereof provides to Seller and which Seller is able to enforce, but such items are not warranted by Seller in any way.]

To make claims under this limited warranty, the Product(s) must, at Seller's sole option, be (1) returned for examination, freight prepaid, to W.W. Patterson Company, 870 Riversea Road, Pittsburgh, PA 15233, or (2) inspected by an authorized agent, employee or representative of Seller. This limited warranty is effective, provided, the buyer notifies Seller of the alleged defect in writing immediately after such defect becomes known to the buyer, and the Product has not been modified, altered or changed by any person or entity (other than an authorized agent, employee or representative of Seller) without Seller's prior written approval. Notwithstanding the foregoing, Seller reserves the right to determine, in its sole discretion, if the Product is defective.

Authorization, shipping instructions and other conditions related to the return of any Product, including but not limited to a Return Material Authorization ("RMA") number, must be obtained from Seller before returning any Products to Seller, and credit will not be allowed for Products returned without meeting such conditions of Seller. RMA numbers can be obtained from Seller by contacting either [rma@pattersonmfg.com](mailto:rma@pattersonmfg.com) or calling 1-800-322-2018. When requesting an RMA number, provide the order number, a description of the Product(s) to be returned and the reason for return. SELLER WILL ONLY ACCEPT PRODUCTS FOR RETURN THAT HAVE AN RMA NUMBER. To avoid delays in processing a return, the RMA number must be clearly printed on the return label. All Products shall be returned to Seller at the following address: RMA Department, Patterson, 845 Pennsylvania Avenue, Pittsburgh, PA 15233. All Products returned to Seller must be shipped freight prepaid and received by Seller within thirty (30) days (for Products returned from within the United States) or forty-five (45) days (for Products returned internationally) of the RMA number issuance date. Products should be returned via a trackable shipping method as Seller is not responsible for any Products lost in shipment during the return process.

Upon Seller's receipt of Products returned in accordance with Seller's return instructions, Seller will diligently process the return. Products that are for immediate replacement will be sent and invoiced to the buyer at the return address provided by the buyer. Upon processing a return of a Product, Seller will either bill or credit the buyer's invoice dependent on the outcome of the return. Seller reserves the right to invoice the buyer if any of the following occur during the return process: (1) the Product is not returned within thirty (30) days (for Products returned from within the United States) or forty-five (45) days (for Products returned internationally) of the RMA number issuance date; (2) the Product is damaged due to the negligence and/or improper use by the buyer or any third party; or (3) the Product is returned outside the limited warranty period. Seller further reserves the right to charge a restocking fee of at least 25% of the purchase price for all returned Products.

EXCEPT FOR WARRANTY OF TITLE AND THE WARRANTIES SET FORTH HEREIN, AND AS FURTHER DESCRIBED IN SELLER'S TERMS AND CONDITIONS WHICH ARE HEREBY INCORPORATED BY REFERENCE, SELLER MAKES NO OTHER REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED, WRITTEN OR ORAL, WITH RESPECT TO THE PERFORMANCE OF ANY SERVICE, OR THE SHIPMENT, DELIVERY, PERFORMANCE OR CONDITION OF ANY PRODUCTS OR COMPONENT THEREOF, WHETHER OR NOT MANUFACTURED, DESIGNED OR DEVELOPED, IN WHOLE OR IN PART, BY SELLER. SELLER SPECIFICALLY DISCLAIMS, AND BUYER, ON BEHALF OF ITSELF AND ITS DIRECTORS, OFFICERS, EMPLOYEES, AGENTS, REPRESENTATIVES, SUCCESSORS AND ASSIGNS AND ALL OTHER PURCHASERS OR USERS OF THE PRODUCTS, HEREBY WAIVES, ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE AND ALL WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE, RELATING TO THIS CONTRACT, INVOICE, OR THE PRODUCTS PURCHASED PURSUANT HERETO.

NOTWITHSTANDING ANY PROVISION CONTAINED HEREIN, SELLER SHALL NOT BE LIABLE IN CONTRACT, IN TORT (INCLUDING BUT NOT LIMITED TO NEGLIGENCE OR STRICT LIABILITY), INDEMNIFICATION OR OTHERWISE FOR DAMAGE TO OR LOSS OR USE OF PROPERTY OR EQUIPMENT, INJURY TO PERSONS (INCLUDING DEATH) CAUSED BY, WITHOUT LIMITATION, MISUSE, UNSAFE OPERATION, MODIFICATION, ALTERATION OR CHANGE OF THE PRODUCTS, LOSS OF TIME, LOSS OF PROFITS OR REVENUE, LOSS OF GOODWILL, INTERRUPTION OF BUSINESS, COST OF CAPITAL, COST OF TEMPORARY PROPERTY OR EQUIPMENT (INCLUDING ADDITIONAL EXPENSES INCURRED IN USING EXISTING FACILITIES), OR FOR ANY SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, REGARDLESS OF WHETHER SELLER (A) HAS BEEN INFORMED OF THE POSSIBILITY OF SUCH DAMAGES OR (B) IS NEGLIGENT. THIS WARRANTY GIVES BUYER SPECIFIC LEGAL RIGHTS, AND BUYER MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO BUYER.

## Returned Goods Policy

Upon written authorization by Patterson Company, standard Patterson products listed on current price sheets can be returned for credit, provided the merchandise is unused, undamaged and complete. Patterson Company reserves the right to solely determine if the merchandise is acceptable upon receipt. Returned goods shall be sent freight prepaid to Patterson Company and a 25% restocking charge applies to each returned product.

# SAFETY PRECAUTIONS

## **Always Observe These Basic Safety Precautions:**

- Only allow personnel trained in the required safety and operating procedures to use and maintain this equipment.
- Only lift loads less than or equal to the rated capacity of this equipment in its current position.
- Keep all body parts, loose clothing, and any foreign objects away from this equipment during operation.
- Always remain to the side of this equipment and slightly behind the crane, during operation of the crane.
- Equipment operators and bystanders should stay clear of any load and the wire.
- Make sure all people and foreign objects are clear of the load and its path.
- Never allow anyone to stand on a moving load.
- Do not stand or step over wire.
- **This equipment is not rated to lift, lower, or move people — or lift, lower, or move loads over top of people.**
- Do not operate this product unless you have a firm stance on a non-slippery surface.
- Do not apply tension to this equipment unless there are at least four (4) complete wraps of wire rope or the number of wraps recommended by the rope manufacturer, on the rope drum.
- Do not operate this equipment if jamming, overloading, or binding occurs.
- This equipment is only rated to handle a freely suspended load. Only pull in a straight vertical pull; do not “side pull” the load.
- Pay attention to the load at all times when operating this equipment.
- After use, properly secure this equipment and all loads.
- Never run the wire over a sharp edge.
- Perform regular inspections of this equipment for worn or damaged parts and cracked welds. If any worn or damaged parts or cracked welds are found, stop use immediately and remove the equipment from service, until all appropriate repairs have been completed.
- When operating the ratchet avoid fulling unthreading. Check the travel limits regularly. Do not force it against the stops.
- Make sure the ratchet is equally spaced out from both ends.
- Do not modify the equipment.
- Do not wrap the wire around load.
- Do not leave load suspended unattended.
- Do not leave load suspended for extended periods of time.
- Make sure crane is properly seated in the base.



# SAFETY INFORMATION

The following safety labels and definitions are based on ANSI Z535 safety standards.

Below is a list of signal words used to identify different levels of potential hazard. These signal words will be used throughout this manual when they apply.



**DANGER** indicates a hazardous situation that, if not avoided, will result in death or serious injury.



**WARNING** indicates a hazardous situation that, if not avoided, could result in death or serious injury.



**CAUTION** indicates a hazardous situation that, if not avoided, could result in minor or moderate injury.



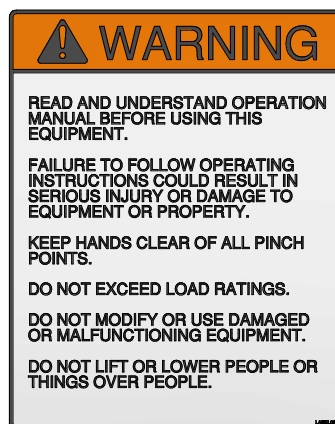
**NOTICE** is used to address practices not related to physical injury.

## THE FOLLOWING SAFETY LABELS CAN BE FOUND ON ALL DAVIT CRANE MODELS:

Part Number: LABEL018



Part Number: LABEL034



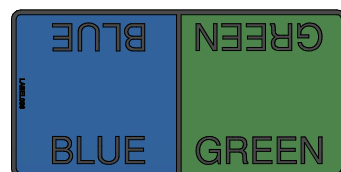
Part Number: LABEL033



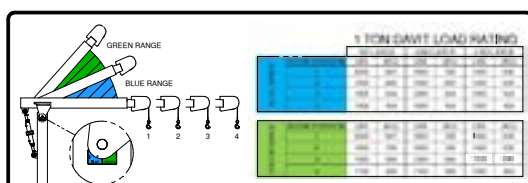
Part Number: LABEL019



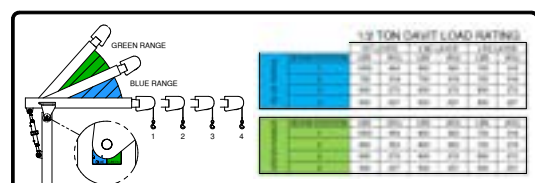
Part Number: LABEL036



Part Number: LABEL035



Part Number: LABEL037





# GENERAL INSTALLATION

- Observe all local and applicable safety codes.
- Only install crane in a safe working environment clear of obstructions.
- If using an electric winch make sure it is grounded and using a sufficiently sized breaker. Consult a licensed electrician as necessary.
- Do not use wire rope or any part of the crane as a ground (earth) for welding.
- Do not weld on or to any part of the crane.
- Never run the wire rope over a sharp edge. Refer to the mounting section for specific instructions.
- Always maintain the minimum number of complete wraps on the rope drum required.
- Verify that all components are lubricated before using this equipment. Refer to the LUBRICATION section for specific information.
- **THE MOUNTING STRUCTURE MUST BE STRONG ENOUGH TO WITHSTAND THE WEIGHT AND HOLDING CAPACITY OF THIS EQUIPMENT, AND THE FORCES LIKELY TO OCCUR DURING OPERATION.**
- Place this equipment in the mounting area, in line with the direction of lift.
- Check for required clearance for proper inspection, operation, and maintenance.

# CRANE INSTALLATION

- Crane base must be installed on a clean flat surface capable of taking the loads generated during operation.
- Ø5/8-11 Gr 5 bolts or equivalent studs are recommended.
- Once the base is installed make sure the plastic bearing is in place.
- Ensure that the storage detent is fully retracted prior to inserting the crane body into the crane base.
- Next drop the crane body into the base, making sure the base pin is properly seated in the crane body.
- Before installing the ratchet make sure it is equally threaded on both ends.
- With one person supporting the boom, have a second person install the ratchet. The ratchet requires a pin and a clevis pin be installed at both ends.
- The booms should be adjusted to no less than two degrees above horizontal.
- Install the winch onto the boom:
  - Remove the pin and clevis pin from the end of the boom.
  - Place the winch in position.
  - The mounting brackets should mate up with the boom.
  - Replace the pin and clevis pin into the winch mounting bracket and the end of the boom.

# WIRE ROPE INSTALLATION

- Always use gloves when handling wire rope.
- Never use rope that is twisted, frayed, or kinked.
- Always ensure the rope is correctly spooled and the first layer is tight.
- Always maintain the required minimum number of complete wraps on the rope drum.
- The rope must reel in from the bottom of the rope drum. Pressing either the IN or OUT push button, on the pendant, make sure the rope drum rotates in the appropriate direction.
- **FOUR (4) COMPLETE WRAPS OF WIRE ROPE OR THE NUMBER OF WRAPS RECOMMENDED BY THE ROPE MANUFACTURER, MUST BE ON THE DRUM AT ALL TIMES IN ORDER FOR THIS EQUIPMENT TO ATTAIN ITS FULL HOLDING CAPACITY.**
- Slowly start to reel the rope onto the drum. Maintain enough tension on the rope to be sure the first coil begins snugly against the side of the drum and each successive coil is snug against the previous coil. Check to make sure the rope is reeled in from the bottom of the drum.
- Continue to spool the rope until the required minimum number of complete rope coils are secured on the drum.

## NOTICE

### **THE FULL EXTENT OF WIRE ROPE WEAR CANNOT BE DETERMINED BY VISUAL INSPECTION.**

At any indication of wear, inspect the wire rope using the following steps:

- Replace loose or damaged end connections.
- Make sure the rope clip is securely mounted in the drum.
- Verify the rope diameter: Measure the diameter of the wire rope from crown-to-crown throughout the life of the rope. Recording of the actual diameter should only be done with the wire rope under equivalent loading and in the same operating section as accomplished during previous inspections. If the actual diameter of the wire rope has decreased more than 1/64" (0.4mm), a thorough examination of the wire rope should be conducted by an experienced inspector to determine the suitability of the wire rope to remain in service.
- For general purpose, we recommend 6x37 wire rope in Ø1/4" for the half ton unit or Ø5/16" for the one ton unit.

# INITIAL OPERATING CHECKS

- Prior to initial operation, verify the oil level in the gearbox and grease components as described in the LUBRICATION section.
- Ensure all mounting fasteners are in place and the rope is spooled correctly onto the drum.
- Operate this equipment, without load, in both directions. During operation inspect components for abnormal noises, indications of binding, and misalignment of parts.
- Operate this equipment, under light load, in both directions. During operation inspect components for abnormal noises, indications of binding, and misalignment of parts.
- Test the brake while the motor is stopped. The brake should hold an appropriate load without slipping.

## **Important Aspects Of Crane Operation**

- Follow all safety instructions when installing, operating, or maintaining this equipment.
- Only trained personnel, familiar with the safety procedures and operation of this product, should operate this equipment.
- Subject this equipment to a regular inspection and maintenance procedure.
- Be aware of this equipment's capacity and the load being applied at all times.

## **Inspection**

Before each shift, inspect this equipment as described under INSPECTION AND MAINTENANCE.

## **NOTICE**

**DISCONTINUE CRANE OPERATION IF IT IS SUSPECTED THAT THE HOLDING BRAKE IS NOT FUNCTIONING PROPERLY.**



# OPERATION OF THE CRANE

## General Notes

- Do not exceed the rated capacity of the crane. It is the responsibility of the end user to ensure the load rating is not exceeded.
- The motor may become hot after prolonged use. Allow the winch to cool to ambient between period of prolonged use.
- Do not use the crane to hold loads. Loads should be set down when not being moved.
- Avoid shock loading the system.
- Avoid allowing the load to spin. This can shorten the life span on the wire rope and can create unexpected loads.
- Do not change boom position when under load.

## Before Operation

- Ensure the load is free to be picked, ie not tied down, caught, etc.
- Inspect the area for obstacles or obstructions. Make sure there is a clear path for the load to travel.
- Inspect the crane, winch, and wire rope. Do not use if damaged.
- Inspect the load. Do not exceed the capacity of the crane.
- Attach the load:

*Use an appropriate lifting sling or lifting device to attach the load to the hook.*

*Make sure the load is centered: off center loads can cause over loading, equipment damage, and excessive spin.*

*Make sure the load is not going to tip, spin, or drag when lifted.*

## Operation

- Pick up the load a small distance at first. Make sure it is still balanced and free to move. Make sure it is not going to spin excessively.
- Pick up the load to desired height, smoothly. Excessive starting and stopping can cause shock loads to the system.
- Allow the load to come to complete stop and pause before reversing directions. Not pausing can cause the load to continue in the original direction.
- Allow the load to come to a complete stop before rotating the load. Do not rotate the load while raising/lowering the load.
- Lower the load to position.
- Remove all tension from the line.
- Disconnect the load

**REMINDER: THIS EQUIPMENT IS NOT RATED TO LIFT, LOWER, OR MOVE PEOPLE — OR LIFT, LOWER, OR MOVE LOADS OVER TOP OF PEOPLE.**

# INSPECTION AND MAINTENANCE

- Visually inspect the equipment before every use.
- Check the wire rope for signs of wear.
- Maintain the winch motor and gearbox per the manufacturer's instructions, if applicable.

## Wire Rope Inspection

- Wire rope should be inspected every day the crane is operated.
- The end user is responsible for care and inspection of wire ropes.
- Follow any local or institutionally appropriate inspections standards.
- ASME B30.4 (Date of Issuance: June 30, 2015) recommends removal of wire rope for any of the following reasons:

*In running ropes, six randomly distributed broken wires in one lay or three broken wires in one strand in one lay.*

*Kinking, crushing, birdcaging, or any other damage resulting in distortion of the rope structure.*

*Evidence of heat damage from any cause.*

*Reductions from nominal rope diameter of more than 5%.*

# CLEANING THE CRANE

- Clean the crane regularly and at least twice a year.
- Remove all dirt and debris.
- Lubricate all moving parts per the lubrication section.

# LUBRICATION

Lubricate the following parts quarterly or as need:

- The base pin.
- The boom pin.
- The ratchet.
- The ratchet pins (2).
- The pillow block bearings, if applicable.
- The hand winch, if applicable.

Lubricate the following per the manufacturer's instructions:

- The wire rope.
- The gear box, if applicable.

# STORAGE

- When not in service, the crane should be stored in a clean dry place.
- Disassemble the winch from the crane.
- The winch should be stored upright.
- Disassemble the crane from the base.
- The crane should be stored with pins and clevis pins in place to avoid loss.
- If appropriate, cover the base to avoid moisture accumulation.
- Always check lubrication after extended periods of storage.

# STOWAGE

- Adjust the crane boom between the 0 and 10 degrees position.
- Retract the crane boom to position 1 as shown on the Load Rating label.
- Reel the wire rope in.
- Secure the hook to the crane to avoid unintentional swinging of the hook and or headache ball during transportation.
- Engage the stowage detent in the desired position to lock the rotation of the crane.

# TROUBLE SHOOTING

Winch does not pick up load:

- Check if the load is oversized.
- Check if the load is free to be picked up.
- Check that the winch has power, if applicable.
- Check that the moving parts of the winch are free of debris and containments.

Boom does not rotate:

- Check that the stowage detent is not engaged.
- Check that boom is properly seated in base.
- Check base pin lubrication.
- Check plastic bushing is in place.

Boom rotates on its own:

- Base is not installed on level ground.
- Load is not centered.

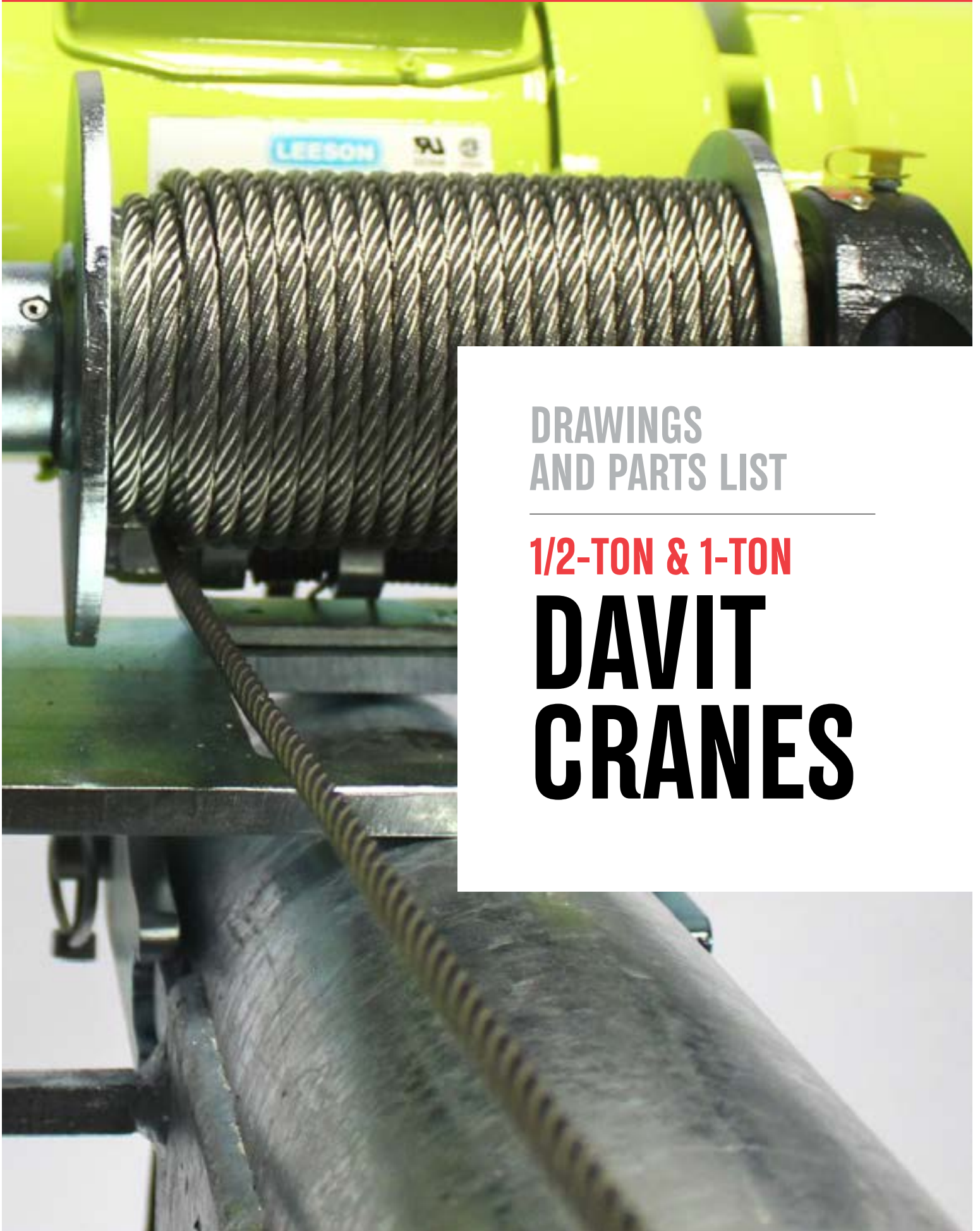
Unusual noise:

- Check for proper lubrication.
- Check if the load is oversized.
- Check the plastic bushing is in place.

Ratchet fully unthreads:

- Replace ratchet.



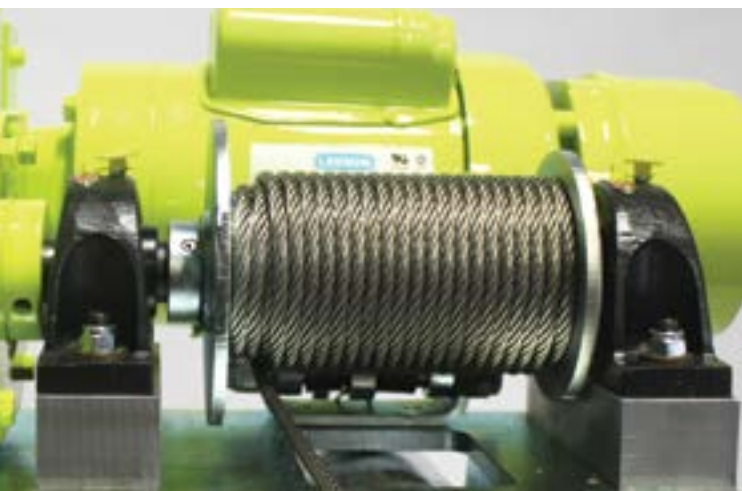


DRAWINGS  
AND PARTS LIST

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**1/2-TON & 1-TON**

# DAVIT CRANES

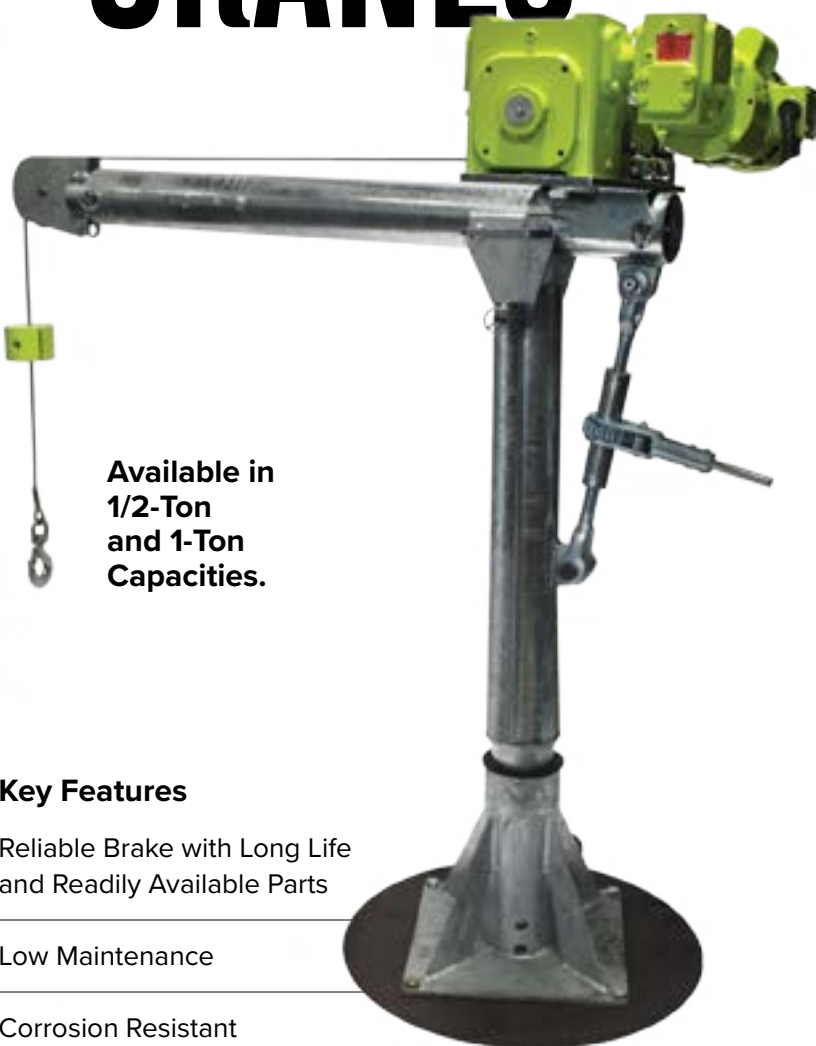


## GIVE YOUR OPERATIONS A LIFT WITH OUR **HALLMARK** **SAFETY AND DURABILITY.**

We make the equipment that makes a difference. Find out how our team can **improve your employees' safety and positively impact your bottom line.**



# DAVIT CRANES



Available in  
1/2-Ton  
and 1-Ton  
Capacities.

### Key Features

Reliable Brake with Long Life  
and Readily Available Parts

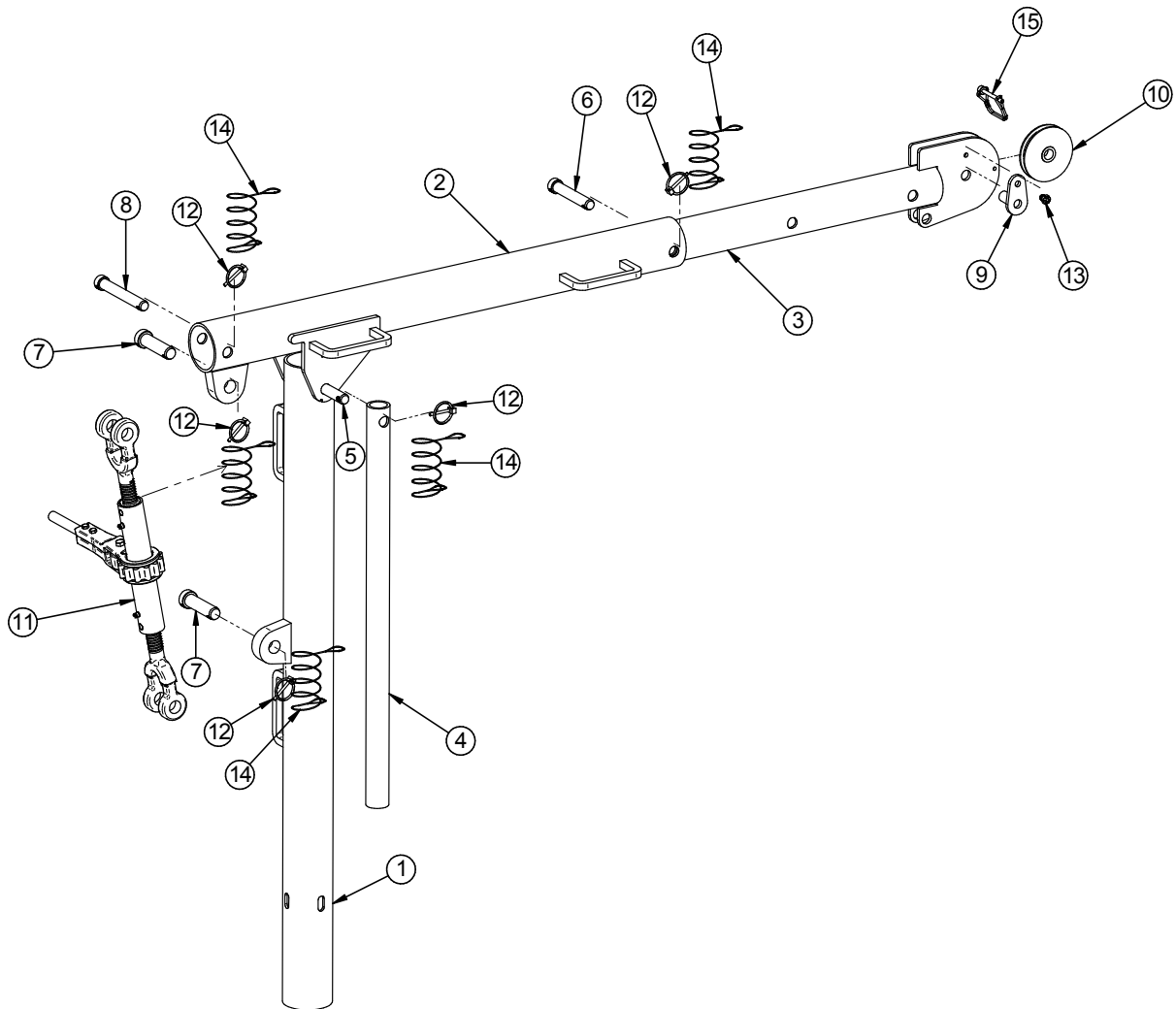
Low Maintenance

Corrosion Resistant

No Plastic Sheaves or Pulleys

Made in the USA

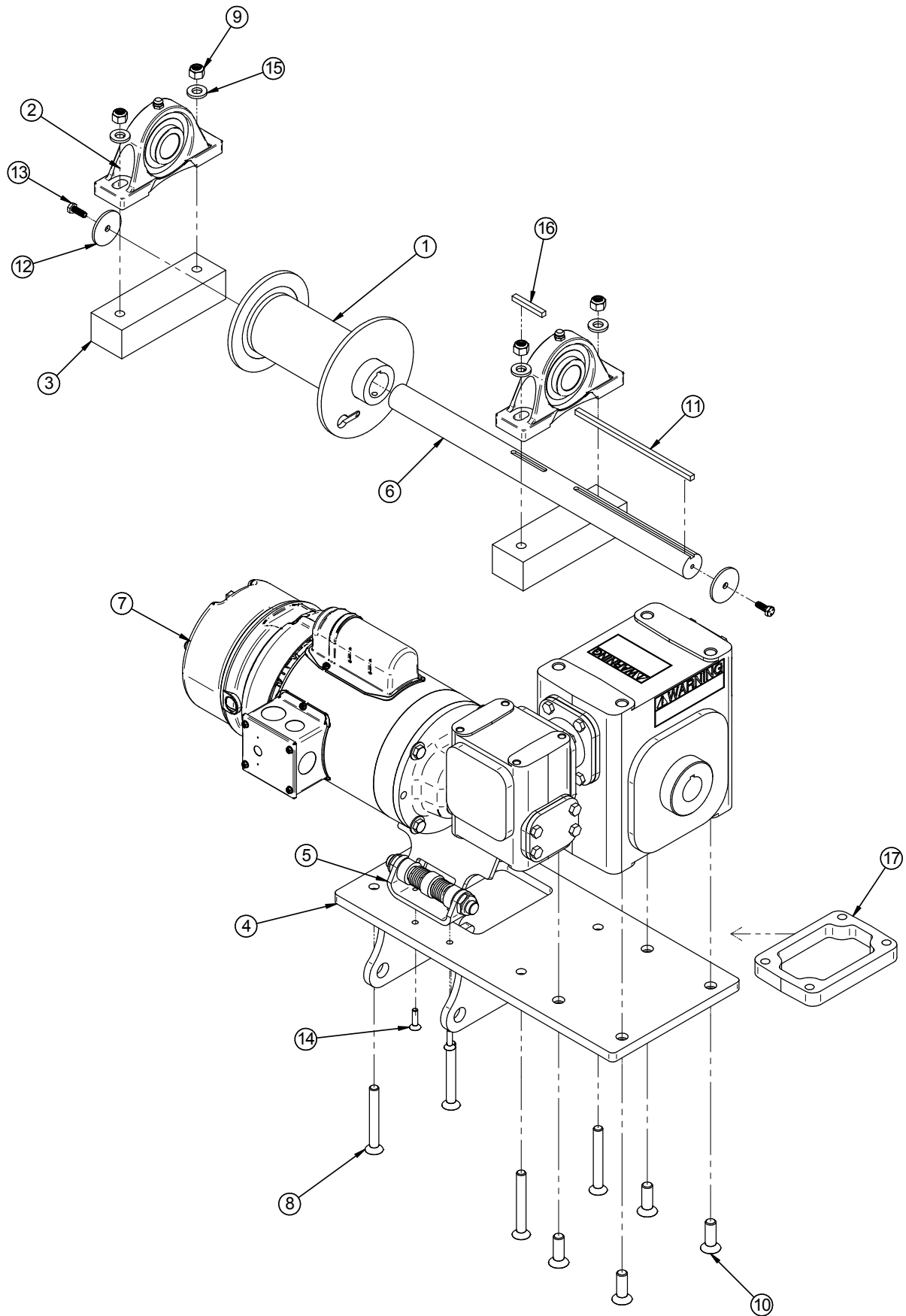
# PATTERSON DAVIT CRANE DIAGRAM



**Patterson Davit Crane Part List**

ITEM	COMPONENT	1/2-TON PART NUMBER	1-TON PART NUMBER
1	CRANE SUPPORT WELDMENT	P0001864	P0001832
2	BOOM OUTER TUBE WELDMENT	P0001865	P0001836
3	BOOM INNER TUBE WELDMENT	P0001866	P0001842
4	DAVIT HANDLE	P0001811	P0001811
5	CRANE MAIN PIN	P0001876	P0001813
6	CRANE BOOM PIN	P0001875	P0001814
7	PIN, CLEVIS	P0001843	P0001843
8	DAVIT MOTOR MOUNT PIN	P0001877	P0001850
9	DAVIT PULLEY PIN	P0002005	P0002001
10	DAVIT PULLEY	B330143	B330142
11	RATCHET	7004-A	7004-A
12	LOCKING PIN WITH RING	B330141	B330141
13	DAVIT PULLEY PIN BOLT	1678	1678
14	DAVIT LANYARD ASSY	P0002004	P0002004
15	WIRE ROPE KEEPER PIN	B330153	B330153

# PATTERSON DAVIT CRANE WINCH DIAGRAM



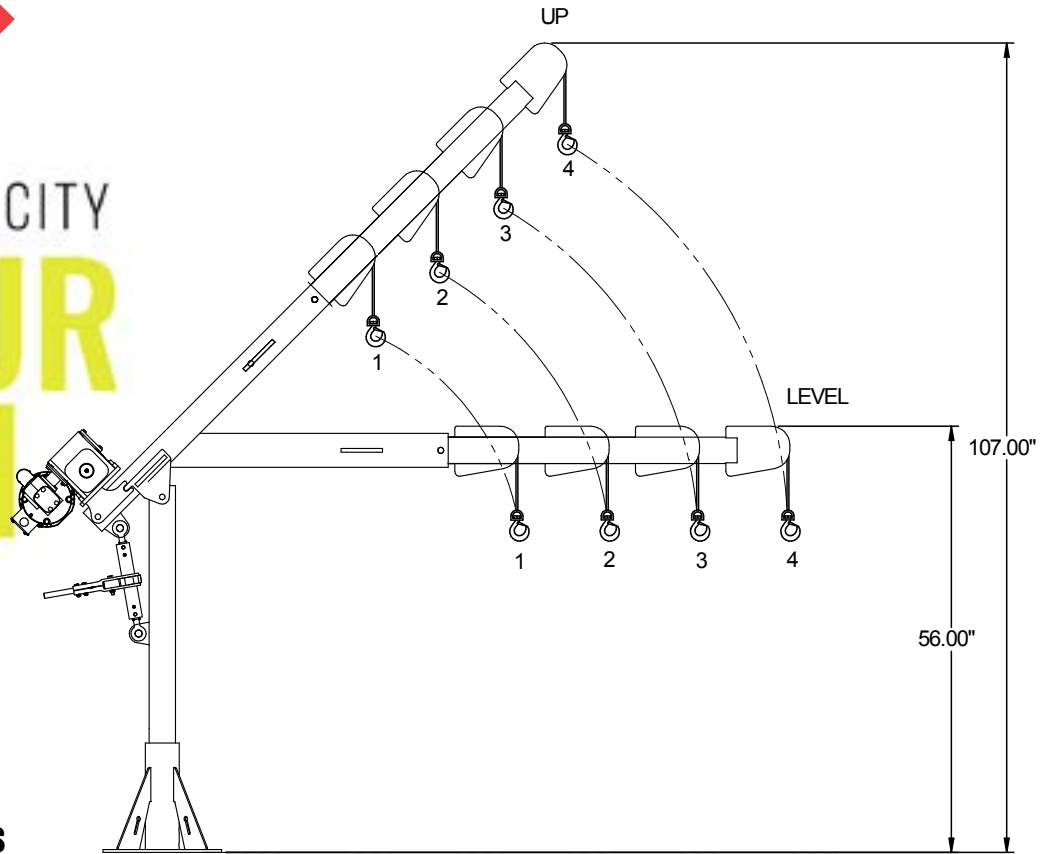


### Patterson Davit Crane Winch Part List

ITEM	COMPONENT	1/2-TON PART NUMBER	1-TON PART NUMBER
1	DRUM	P0001795	P0001795
2	PILLOW BLOCK	B330126	B330126
3	SPACER BLOCK	P0001825	P0001799
4	BASE PLATE ASSY	P0001827	P0001804
5	TENSIONER	P0001873	P0001873
6	SHAFT, COMPLETE	P0001826	P0001802
7	GEARBOX MOTOR ASSY	B131440	B131438
8	SCREW	B330146	B330127
9	NUT	B330130	B330130
10	SCREW	B330127	B330128
11	KEY	KEY070	KEY069
12	WASHER	P0001803	P0001803
13	BOLT	B330129	B330129
14	SCREW	B330138	B330138
15	WASHER	B330133	B330133
16	KEY	KEY072	KEY072
17	GEARBOX SPACER	P0001996	NA



SAFETY + SIMPLICITY  
**IN YOUR  
REACH**



## Davit Cranes Ratings and Specifications

### 1/2-TON MODEL using 1/4-inch wire rope

Boom Position	Load Rating 1st Wrap	Load Rating 2nd Wrap	Load Rating 3rd Wrap	Hook Reach	Hook Height
<b>LEVEL 1</b>	1,000 lbs	800 lbs	700 lbs	29"	40"
<b>LEVEL 2</b>	700 lbs	700 lbs	700 lbs	39"	40"
<b>LEVEL 3</b>	600 lbs	600 lbs	600 lbs	49"	40"
<b>LEVEL 4</b>	500 lbs	500 lbs	500 lbs	59"	40"
<b>UP 1</b>	1,000 lbs	800 lbs	700 lbs	16"	63"
<b>UP 2</b>	800 lbs	800 lbs	700 lbs	23"	70"
<b>UP 3</b>	600 lbs	600 lbs	600 lbs	30"	77"
<b>UP 4</b>	500 lbs	500 lbs	500 lbs	37"	84"

### 1-TON MODEL using 5/16-inch wire rope

Boom Position	Load Rating 1st Wrap	Load Rating 2nd Wrap	Load Rating 3rd Wrap	Hook Reach	Hook Height
<b>LEVEL 1</b>	2,000 lbs	1,600 lbs	1,400 lbs	39"	42"
<b>LEVEL 2</b>	1,500 lbs	1,500 lbs	1,400 lbs	51"	42"
<b>LEVEL 3</b>	1,200 lbs	1,200 lbs	1,200 lbs	63"	42"
<b>LEVEL 4</b>	1,000 lbs	1,000 lbs	1,000 lbs	75"	42"
<b>UP 1</b>	2,000 lbs	1,600 lbs	1,400 lbs	20"	64"
<b>UP 2</b>	1,600 lbs	1,600 lbs	1,400 lbs	29"	71"
<b>UP 3</b>	1,300 lbs	1,300 lbs	1,300 lbs	37"	78"
<b>UP 4</b>	1,100 lbs	1,100 lbs	1,000 lbs	46"	85"

## ABOUT PATTERSON INNOVATION

On a daily basis, the Patterson team vets the most effective products and customizations for particular customers' situations, while over longer periods of time our innovation team studies operations, industry standards, and changing regulations to proactively build better products for industrial market leaders.

Our results include products like the revolutionary YoYo Winch that saves 50% of time compared to ratchets, eliminates bird nesting, and removes dangerous long walk scenarios for workers; adaptive winch products that address electric motor regulations; and material upgrades to resist corrosion.

*The industries we serve include:*

**Marine**

**Construction**

**Mining**

**Waste Water Management**

**Manufacturing**

**Custom Fabrication**

Learn more: [PattersonMfg.com](http://PattersonMfg.com) | 800.322.2018

MANUAL  
WINCHES

POWERED  
WINCHES

DAVIT  
CRANES

CAPSTANS

FAIRLEADS  
+ CHOCKS

RATCHET  
TURNBUCKLES

# DAVIT CRANES

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