



## 2000-Lb. Telescoping Gantry Crane

Owner's Manual



**!** **WARNING:** Read carefully and understand all ASSEMBLY AND OPERATION INSTRUCTIONS before operating. Failure to follow the safety rules and other basic safety precautions may result in serious personal injury.

Item# 53318111

**READ & SAVE THESE INSTRUCTIONS**

Thank you very much for choosing a Bannon™ product!

For future reference, please complete the owner's record below:

Serial Number/Lot Date Code: \_\_\_\_\_

Purchase Date: \_\_\_\_\_

Save the receipt, warranty, and this manual. It is important that you read the entire manual to become familiar with this product before you begin using it.

This gantry crane is designed for certain applications only. Northern Tool and Equipment is not responsible for issues arising from modification or improper use of this product such as an application for which it was not designed. We strongly recommend that this product not be modified and/or used for any application other than that for which it was designed.

For technical questions, please call **1-800-222-5381**.

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## Intended Use

Bannon's 2000-Lb. Telescoping Gantry Crane allows one operator to hoist heavy items easily. It's designed for use with a trolley hoist (not included). This crane features an I-beam that adjusts from 99" to 148"H with 9 positive stops to provide a sturdy overhead lift point for lifting car engines, heavy machinery, and other equipment. The easy crank handle allows for raising and lowering without difficulty. It rolls smoothly on 5" ball bearing casters (2 locking).

## Packaging Contents

- Part A (2)
- Rod (1)
- I-Beam (1)
- Part B
- Other parts

## Technical Specifications

Property	Specification
Load Capacity (lb.)	2,000
I-Beam Length (ft.)	7 7/8
I-Beam to Ground (in.)	99 ½ to 148 H
I-Beam H x W (in.)	5 1/2 x 3 1/8
Crane L x W (in.)	94 x 58
Product Weight (lb.)	430
Material	Heavy-duty, All Steel Construction

## Important Safety Information

### **⚠WARNING**

- Read and understand all instructions. Failure to follow all instructions may result in serious injury or property damage.
- The warnings, cautions, and instructions in this manual cannot cover all possible conditions or situations that could occur. Exercise common sense and caution when using this tool. Always be aware of the environment and ensure that the tool is used in a safe and responsible manner.
- Do not allow persons to operate or assemble the product until they have read this manual and have developed a thorough understanding of how it works.
- Do not modify this product in any way. Unauthorized modification may impair the function and/or safety and could affect the life of the product. There are specific applications for which the product was designed.
- Use the right tool for the job. DO NOT attempt to force small equipment to do the work of larger industrial equipment. There are certain applications for which this equipment was designed. This product will be safer and do a better job at the capacity for which it was intended. DO NOT use

this equipment for a purpose for which it was not intended.

- Industrial or commercial applications must follow OSHA requirements.

## **⚠WARNING**

### **WORK AREA SAFETY**

- Inspect the work area before each use. Keep work area clean, dry, free of clutter, and well-lit. Cluttered, wet, or dark work areas can result in injury. Using the product in confined work areas may put you dangerously close to cutting tools and rotating parts.
- Do not use the product where there is a risk of causing a fire or an explosion; e.g., in the presence of flammable liquids, gases, or dust. The product can create sparks, which may ignite the flammable liquids, gases, or dust.
- Keep children and bystanders away from the work area while operating the tool. Do not allow children to handle the product.
- Be aware of all power lines, electrical circuits, water pipes, and other mechanical hazards in your work area. Some of these hazards may be hidden from your view and may cause personal injury and/or property damage if contacted.

## **⚠WARNING**

### **PERSONAL SAFETY**

- Stay alert, watch what you are doing, and use common sense when operating the tool. Do not use the tool while you are tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating the tool may result in serious personal injury.
- Dress properly. Do not wear loose clothing, dangling objects, or jewelry. Keep your hair, clothing and gloves away from moving parts. Loose clothes, jewelry, or long hair can be caught in moving parts. Air vents on the tool often cover moving parts and should be avoided.
- Wear the proper personal protective equipment when necessary. Use ANSI Z87. 1 compliant safety goggles (not safety glasses) with side shields, or when needed, a face shield. Use a dust mask in dusty work conditions. Also use non-skid safety shoes, hardhat, gloves, dust collection systems, and hearing protection when appropriate. This applies to all persons in the work area.
- Do not overreach. Keep proper footing and balance at all times.

## **⚠CAUTION**

### **CRANE USE AND CARE**

- Do not force the crane. Products are safer and do a better job when used in the manner for which they are designed. Plan your work, and use the correct product for the job.
- Check for damaged parts before each use. Carefully check that the product will operate properly and perform its intended function. Replace damaged or worn parts immediately. Never operate the product with a damaged part.

- Store the product when it is not in use. Store it in a dry, secure place out of the reach of children. Inspect the tool for good working condition prior to storage and before re-use.
- Use only accessories that are recommended by the manufacturer for use with your product. Accessories that may be suitable for one product may create a risk of injury when used with another tool. Never use an accessory that has a lower operating speed or operating pressure than the tool itself.

## Specific Operation Warnings

### ⚠WARNING

- To prevent serious injury or property damage, read and understand the owner's manual before use.
- Do not exceed the rated load capacity.
- Operate on a hard, level surface.
- Do not operate crane if the beam is not level.
- Be sure the trolley stoppers have been fixed to both ends of the beam .
- Ensure the load is centered before lifting.
- Do not use to lift people or animals.
- Keep persons and property clear from under the load.
- Do not leave loads suspended when the gantry crane is unattended.
- Do not allow the load to swing or roll against the support members.
- Inspect the crane for damaged parts and loose bolts before each use.
- Do not use the crane if there are damaged parts. Replace damaged parts before continuing use.
- Do not adjust height or disassemble crane while loaded.
- Secure trolley and hoist in the center of the beam when adjusting height.
- Do not push or pull crane with a forklift or other vehicle.
- Never push the load when trying to move the crane.
- When moving crane while loaded, keep the load close as close to the floor as possible and position the load in the center of the beam .
- Do not anchor the legs to the floor.
- Secure the trolley and hoist in the center of the beam when adjusting the height.

## Main Parts of Telescoping Crane

Reference	Subassembly
1	Post Insert & Post Sleeve
2	Base

Reference	Subassembly
3	I-Beam
4	Post Support
5	Gear Box
6	Locking Swivel Caster
7	Rod

## Assembly Instructions

### ⚠WARNING

- TO PREVENT SERIOUS INJURY AND DEATH: Wear ANSI Z87. 1 compliant safety goggles, hard hat, heavy-duty work gloves, and steel-toed work boots during assembly and operation.
- The correct bolts must be used during assembly. If any doubts arise regarding proper assembly, contact Northern Tool + Equipment before use.

### Attaching Posts to I-Beam

Hardware-8 each:



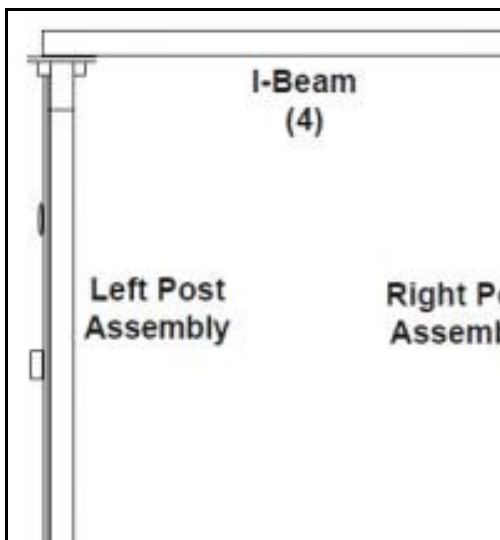
(39) Bolt M14 x 40

(36) Washer M14

(37) Nut M14

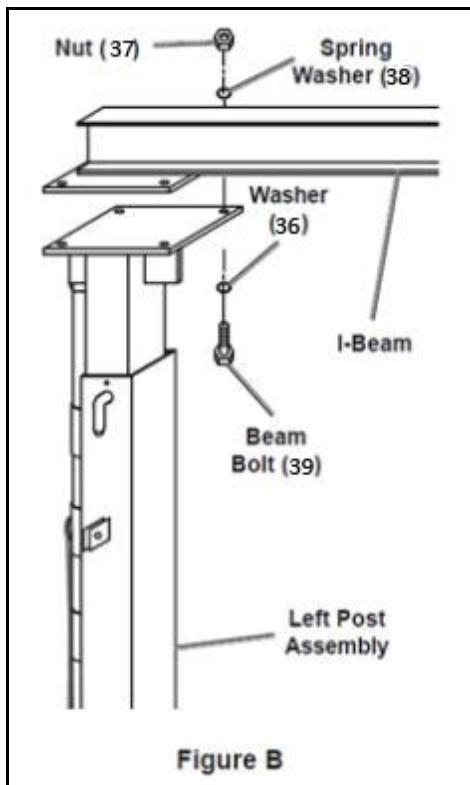
(38) Spring Washer M14

1. Lay the I-beam (04) on the ground. Lay the left and right post assemblies on the ground so pulleys and cables are facing out.



2. Attach the left post assembly to the I-beam, using four bolts(39), washers(36), nuts(37) and spring Washer(38).
3. Tighten the connections securely.

- Repeat for right post assembly.



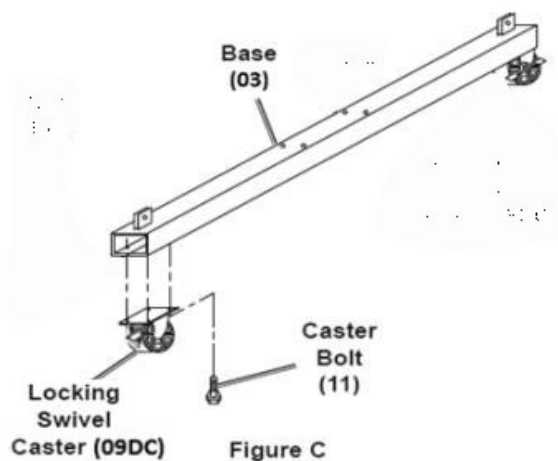
### Attaching Casters to Bases

Hardware- 16 each:

**Threaded  
Shaft Size**

(11)Caster Bolt M10 x 25

- Attach one locking swivel caster (09DC) to the other end of the base (03) using four set of caster bolts (11) .
- Tighten the connections securely.**
- Repeat for the other base.



## Attaching Base Assemblies to Post Assemblies

Hardware-8 each:

**Threaded  
Shaft Size**

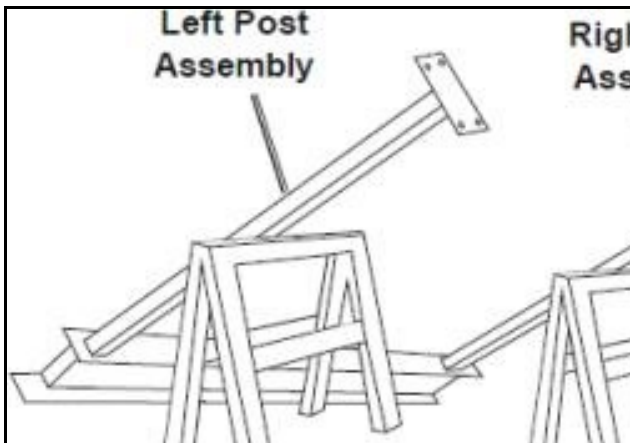


(17) Post Bolt M14 x 100 (36) Washer M14

(37) Nut M14

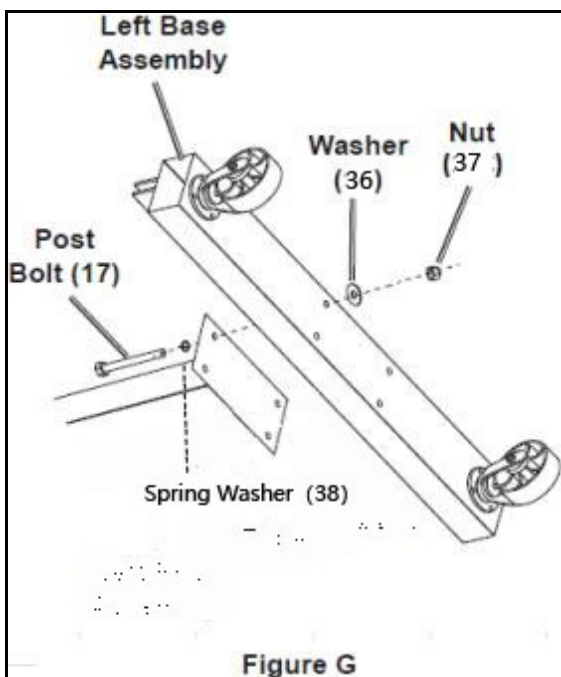
(38) Spring Washer M14

1. Using helpers, raise base plate ends of the post assemblies onto sawhorses or other suitable means of support.



2. Attach the left base assembly to the left post assembly by inserting the tube into the sleeve and using four sets of post bolts (17), washers (36), nuts (37) and spring washer (38).

3. Tighten connections securely.



4. Repeat for the right base assembly and the right post assembly.

## Attaching Post Supports

Hardware-8 each:

**Threaded  
Shaft Size**

(29) Bolt M16 x 40  
Washer M16



(19) Washer M16

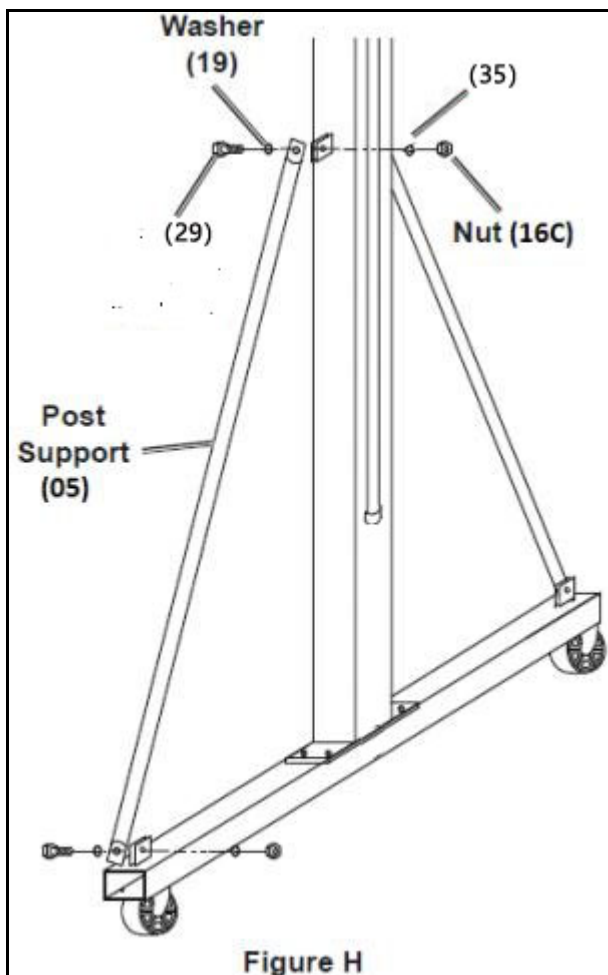


(16C) Nut M16



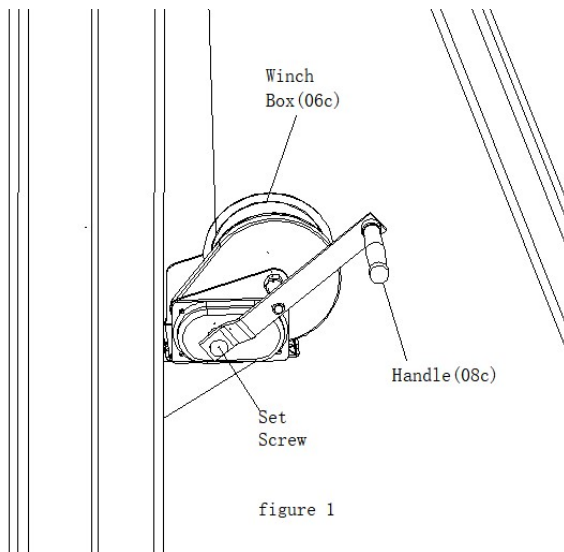
(35) Spring

1. Using helpers, lift the crane to an upright position.
2. Attach the post supports (05) to the left base and post the assemblies using post bolts (29), washers (19), and nuts (16C) and spring washer (35) .
3. Tighten the connections securely.
4. Repeat for the right base and post assemblies.



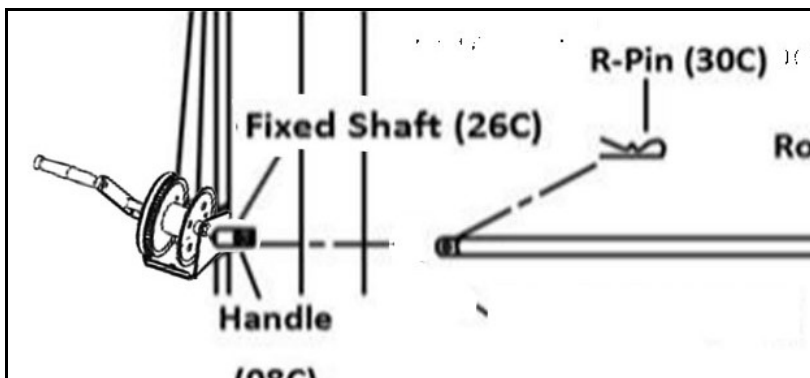
## Attaching Handles

1. Insert the handle (08C) INTO the left winch box (06C), and then tighten the screw securely.
2. Repeat for the right winch box.
3. Once the assembly is complete, confirm that the crane is solid and level, with all four casters on the floor and the I-beam perfectly level. As needed, loosen one set of connections at a time and make small adjustments with the help of an assistant so the crane is completely level. Tighten every connection fully before moving on to another
4. Place the crane on a solid, level surface, capable of supporting the weight of the crane and a load.



## Attaching the Rod

1. Connect the rod (15C) with the left fixed shaft (26C), using the R-pin (30C).
2. Repeat for the right fixed shaft and rod.



## Before Each Use

### **⚠WARNING**

- **TO PREVENT SERIOUS INJURY AND DEATH:**The use of cranes is subject to certain hazards that cannot be met by mechanical means, but only by the exercise of intelligence, care, common sense, and experience in anticipating the motions that will occur as a result of operating the controls.
- Wear ANSI Z87. 1 compliant safety goggles, hard hat, heavy-duty work gloves, and steel-toed work boots during operation.

## Adjusting I-Beam Height

### **⚠CAUTION**

- Use two people to adjust the I-beam height.
  1. Remove the R-pins (18) from height pins (07), then remove height pins.
  2. Turn the handles on both winch boxes at the same time:
    - a. Clockwise to raise the I-beam .
    - b. Counterclockwise to lower the I-beam .

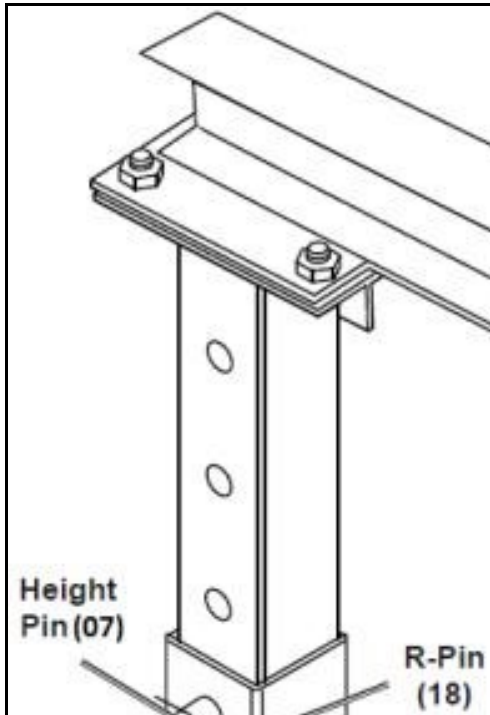
### **⚠CAUTION**

- To reduce the risk of tipping, use the crane at the lowest height possible for the application.

### **⚠WARNING**

- Do not adjust the legs to different heights.

3. Once the desired height has been reached, reinsert height pins and secure in place with R-pins.



### Before Operating Hoist

1. After desired height has been reached, secure with R-Pins, REMOVE THE ROD(15C) before operating Hoist.

15C

2. Familiarize yourself with all operating controls of the hoist and with the operation(s) to be performed. Instructions include, the warnings on the hoist, and the safety and operating instructions portion of this manual.

### **⚠WARNING**

- TO PREVENT SERIOUS INJURY FROM HOIST FAILURE: Do not use damaged equipment. If adjustments or repairs are necessary, or any defects are known, have the problem corrected before further use.

3. Do not operate a hoist with an out-of-order sign.
4. Only a qualified technician should perform maintenance to the hoist.
5. Designate a work area that is clean and well-lit. The work area must not allow access by children or pets to prevent distraction and injury.
6. There must not be objects, such as utility lines, nearby that will present a hazard while working.
7. Lock casters before lifting a load.

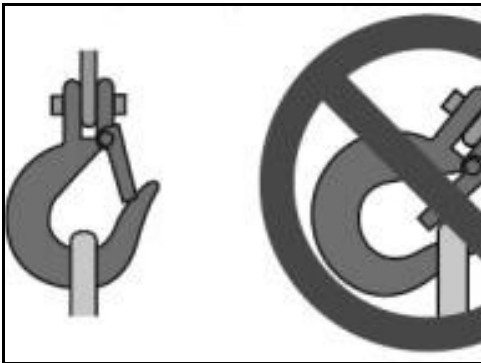
## Operating Instructions

### ⚠WARNING

- TO PREVENT SERIOUS INJURY AND DEATH: Use warning signs and barriers on the floor beneath the gantry crane where overhead maintenance work creates a hazard.
- Wear ANSI-approved safety goggles, hard hat, heavy-duty work gloves, and steel-toed work boots during operation.
- Always have a least 2 people operating crane at any time.
- Operate on a hard, level surface.
- Do not operate crane if the beam is not level.
- Do not use to lift people or animals.
- Keep persons and property clear from under the load.
- Do not allow the load to swing or roll against the support members.

### Applying the Load

1. Attach the load to the load hook securely by properly rated, suitable means, such as chains, shackles, hooks, lifting slings, etc. Load must be attached to prevent accidental disconnection.



2. Properly seat the sling or other device in the base (bowl or saddle) of the hook (Figure L). Do not allow the hook hitch to support any part of the load.
3. Do not apply the load to the point of the hook (Figure L).
4. Do not operate the hoist unless the hoist unit is centered over the load.
5. Do not pick up a load in excess of the rated load appearing on the hoist or load block, except during properly authorized tests. Do not use a hoist overload limiting device to measure the maximum load to be lifted.
6. Give specific attention to load balancing and hitching or slinging to prevent the load from slipping.

### Moving the Load

1. Do not engage in any activity which will divert the operator's attention while operating the hoist.
2. Respond to signals from a designated person only. However, always obey a stop signal, no matter who gives it.
3. Do not lift or lower a load with the hoist until the operator and all other personnel are clear of the load.

4. Make sure the load and hoist will clear all obstacles before moving or rotating the load.
5. Do not lift a load more than a few inches until it is well balanced in the sling or lifting device.
6. Each time a load is handled that is approaching the rated capacity. Check the hoist brake action by lifting the load just clear of supports and continuing only after verifying that the brake system is operating properly.

### **⚠WARNING**

- Do not use to lift people or animals.
- Keep persons and property clear from under the load.
- Do not allow the load to swing or roll against the support members.

7. Avoid swinging the load or load hook when moving the hoist.
8. Avoid contact between trolleys and between trolleys and stops.
9. Do not use the upper (or lower, if provided) limit devices as a normal means of stopping the crane. These are emergency devices only.
10. Do not move the crane while loaded.

#### **Parking the Load**

1. Do not leave a suspended load unattended unless specific precautions have been instituted and are in place.
2. Position the load block above head level for storage when the hoist is not in use.
3. Exercise care when removing a sling from under a landed and blocked load.

### **After Each Use**

1. Adjust the crane at lowest height, insert height pins and secure in place with R-pins.
2. Position the load block above head level for storage when the hoist is not in use.
3. Move the crane to a location where it will create the least interference with other cranes or objects. Lock the casters.
4. Keep the crane in a clean, well-lit, safe place. Do not allow access by children or pets to prevent injury.

### **Maintenance**

#### **⚠WARNING**

- **TO PREVENT SERIOUS INJURY FROM CRANE FAILURE:** Do not use damaged equipment. If any defect or damage is noted, have the problem corrected before further use.
- Repair or replacement of crane components must be performed only by a qualified technician using only identical replacement parts with the same rating.

Maintain the product by adopting a program of conscientious repair and maintenance in accordance with the following recommended procedures. It is recommended that the general condition of any tool be examined before it is used. Keep your tool in good repair. Keep handles dry, clean, and free from oil and grease. The following chart is based on a normal operation schedule.

Maintenance Interval	Maintenance Point
Daily before operating	<ol style="list-style-type: none"> <li>1. Some components may require adjustment. The following are examples:               <ol style="list-style-type: none"> <li>A. Operating mechanisms</li> <li>B. Limit switches</li> <li>C. Control systems</li> <li>D. Brakes</li> </ol> </li> <li>2. Note the following regarding specific components:               <ol style="list-style-type: none"> <li>A. Replace damaged or worn hooks. Do not repair them by welding or reshaping.</li> <li>B. Replace or repair all critical parts that are cracked, broken, bent, excessively worn, or missing.</li> </ol> </li> <li>3. Do not repair load-sustaining members by welding. Replace them as needed.</li> <li>4. Lubrication:               <ol style="list-style-type: none"> <li>A. Immobilize the crane before lubrication by blocking casters.</li> <li>B. Lubricate all moving parts regularly using grease. Lubricate casters, as shown in the 'Attaching Casters to Bases' section.</li> </ol> </li> <li>5. After maintenance work is completed and before restoring the crane to normal operation:               <ol style="list-style-type: none"> <li>A. Reinstall guards;</li> <li>B. Reactivate safety devices;</li> <li>C. Remove replaced parts and loose material;</li> <li>D. Remove maintenance equipment.</li> </ol> </li> </ol>
Monthly maintenance	<ol style="list-style-type: none"> <li>1. Check operating mechanisms for proper operation, proper adjustment, and unusual sounds.</li> <li>2. Check upper limit device(s) of attached cranes, if equipped, according to manufacturer's documentation.</li> <li>3. Check hooks and hook latches (if used), according to manufacturer's documentation.</li> </ol>

Maintenance Interval	Maintenance Point
Yearly maintenance	<ol style="list-style-type: none"> <li>1. Follow all monthly maintenance procedures.</li> <li>2. Check for deformed, cracked, or corroded parts, replace them as needed.</li> <li>3. Make sure all the parts as bolts,nuts,pins, or rivets are fixed well.</li> <li>4. Check for other worn, cracked, or distorted parts such as pins, bearings, wheels, shafts, gears, rollers, locking and clamping devices, bumpers, and stops.</li> </ol>

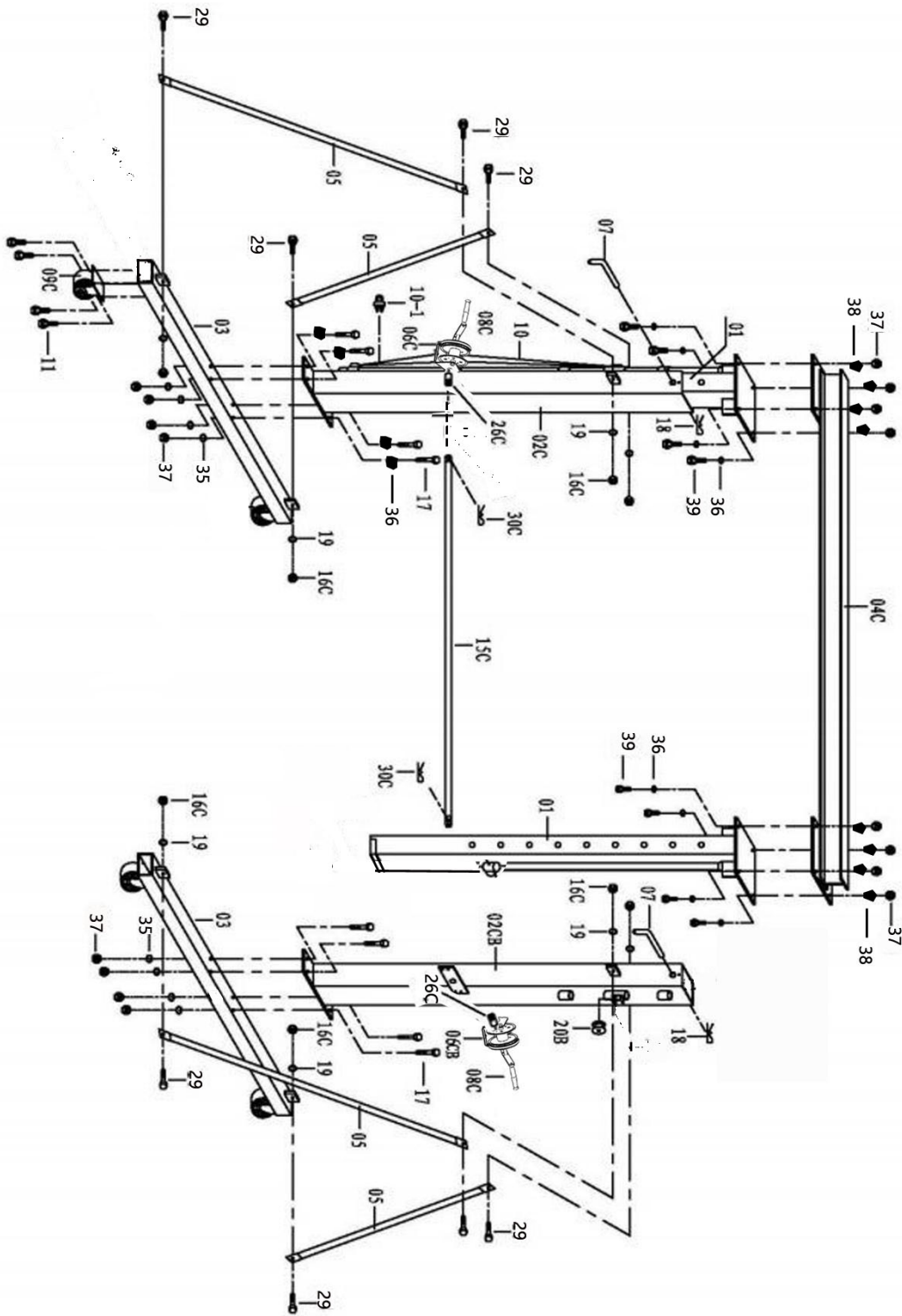
## Troubleshooting

**⚠WARNING**

- TO PREVENT SERIOUS INJURY FROM CRANE FAILURE: Do not use damaged equipment. If any defect or damage is noted, have the problem corrected before further use.
- Repair or replacement of crane components must be performed only by a qualified technician using only identical replacement parts with the same rating.

Failure	Possible Cause	Corrective Action
Cannot adjust the I-beam height	Remove R-pins from height pins	Remove R-pins from height pins
	The cable outside of pulley	Place the cable inside pulley
	The gear wheel stuck in winch box	Replace the winch box
Post insert can't decline to the lowest hole height	The lifting tube's end of post insert cannot insert completely to the base's sleeve	Put the lifting tube into the base's sleeve
Crane won't move flexibly	The caster broke or is stuck	Loosen the brake or replace the caster
Post sides-are not level	Two sides cable wind in the same diameter	Attach one side's R-pin, loosen the rod, and then adjust another side's height by changing the cable tightness, to keep the rod in the same level, and then insert R-pin.

# Parts Diagram



## Parts List

Reference	Part Number	Part Description	Qty.	Remark
1	01	Post Insert	2	
2	02C	Post Sleeve (left)	1	
3	02CB	Post Sleeve (right)	1	
4	03	Base	2	
5	04C	I-Beam	1	
6	05	Post Support	4	
7	06C	Winch Box (left)	1	
8	06CB	Winch Box (Right)	1	
9	07	Height Pin	2	
10	08C	Handle	2	
11	09DC	Locking Swivel Caster	4	5"
12	10	Cable	2	
13	10- 1	Wire Rope Clamp	2	
14	11	Bolt	16	M10*30
15	15C	Rod	1	
16	16C	Nut	16	M16
17	17	Post Bolt	8	M14*110
18	18	R-Pin	2	4"
19	19	Washer	16	16
20	20B	Pulley	2	
21	26C	Fixed Shaft	2	
22	29	Bolt	16	M16*40
23	30C	R-Pin	2	2.5"
24	35	Spring Washer	16	16
25	36	Washer	16	14
26	37	Nut	16	M14
27	38	Spring Washer	16	14
28	39	Bolt	8	14*40

## Replacement Parts

For replacement parts and technical questions, please call Customer Service at **1-800-222-5381**.

Not all product components are available for replacement. The illustrations provided are a convenient reference to the location and position of parts in the assembly sequence.

When ordering parts, the following information will be required: item description, item model number, item serial number/item lot date code, and the replacement part reference number.

The distributor reserves the rights to make design changes and improvements to product lines and manuals without notice.

## Limited Warranty

Northern Tool and Equipment Company, Inc. ("We" or "Us") warrants to the original purchaser only ("You" or "Your") that the Bannon product purchased will be free from material defects in both materials and workmanship, normal wear and tear excepted, for a period of **one years** from date of purchase. The foregoing warranty is valid only if the installation and use of the product is strictly in accordance with product instructions. There are no other warranties, express or implied, including the warranty of merchant ability or fitness for a particular purpose. If the product does not comply with this limited warranty, Your sole and exclusive remedy is that We will, at our sole option and within a commercially reasonable time, either replace the product or product component without charge to You or refund the purchase price (less shipping). This limited warranty is not transferable.

### Limitations on the Warranty

This limited warranty does not cover: (a) normal wear and tear; (b) damage through abuse, neglect, misuse, or as a result of any accident or in any other manner; (c) damage from misapplication, overloading, or improper installation; (d) improper maintenance and repair; and (e) product alteration in any manner by anyone other than Us, with the sole exception of alterations made pursuant to product instructions and in a workmanlike manner.

### Obligations of Purchaser

You must retain Your product purchase receipt to verify date of purchase and that You are the original purchaser. To make a warranty claim, contact Us at 1-800-222-5381, identify the product by make and model number, and follow the claim instructions that will be provided. The product and the purchase receipt must be provided to Us in order to process Your warranty claim. Any returned product that is replaced or refunded by Us becomes our property. You will be responsible for return shipping costs or costs related to Your return visit to a retail store.

### Remedy Limits

Product replacement or a refund of the purchase price is Your sole remedy under this limited warranty or any other warranty related to the product. We shall not be liable for: service or labor charges or damage to Your property incurred in removing or replacing the product; any damages, including, without limitation, damages to tangible personal property or personal injury, related to Your improper use, installation, or maintenance of the product or product component; or any indirect, incidental or consequential damages of any kind for any reason.

### Assumption of Risk

You acknowledge and agree that any use of the product for any purpose other than the specified use(s) stated in the product instructions is at Your own risk.

### Governing Law

This limited warranty gives You specific legal rights, and You also may have other rights which vary from state to state. Some states do not allow limitations or exclusions on implied warranties or incidental or consequential damages, so the above limitations may not apply to You. This limited warranty is governed by the laws of the State of Minnesota, without regard to rules pertaining to conflicts of law. The state courts located in Dakota County, Minnesota shall have exclusive jurisdiction for any disputes relating to this warranty.



Distributed by:

Northern Tool & Equipment Company, Inc.

Burnsville, Minnesota 55306

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