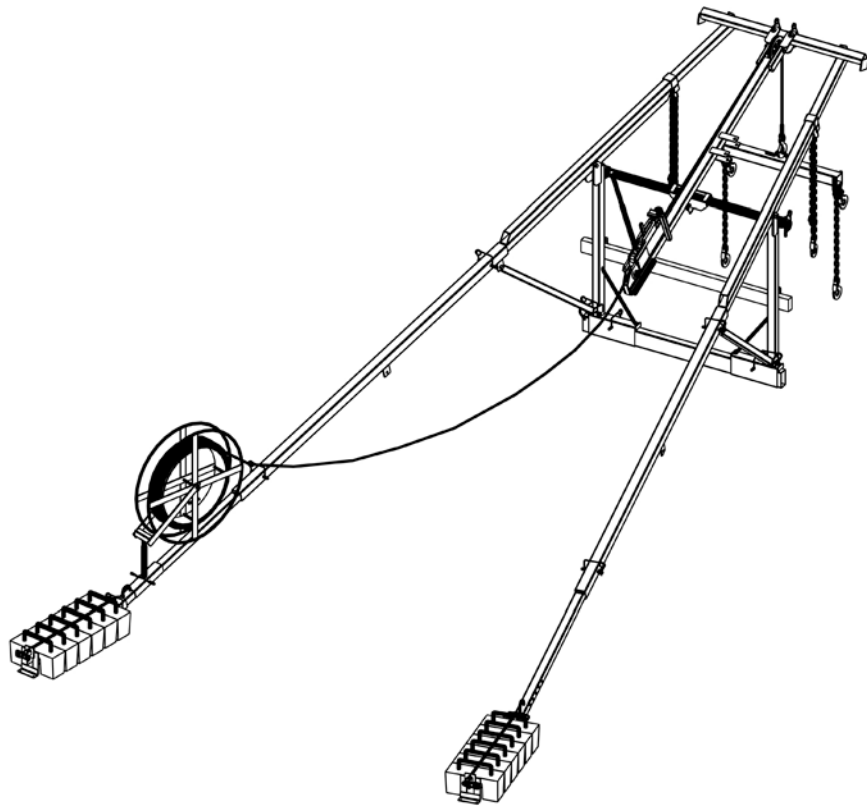


# SUPERCHUTE® DEBRIS REMOVAL SYSTEM

## CHUTE HOIST INSTALLATION MANUAL

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## *ROOFER HOIST* *Model SC-905-cb*

**SUPERCHUTE® FACTORY**

**Edition of Mar 10, 2016**

- toll free: 800-363-2488
- telephone: 514-365-6121
- facsimile: 514-365-8987
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- address: 8810 Elmslie Road, Montreal, Canada, H8R 1V6

<b>IMPORTANT REFERENCE DOCUMENT</b>
---

## **IMPORTANT NOTICE:**

**IT IS THE RESPONSIBILITY OF COMPANIES THAT SELL, RENT OR USE THE SUPERCHUTE® PRODUCT TO FREELY SUPPLY THE LATEST EDITION OF THIS MANUAL TO THE FOLLOWING PERSONS:**

- **THE PLANNERS AND SUPERVISORS OF THE CHUTE SYSTEM**
- **THE INSTALLERS OF THE CHUTE SYSTEM**
- **THE USERS OF THE CHUTE SYSTEM**

**If you have any questions or comments concerning this manual, please feel free to contact Superchute Ltd.**

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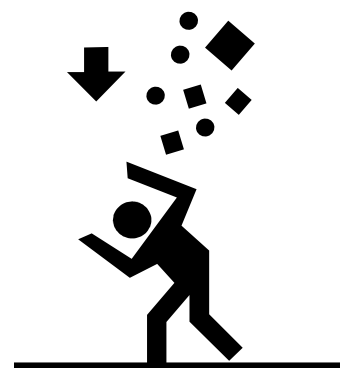
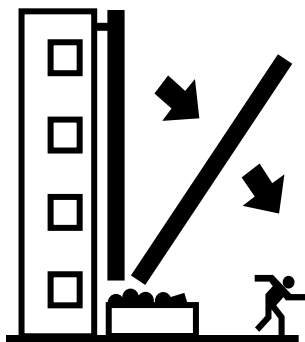
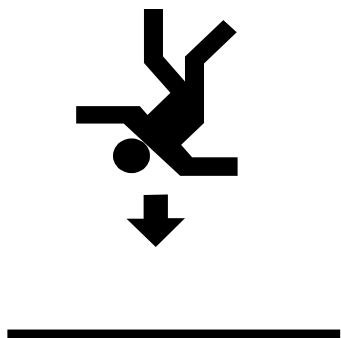
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This manual refers to the following products, which are protected by international patent laws:

Door Sections	Wraparound® Regular Sections	Chute Hoists
U.S. Pat. No. Des. 328,174 Can. Ind. Des. 1990 RD 66842	U.S. Pat. 5,472,768 Can. Pat. 2,119,108 U.K. Pat. 2,276,151	U.S. Pat. 5,934,437 Can. Pat. Application 2,177,741



# WARNING



- The installation and use of a Superchute Chute System involves many hazards, for example, the risk of:
  - a worker falling off a building
  - a blockage in the chute causing the chute system to collapse
  - a person being struck by falling debris
- Failure to follow Superchute's instructions may result in serious injury or death.
- Planners, Supervisors, Installers, and Users must read, understand, and follow the instructions found in these manuals before rigging or using a chute system:
  1. The "Chutes Manual"
  2. The applicable "Chute Hoist Installation Manual(s)"
- For copies of these manuals contact Superchute® Ltd: 1-800-363-2488 or download them from [www.superchute.com](http://www.superchute.com)

# **HOW TO USE THIS MANUAL**

Many people read this manual from beginning to end when they first receive their chute hoist. The manual explains the hoist's features and the procedures for using it safely.

In this manual, you'll find that pictures and words work together to explain things quickly.

## **A) USE THE MOST RECENT EDITION**

- Each new edition of the SC-905-cb Chute Hoist Installation Manual contains important new information.
- **ALWAYS USE THE MOST RECENT EDITION:** Compare the edition date of this booklet (printed at the bottom of every page) to the edition available for download on the Superchute website: [www.superchute.com](http://www.superchute.com). Use the edition with the most recent date. If you do not have access to the internet, call Superchute (1-800-363-2488) and ask a representative for assistance.
- The instructions in a new edition supersede any instruction found in a prior edition.
- Avoid confusion: discard any old SC-905-cb Chute Hoist Installation Manuals.

## **B) IF USING THIS MANUAL EDITION WITH AN OLDER HOIST**

Over time, improvements have been made to the Roofer Hoist. If you are using this manual with an older hoist, you may find some of the sketches do not match the product you have. If you are unsure of how to proceed, call the Superchute® Factory: 1-800-363-2488.

Older hoists can be upgraded to reflect the latest improvements. Contact the Superchute® factory for details.

## **C) USE THE TABLE OF CONTENTS**

A good place to look for what you need is the Table of Contents located on **page 6** of the manual. It's a list of all that's in the manual along with the page number where you'll find it.


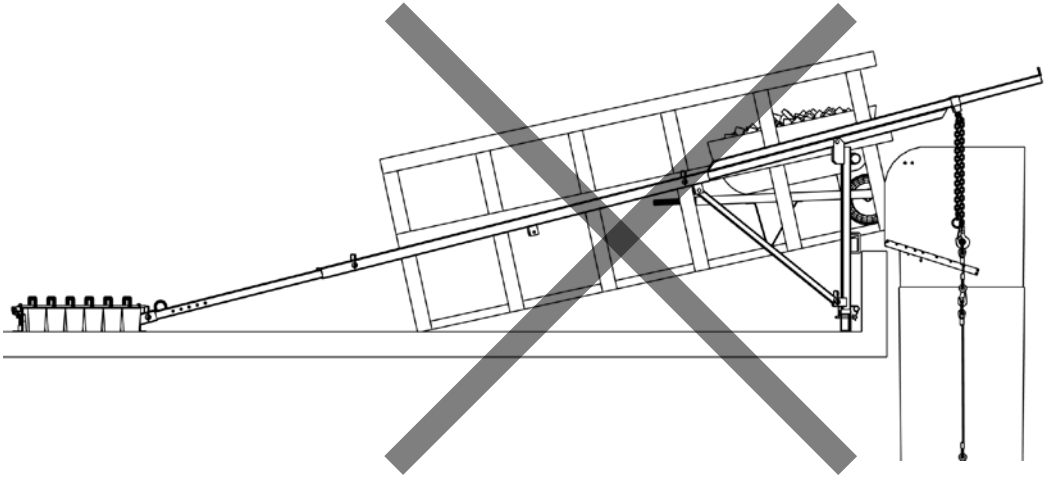
## D) SAFETY WARNINGS AND SYMBOLS

You will find a number of safety warnings in this book. Safety warnings tell you about things that could hurt you, or others, if you were to ignore the warning. We use the following symbol to attract your attention to the warning:



A warning indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

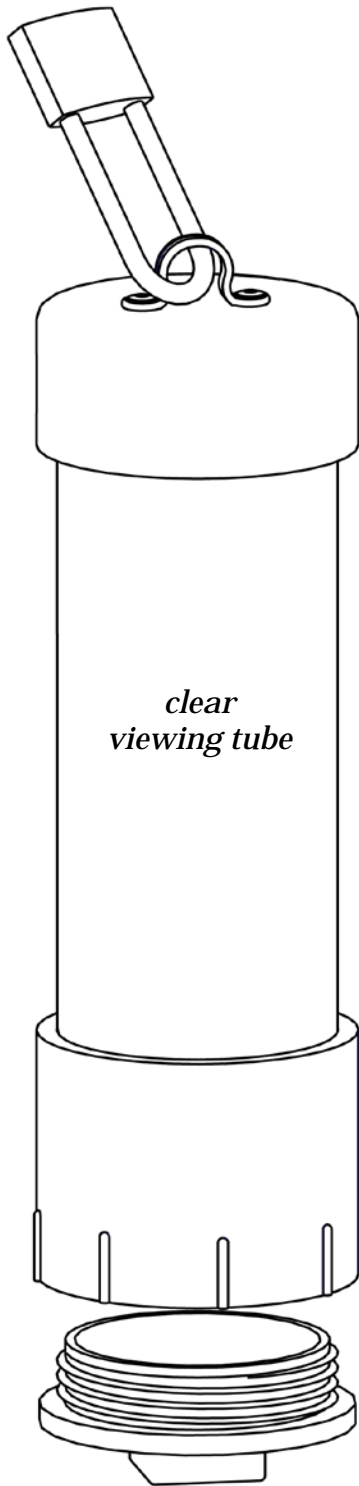
Here is an example of a Superchute® warning:

		 <b>WARNING</b>
<b>Hazard</b>	<input type="checkbox"/>	<ul style="list-style-type: none"><li>• A ramp resting on the hoist frame could greatly increase the loading on the hoist frame.</li><li>• The load increase could cause the hoist frame to fail.</li><li>• Do NOT rest ramps on the hoist frame. Do NOT attach ramps to the hoist frame. Ramp designs must be approved by a structural engineer.</li></ul>
<b>Consequence</b>	<input type="checkbox"/>	
<b>Instruction</b>	<input type="checkbox"/>	
<b>Pictorial (optional)</b>	<input type="checkbox"/>	<p><b><u>WRONG:</u></b></p> <p>The wheelbarrow ramp increases the load on the hoist frame.</p> 

## **E) STORE THE MANUAL IN THE SUPERCHUTE DOCUMENTS CANISTER**

Use a canister at the jobsite to:

- protect and store the manual.
- make the manual readily available to users of the Hoist.



The canister is virtually indestructible and weatherproof. It features a clear plastic viewing tube that allows users to see its contents. The canister is supplied with a brass padlock to allow it to be locked to the hoist.

An on-site canister protects your workers and your company by ensuring greater jobsite safety. Use the canister as part of your overall safety program.

Color pictures with more explanations are provided on the Superchute website: [www.superchute.com](http://www.superchute.com).

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# 1. INTRODUCTION

Welcome to safe, quick, and easy chute installations!

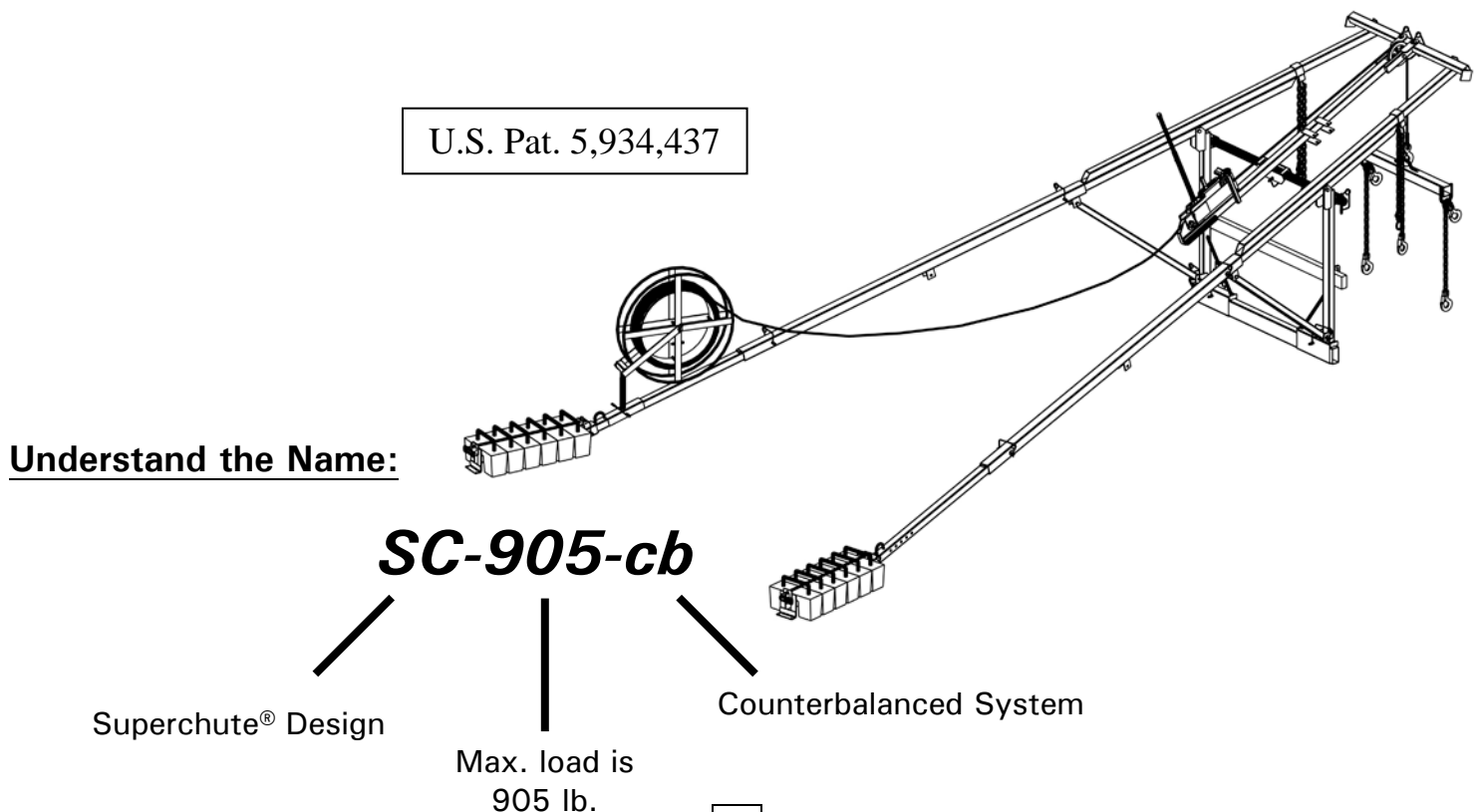
The Roofer Hoist is a counterweighted chute hoist that can be used from a flat roof, a floor slab, or through a window opening.

Superchute Ltd. manufactures three models of Roofer Hoist: the SC-300-cb, SC-605-cb, and SC-905-cb. This installation manual concerns model SC-905-cb, which lifts, supports, and lowers up to 900 lb. of chute. A 900 lb. chute load translates into approximately 70 feet (21 chute sections). The length of chute that can be created depends on the total weight of the chute, which must be calculated (refer to **Section 7** in this manual entitled: **Assess Chute Height & Weight**).

Assembly of the SC-905-cb is quick and requires only a few identical locking pins. Twelve counterweights are required to support the chute load. The outrigger beams are splayed apart for rock-solid stability. The design features a 3:1 safety factor.

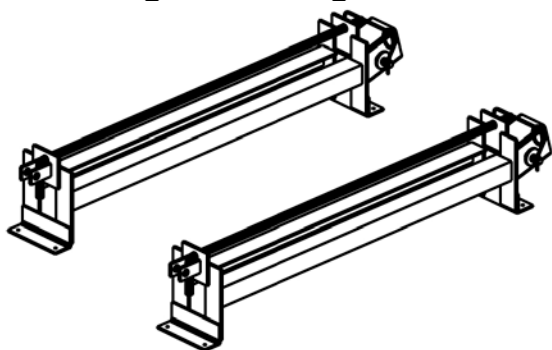
A removable Fishpole is available for lifting and lowering the chute. The same Fishpole can serve many SC-905-cb frames.

When not in use the entire frame can be folded and stored as compact packets.

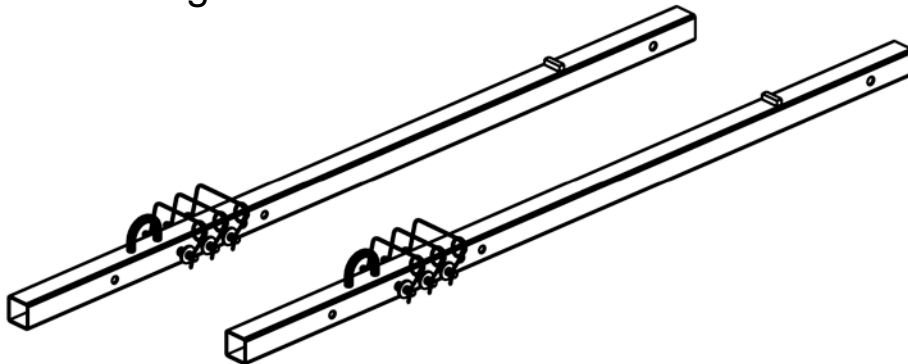


## 2. IDENTIFY THE PIECES

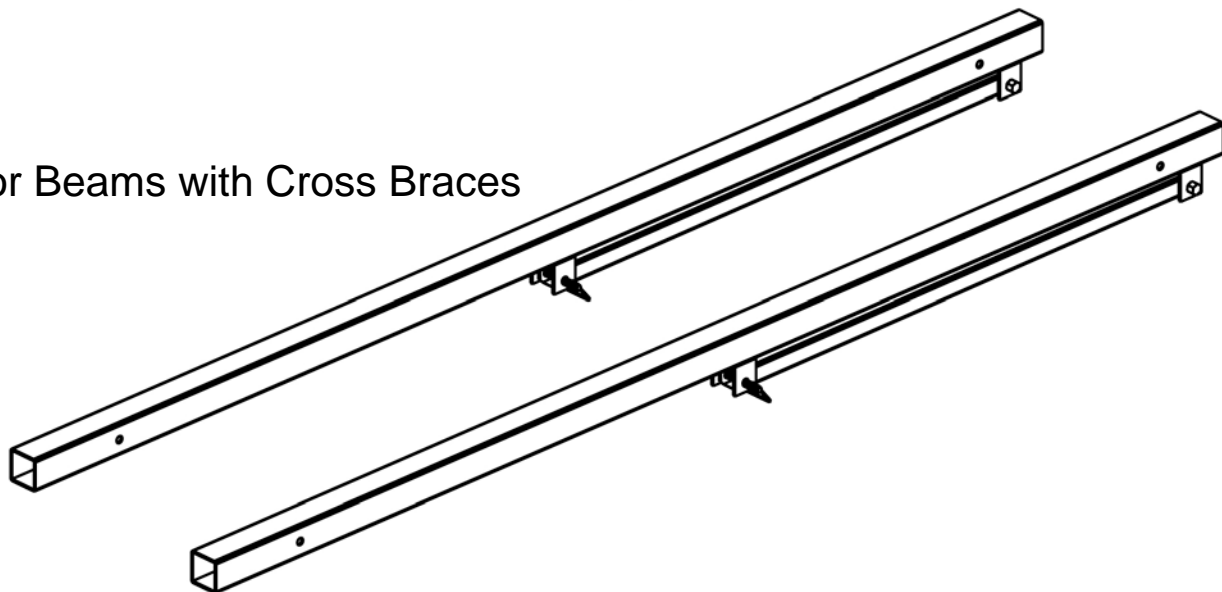
2 Weight Carriages



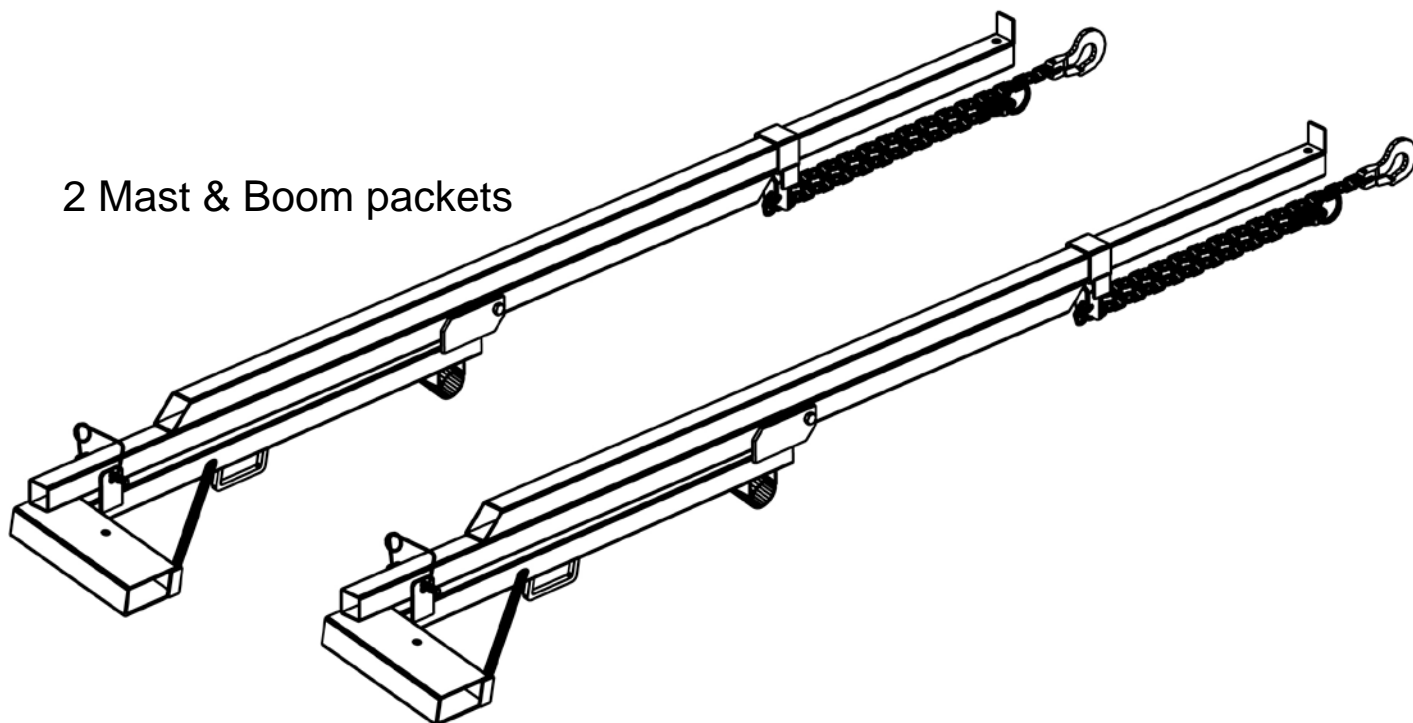
2 Weight Beams with Pin Racks



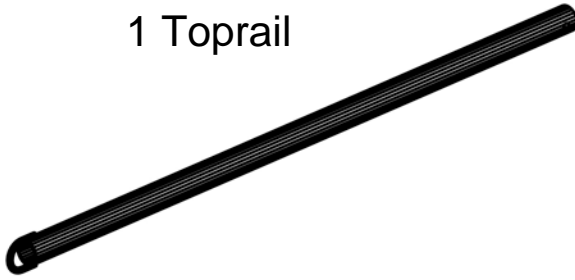
2 Connector Beams with Cross Braces



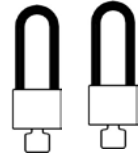
2 Mast & Boom packets



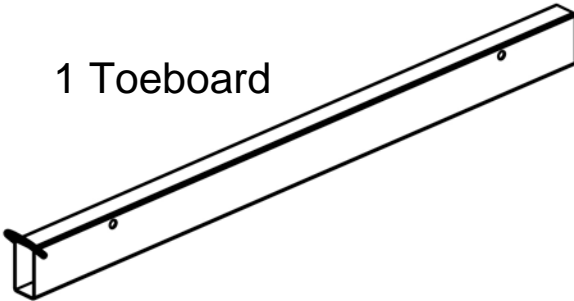
1 Toprail



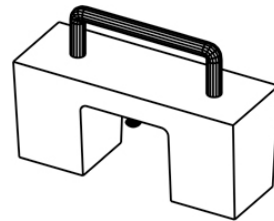
2 Padlocks



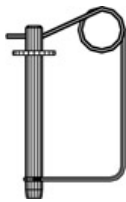
1 Toeboard



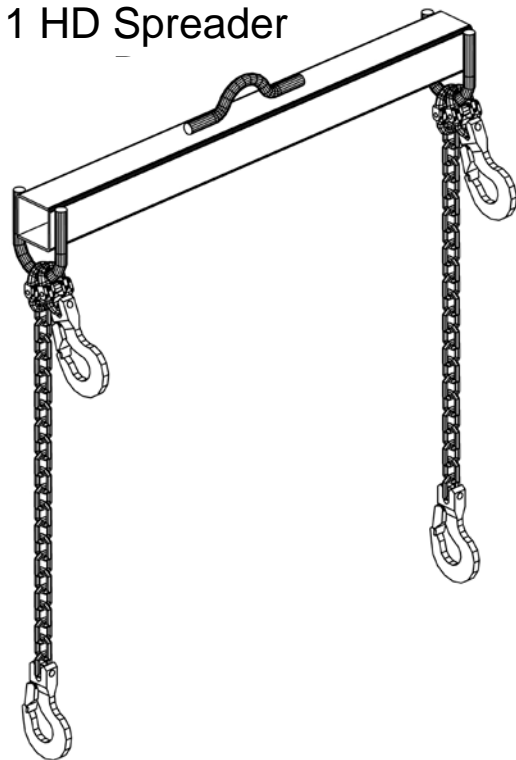
12 Weights  
(55 lb. each)



14 Pins



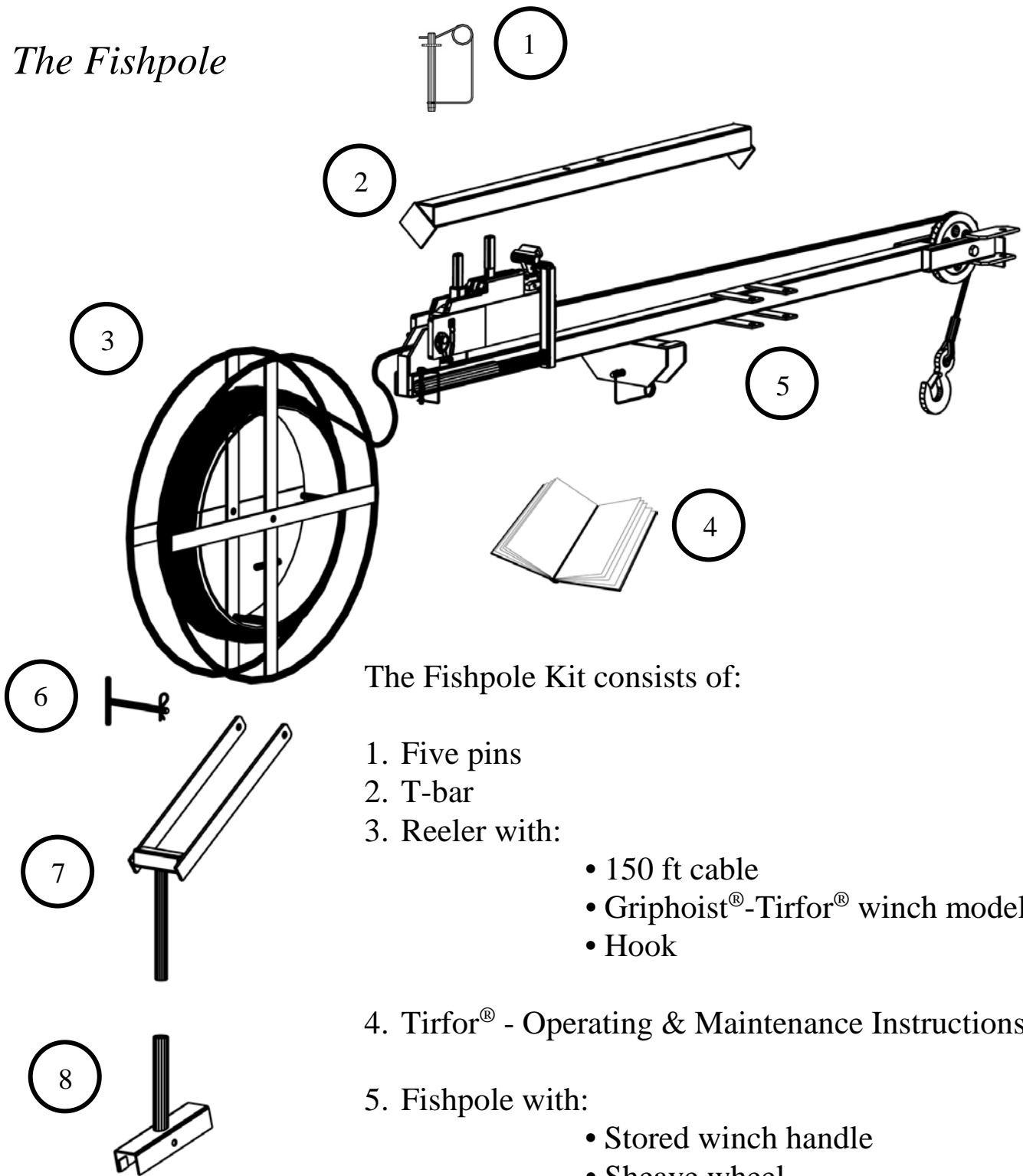
1 HD Spreader



## Optional Components

(Sold separately )

### *The Fishpole*



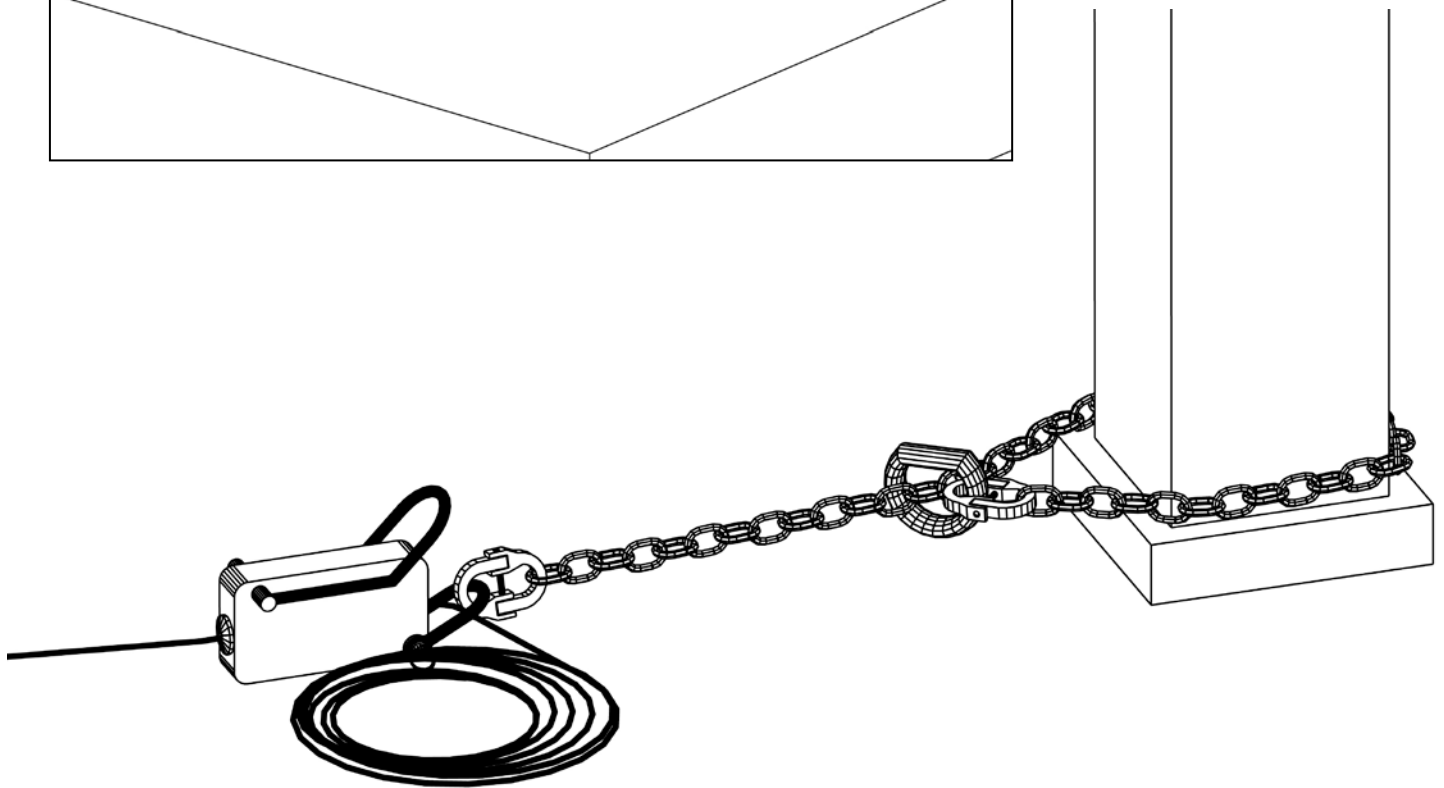
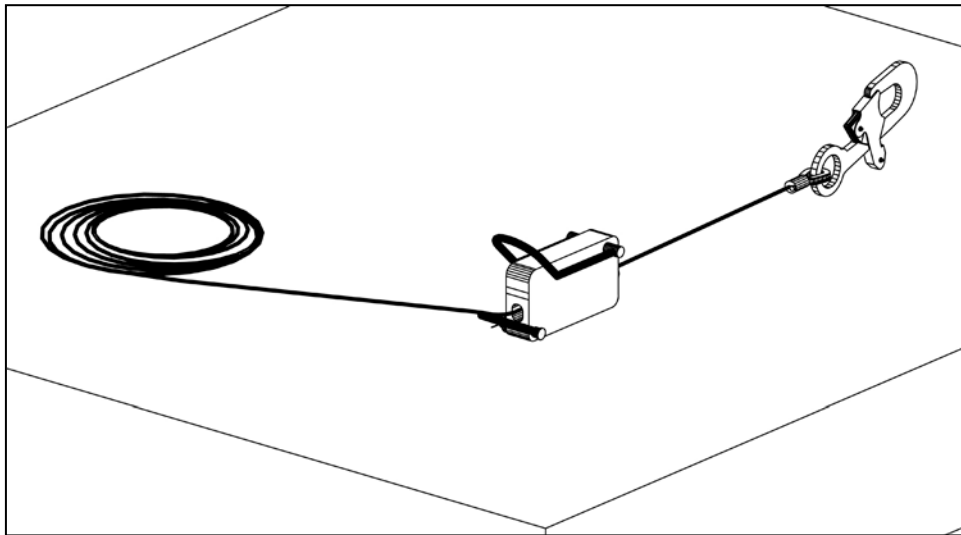
The Fishpole Kit consists of:

1. Five pins
2. T-bar
3. Reeler with:
  - 150 ft cable
  - Griphoist<sup>®</sup>-Tirfor<sup>®</sup> winch model T-508
  - Hook
4. Tirfor<sup>®</sup> - Operating & Maintenance Instructions Booklet
5. Fishpole with:
  - Stored winch handle
  - Sheave wheel
6. Reeler Pin
7. Reeler Arm
8. Reeler Base

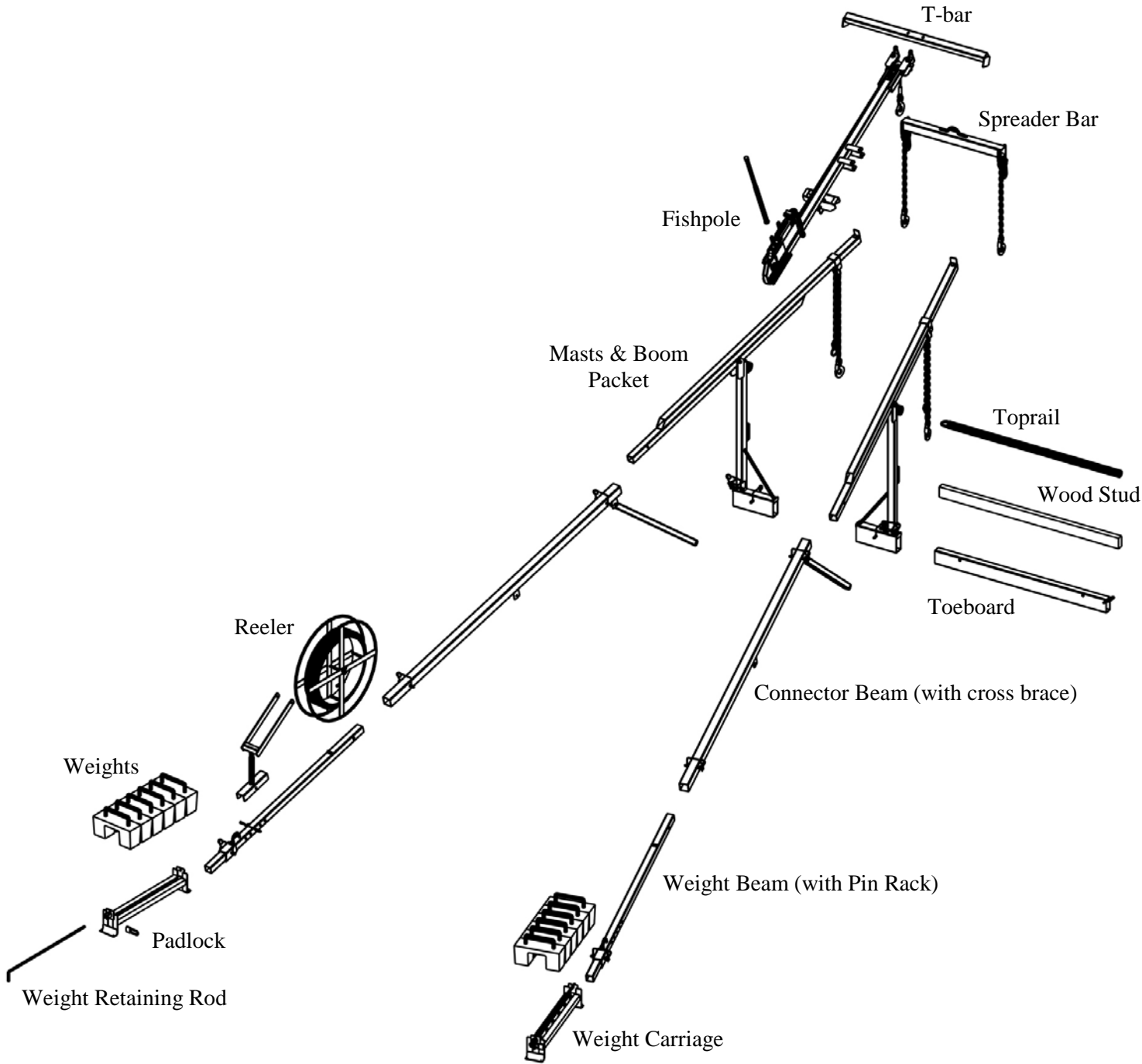
## Optional Components

(Sold separately )

### *The Tieback Kit*

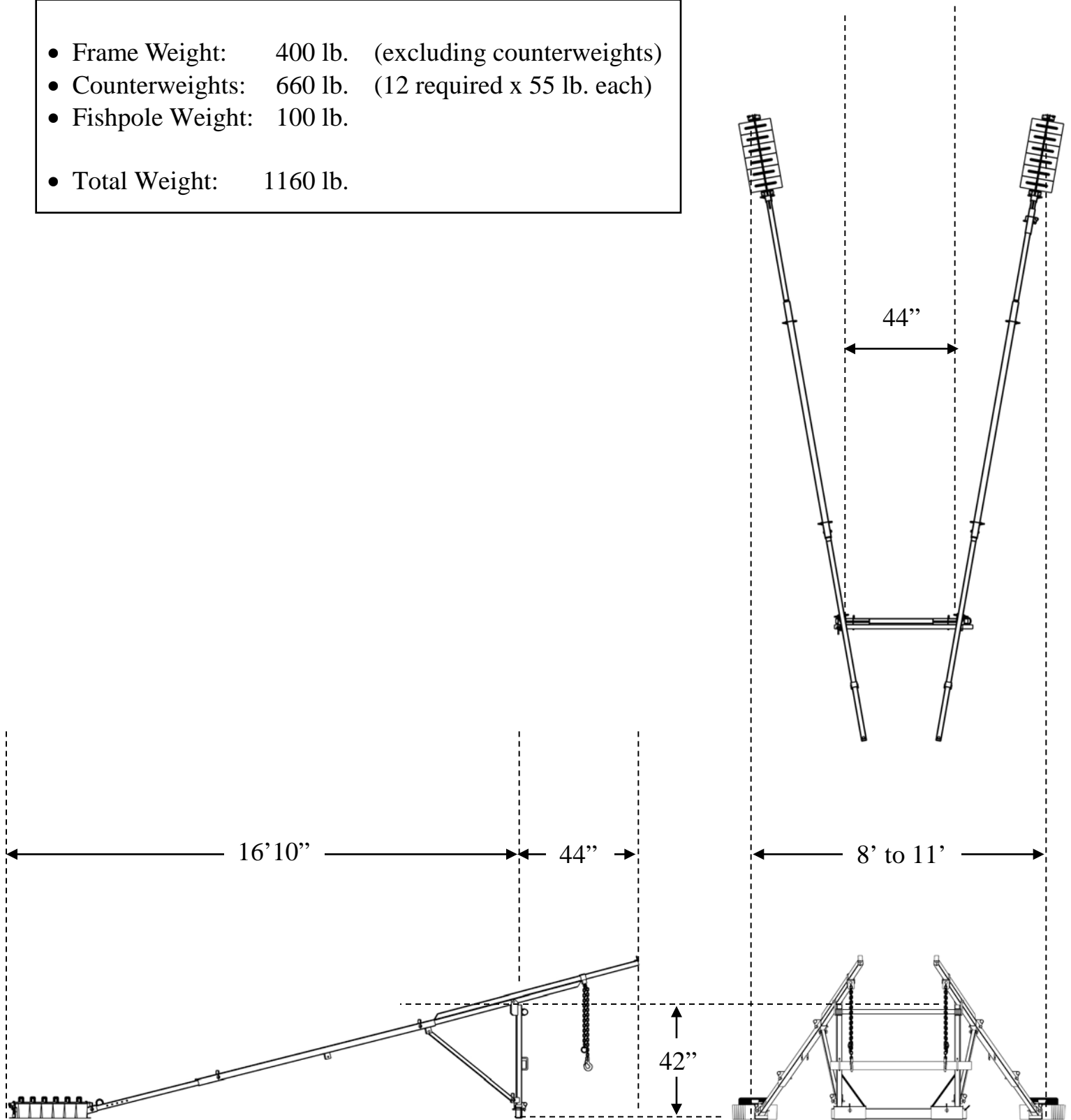


## Exploded View



### 3. DIMENSIONS

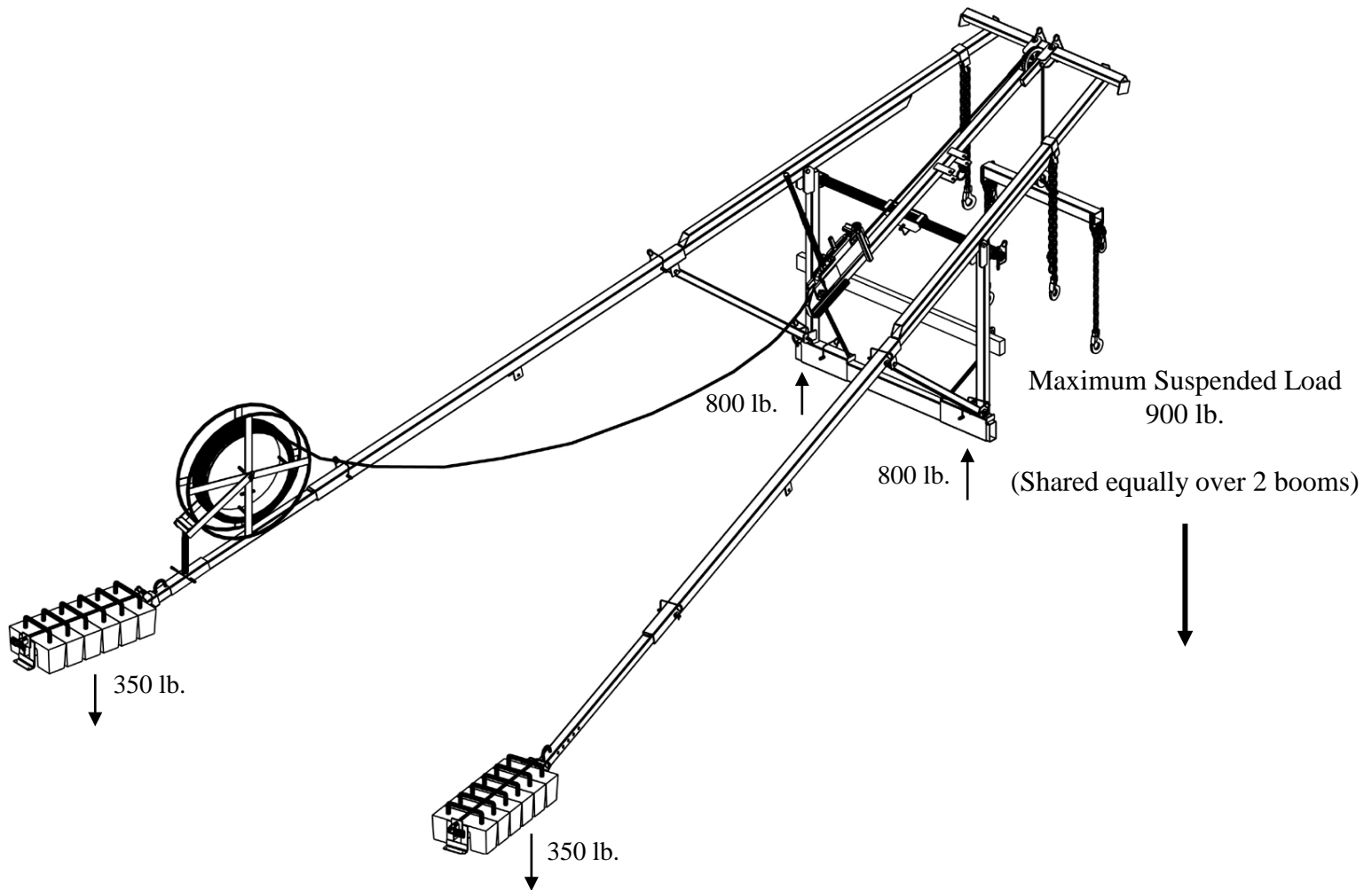
- Frame Weight: 400 lb. (excluding counterweights)
- Counterweights: 660 lb. (12 required x 55 lb. each)
- Fishpole Weight: 100 lb.
- Total Weight: 1160 lb.



## 4. NORMAL LOADS

The sketch shows the loads imposed on the supporting structure with normal use.

A structural engineer must verify the adequacy of the supporting floor.

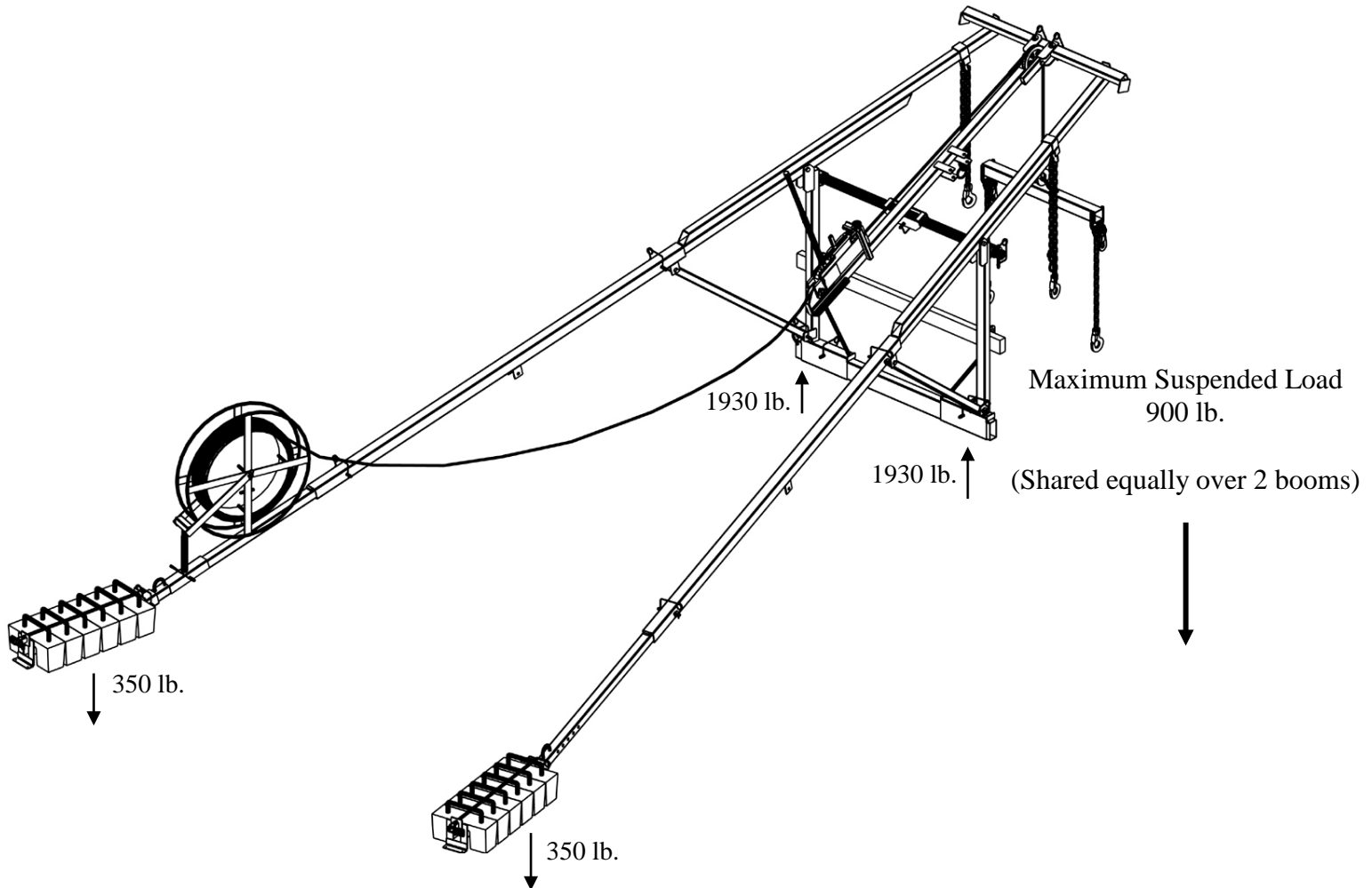


**Showing Normal  
Applied Loading**

## 5. ULTIMATE LOADS

The sketch shows the loads imposed on the supporting structure when the device is overloaded.

A structural engineer must verify the adequacy of the supporting floor.



**Showing Ultimate Load Requirement**

**Loads Imposed On Structure At 3:1 Stability Factor**

## **6. IMPORTANT INFORMATION**

### **Applicable Regulations:**

Before rigging or using the chute system, planners, supervisors, installers and users should be aware of applicable federal, state, and local safety regulations.

### **Additional Expertise**

This manual should not be taken as an overall survey on rigging technique, fall protection, or structure appraisal. Whenever these considerations arise, the planners, supervisors, installers and users of the chute system should secure the services of trained professionals.

### **Availability of the Manual:**

Planners, supervisors, installers and users of the chute system must be able to refer to this manual at any time. Copies of this manual are available from Superchute Ltd. free of charge, **by mail or fax, and can be downloaded from the Superchute® web site at: [www.superchute.com](http://www.superchute.com)**. If this manual is not with the chute system on the job site, postpone installation and use of the chute system until a manual is obtained.

### **Condition of the Equipment**

Every time the chute is to be rigged or used, make sure the following items are in good condition: Superchute® hoist(s), Superchute® cable assemblies, Superchute® chute sections, Superchute® steel liners, and any other ancillary Superchute® equipment, such as door adjustment kits and tie-back kits. Thorough overhaul servicing is available from Superchute Ltd.

### **Condition of the Workers**

Superchute® equipment should only be used by workers who are fit to operate it in a responsible manner.

### **Corrosive Substances**

Keep corrosive substances away from all hoist components.

### **Engineered Rigging Equipment**

Use engineered rigging equipment to install and anchor chute sections (for example, a Superchute® chute hoist)

### **Fire Prevention**

Do not weld or flame-cut within 20 ft. of the hoist or chute.

### **Help Line**

If at any time you are unsure of how to proceed call Superchute Toll Free: 1-800-363-2488

### **Intent of the Product**

Do not use the chute hoist to lift or lower materials other than a Superchute® trash chute. Do not use the chute hoist as a man-hoist.

### **Lightning Storm**

During a lightning storm stay away from the hoist & suspended chute system.

### **Other Brands of Chute**

Do not mix Superchute® chute sections with chute sections of another brand.

### **Parts**

Do not replace original Superchute® parts with non-Superchute® parts.

### **Powered loaders**

Do not use powered loaders to introduce debris into the chute.

### **Prevent Electrocution**

Install the hoist and chute in an area free of electric cables. If cables are present contact your local electrical authority before proceeding.

### **Structural Engineer**

Before a chute installation begins, a structural engineer must verify the adequacy of the supporting structure.

### **Training**

A one-day training seminar is offered free of charge at the Superchute® factory. The seminar examines the proper installation and use of Superchute® chute sections and chute hoists. Call 1-800-363-2488 for details.

## 7. ASSESS CHUTE HEIGHT & WEIGHT

# SAMPLE

- The first step in undertaking a chute installation is to formulate an installation plan.
- This page is a planning tool, which is used here to illustrate an imaginary chute job.
- The next page is clean and is for your own use. Photocopy it and use it to plan your chute installations.

JOB NAME: Hotel On First Ave.

1. What is the anticipated height of the chute? 70 feet feet.
2. How many chute sections will be needed?  $\text{Height in ft} \times 3 \div 10 = \underline{21}$  sections.  
*When linked, 3 chute sections of any type will create a 10 foot drop.*
3. What diameter of chute will be used? [18"] [23"] [27"] [30"] [33"] [36"]  
*Every chute section is branded with its diameter.*
4. Calculate the total weight of the chute system using the form below:  
*Every chute section is branded with its weight.*  
*Section Weights are also provided on page 20.*

### Chute Weight Calculation Form

(A) 1 Top Hopper x 42 lb. each = 42 lb.  
Wraparound

(B) 0 Door Sections x 52 lb. each = 0 lb.  
Wraparound

(C) 21 Wraparound - 3/16" wall Regular Sections x 39 lb. each = 819 lb.

(D) 0 Steel Liners x 40 lb. each = 0 lb.

**A+B+C+ D = The Total Weight Of The Chute System = 861 lb.**

5. Does this weight exceed 900 lb? If "YES", then model SC-905-cb is not adequate. NO  
*Call the Superchute® factory if your chute weight exceeds 900 lb.*

6. Does the selected installation area give out over a clean building exterior? Can the chutes be easily set-up, without the chutes or hoist cable dragging over balconies or ledges?

YES - OK -

## ASSESS CHUTE HEIGHT & WEIGHT – PHOTOCOPY & USE THIS PAGE

Before the chute is rigged it's height and weight must be calculated. Photocopy this form and use it with the weight charts provided on the next page. Knowing the total weight of the chute allows the installer(s) to choose an appropriate lifting device and suitable anchors. If at any time you would like to discuss the particulars of your job situation, please feel free to call the Superchute® factory: 1-800-363-2488.

JOB NAME: \_\_\_\_\_

1. What is the anticipated height of the chute? \_\_\_\_\_ feet.
2. How many chute sections will be needed? Height in ft x 3 ÷ 10 = \_\_\_\_\_ sections.  
*When linked, 3 chute sections of any type will create a 10 foot drop.*
3. What diameter of chute will be used? [18"] [23"] [27"] [30"] [33"] [36"]  
*Every chute section is branded with its diameter.*
4. Calculate the total weight of the chute system using the form below:  
*Every chute section is branded with its weight.*  
*Section Weights are also provided on the next page.*

### Chute Weight Calculation Form

(A) 1 Top Hopper x \_\_\_\_\_ lb. each = \_\_\_\_\_ lb.

(B) \_\_\_\_\_ Door Sections x \_\_\_\_\_ lb. each = \_\_\_\_\_ lb.

(C) \_\_\_\_\_ Regular Sections x \_\_\_\_\_ lb. each = \_\_\_\_\_ lb.

(D) \_\_\_\_\_ Steel Liners x \_\_\_\_\_ lb. each = \_\_\_\_\_ lb.

**A+B+C+ D = The Total Weight Of The Chute System = \_\_\_\_\_ lb.**

5. Does this weight exceed 900 lb? If "YES", then model SC-905-cb is not adequate.  
*Call the Superchute® factory if your chute weight exceeds 900 lb.*
6. Does the selected installation area give out over a clean building exterior? Can the chutes be easily set-up, without the chutes or hoist cable dragging over balconies or ledges?

## 8. CHUTE SECTION WEIGHT CHARTS

- An “x” signifies that no such section exists.
- If using steel liners, do not forget to account for their weight.

### WELDED SECTIONS WEIGHTS (in lb.)

Diameter	Wall Thick.	Regular	Top Hopper	Door
18”	5 mm	23	24	29
23”	5 mm	27	30	36
27”	5 mm	32	34	41
30”	5 mm	37	40	47
30”	4 mm	27	X	X
30”	3.2 mm	X	X	X
33”	5 mm	40	42	50
36”	6 mm	48	53	60

### WRAPAROUND® SECTIONS WEIGHTS (in lb.)

Diameter	Wall Thick.	Regular	Top Hopper	Door
18”	5 mm	X	X	X
23”	5 mm	29	30	40
27”	5 mm	35	40	49
30”	5 mm	39	42	52
30”	4 mm	31	X	X
30”	3.2 mm	28	X	X
33”	5 mm	43	48	57
36”	6 mm	49	57	68

### LINER WEIGHTS (in lb.)

18”	23”	27”	30”	33”	36”
23 lb.	32 lb.	37 lb.	40 lb.	48 lb.	53 lb.

## **9. A FEW FALL PROTECTION REGULATIONS**

“The employer shall determine if the walking/working surfaces on which its employees are to work have the strength and structural integrity to support employees safely. Employees shall be allowed to work on those surfaces only when the surfaces have the requisite strength and structural integrity.”

“Each employee on a walking/working surface ... with an unprotected side or edge which is 6 ft or more above a lower level shall be protected from falling by the use of guardrail systems, safety net systems, or personal fall arrest systems.”

“An unprotected side or edge means any side or edge ... where there is no wall or guardrail system at least 39” high.”

“Each employee in a hoist area shall be protected from falling 6 feet or more to lower levels by guardrail systems or personal fall arrest systems. If guardrail systems ... or portions thereof, are removed to facilitate the hoisting operation ... and an employee must lean through the access opening or out over the edge of the access opening (to receive or guide equipment and materials, for example) that employee shall be protected from fall hazards by a personal fall arrest system.”

*From OSHA Part 1926 Safety and Health Regulations for Construction, Subpart M, Fall Protection*

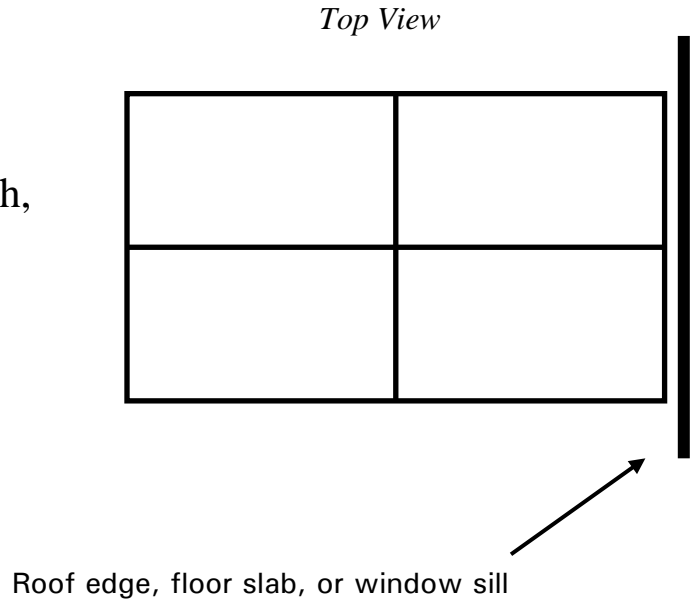
When properly used, the SC-905-cb Roofer Hoist meets the applicable requirements of OSHA Part 1926, Subpart M, Fall Protection.

### **For a more complete understanding of the OSHA Regulations you can:**

- Consult OSHA’s excellent online documentation on the internet: [www.osha.gov](http://www.osha.gov).
- Telephone the OSHA bookstore (206) 553-4270 and order the OSHA Regulations on CD-ROM (price \$53).
- Telephone the OSHA bookstore (206) 553-4270 and order **29 CFR Part 1926** in print (price \$30).
- Some states have their own regulations, which will differ from the U.S. Dept. of Labor’s OSHA regulations.

## 10. PROTECT THE DECK

- To protect the roof membrane or floor finish, arrange four sheets of plywood as shown:



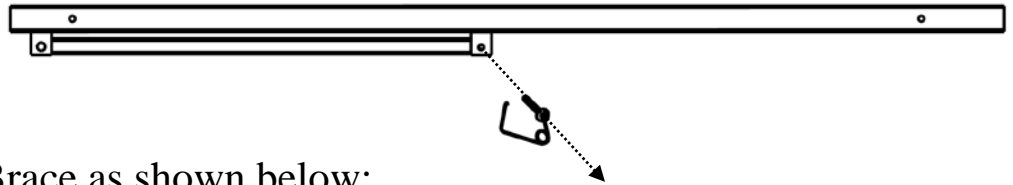
### **WARNING**

- A person can easily fall off of a building if the floor edge they are working near does not offer fall protection safeguards.
- A fall from a height of 6 ft. is enough to seriously injure or kill.
- OSHA requires that fall prevention barriers be at least 42" high, plus or minus 3". Guardrail systems, parapet walls, and window sills may be acceptable fall prevention barriers provided they meet OSHA's height and strength criteria.
- Use a personal fall arrest system (harness and rope, or similar device) when working near a floor edge that does not offer proper fall prevention barrier(s).
- Read and understand the OSHA fall protection regulations (a few of the regulations are provided on previous page).

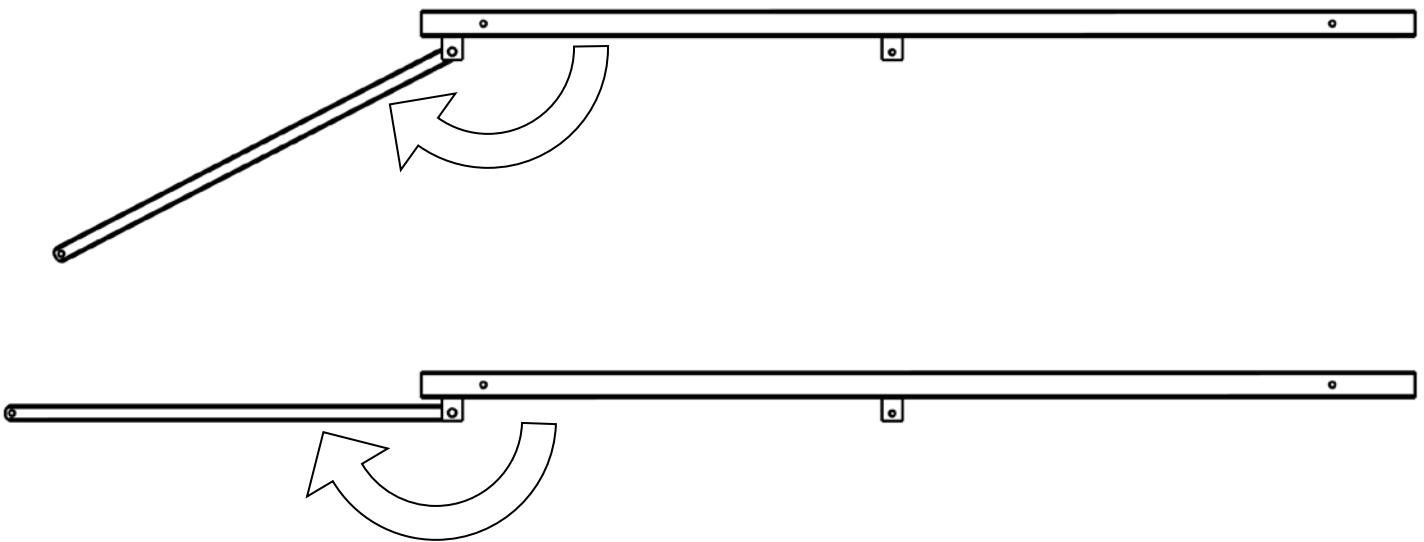
## 11. ASSEMBLE THE FRAME

*A partially assembled frame can be awkward to handle. To prevent a worker from falling off the building, execute this section's instructions at a distance of 15 feet (minimum) from any unprotected edges.*

1. Unpin the Cross Brace from the Connector Beam.



2. Extend the Cross Brace as shown below:



### **WARNING**

- The frame may fail when load is applied if the correct pins are not used.
- A falling load can seriously injure or kill.
- Use only the pins that were supplied with this hoist (see "Pin Information").
- To prevent pin loss, store the pins on the unit.
- Order replacement pins from Superchute Ltd.

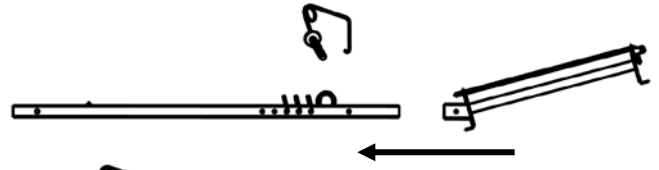
### **Pin Information:**

- 11 pins are required to assemble and use the FRAME.
- 5 pins are required to assemble and use the FISHPOLE.
- 3 spare pins are provided with every frame.
- All of the pins used on the SC-905-cb hoist are identical:

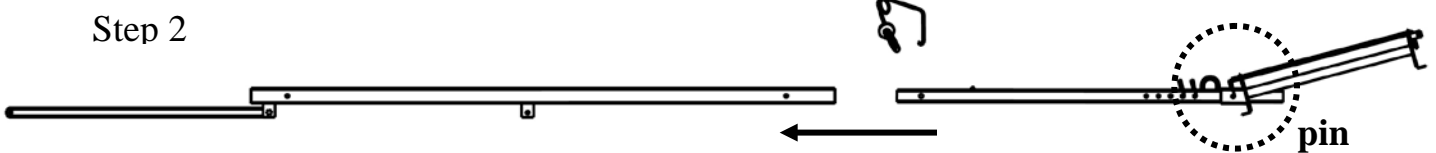
- Diameter:  $\frac{1}{2}$ "
- Overall Length: 5"
- Usable Length:  $3\frac{1}{2}$ "

### 3. Assemble the following pieces.

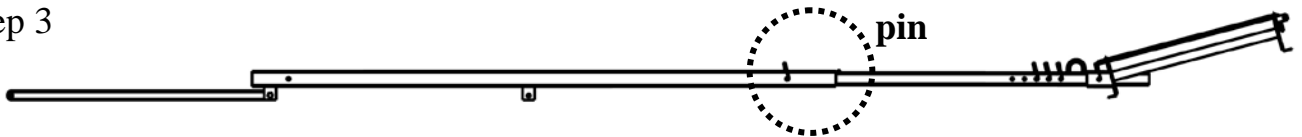
Step 1



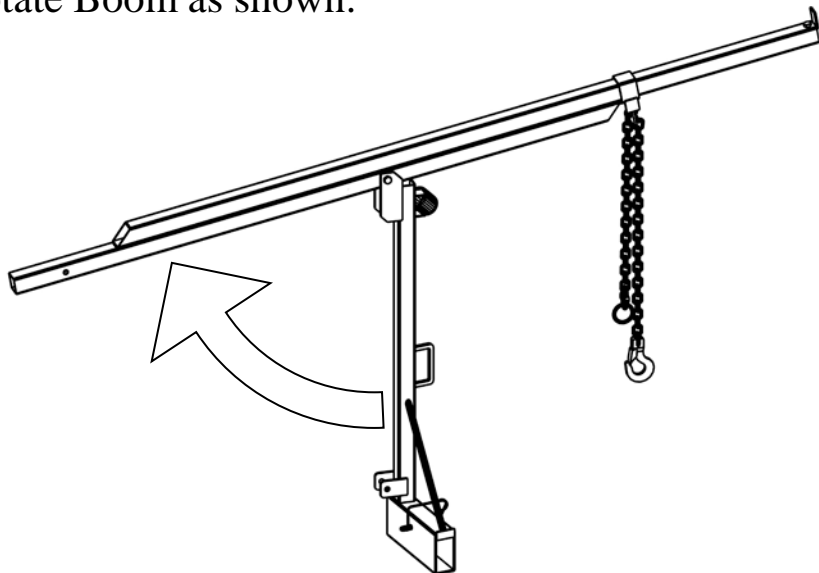
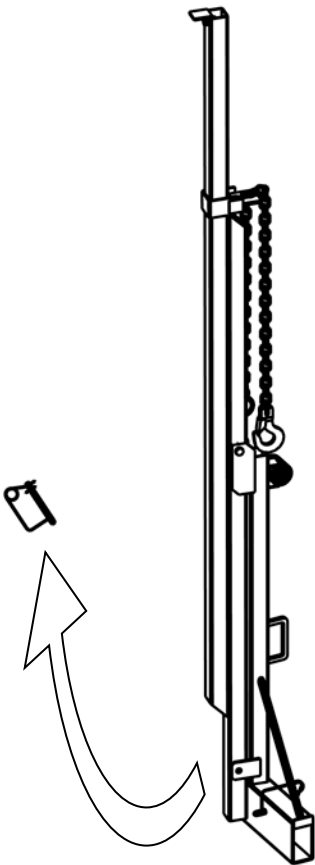
Step 2



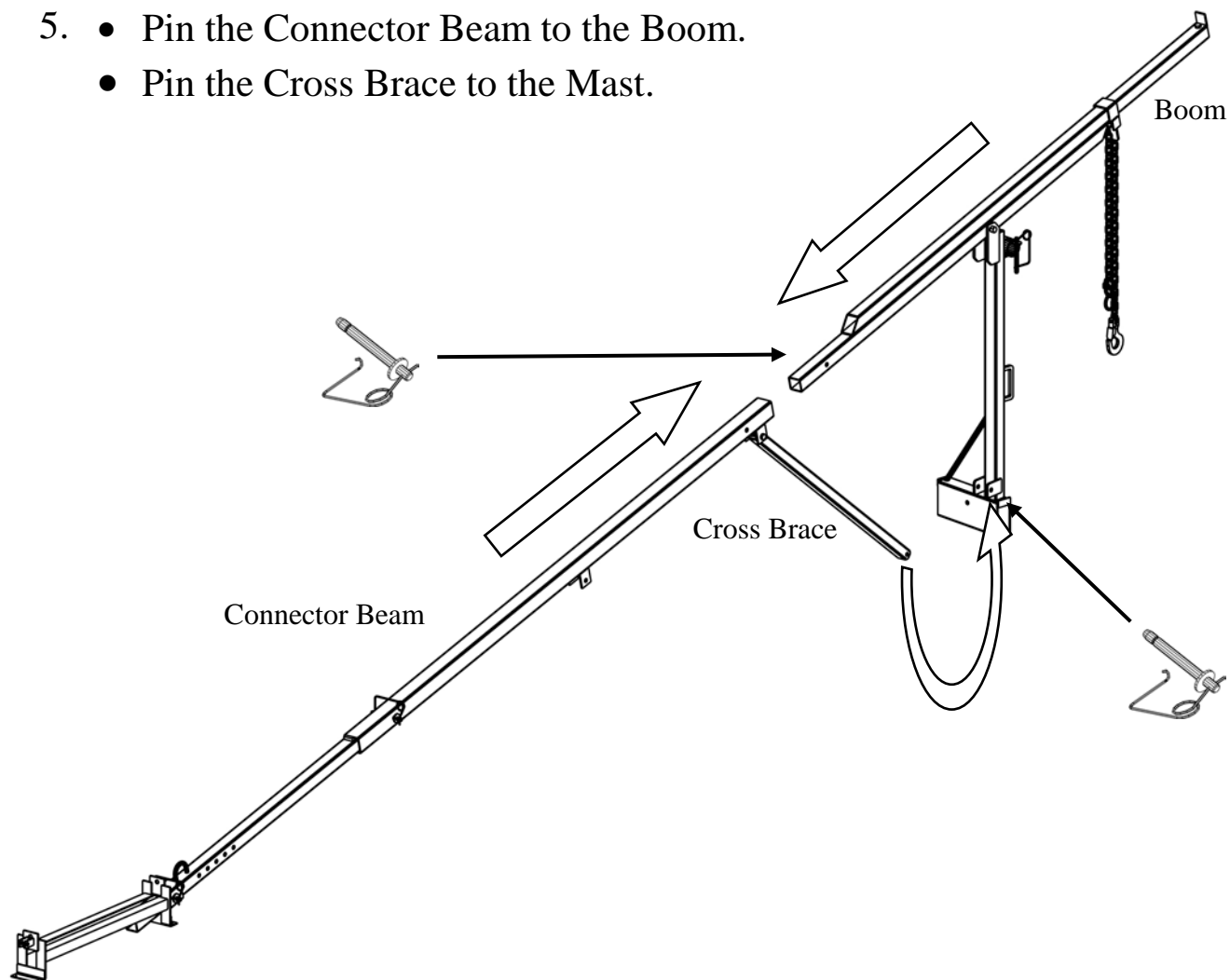
Step 3



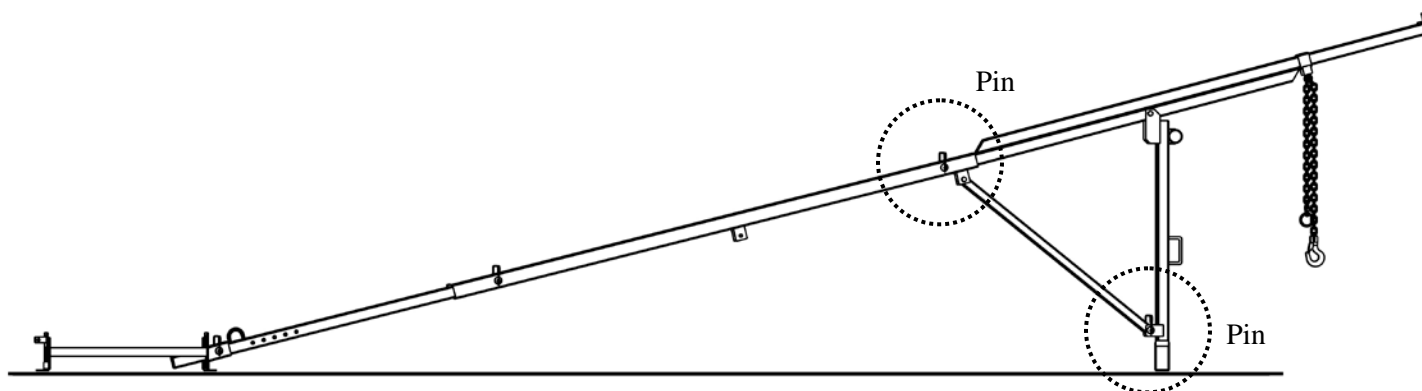
- 4.
- Hold a Mast in the upright position.
  - Unpin the Boom.
  - Rotate Boom as shown.

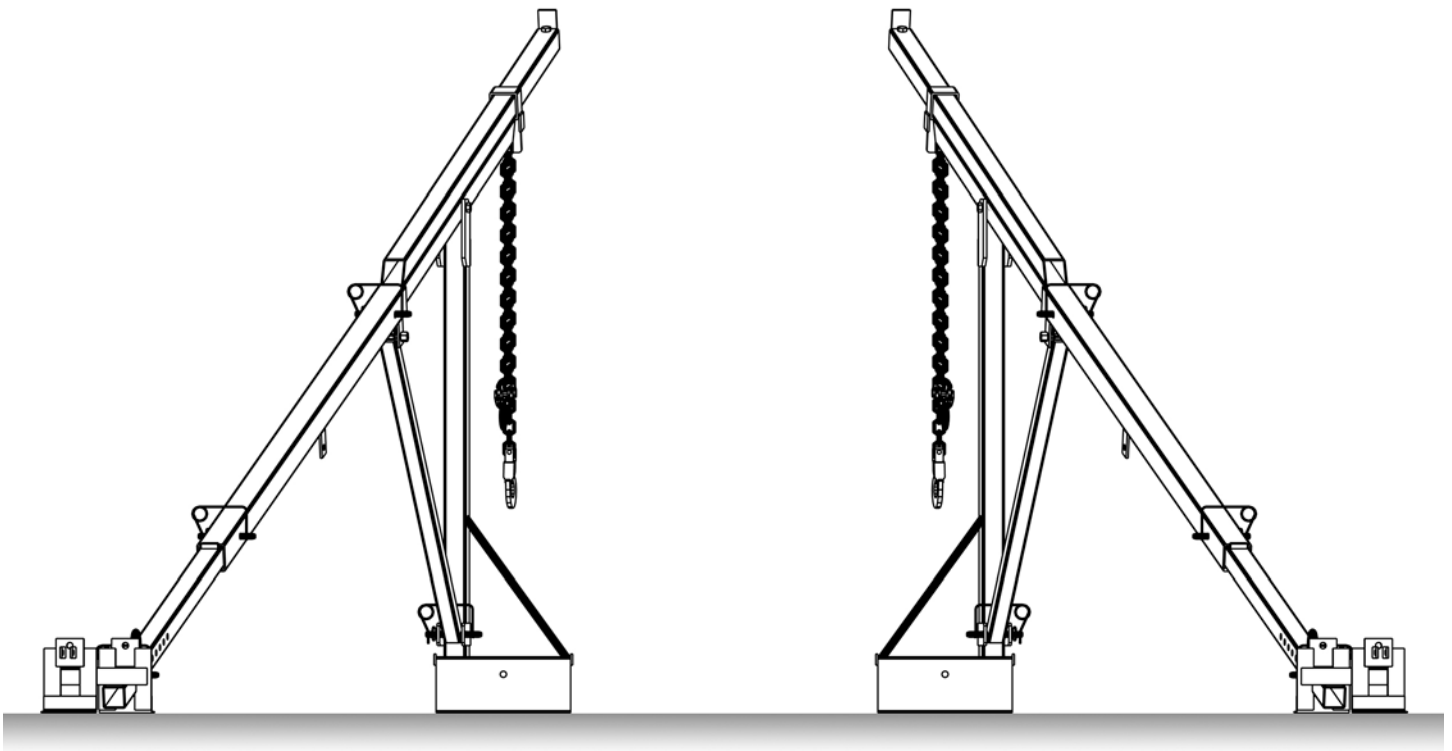


5. • Pin the Connector Beam to the Boom.  
• Pin the Cross Brace to the Mast.

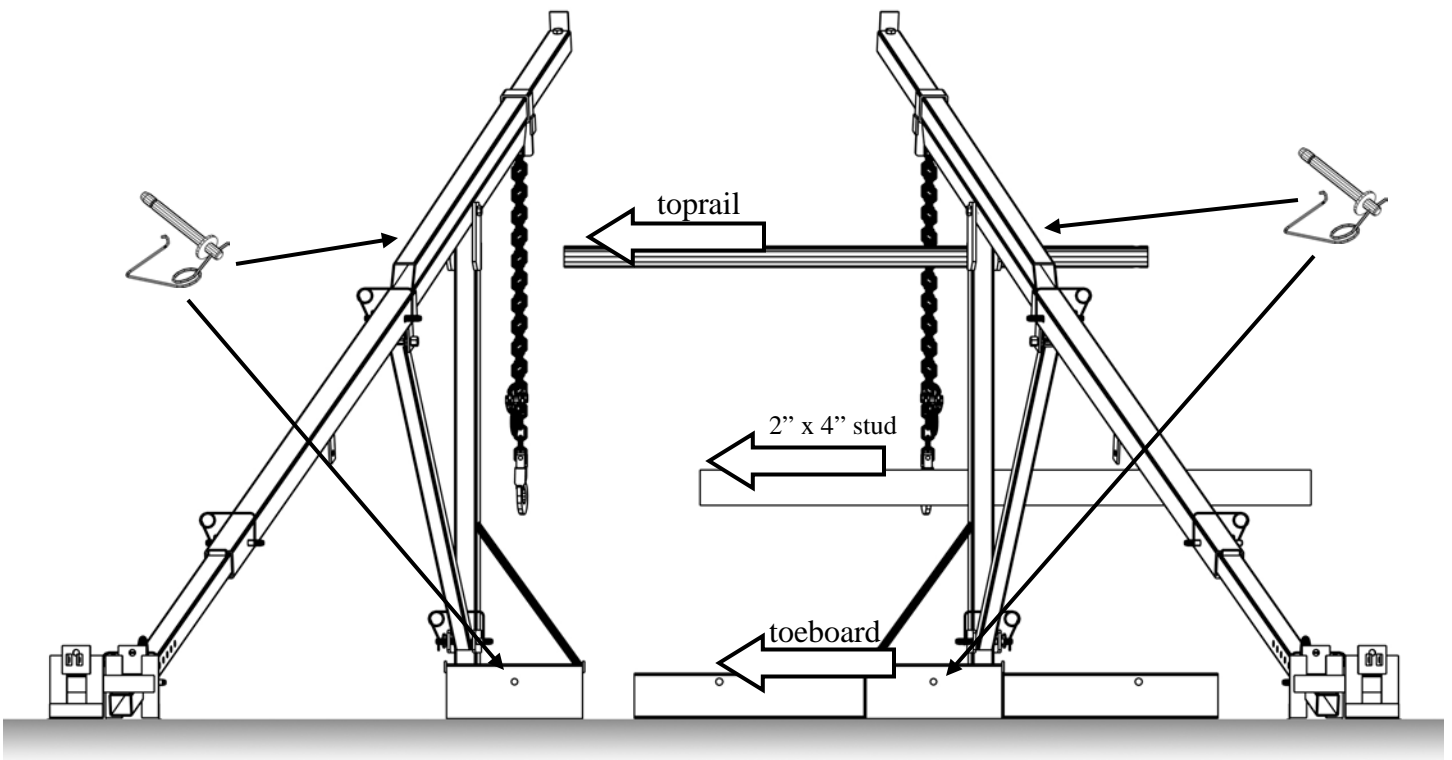


6. • We now have one half of the frame.  
• Build the other half: Repeat steps 1 through 5.





7. Place the two half-frames side-by-side.

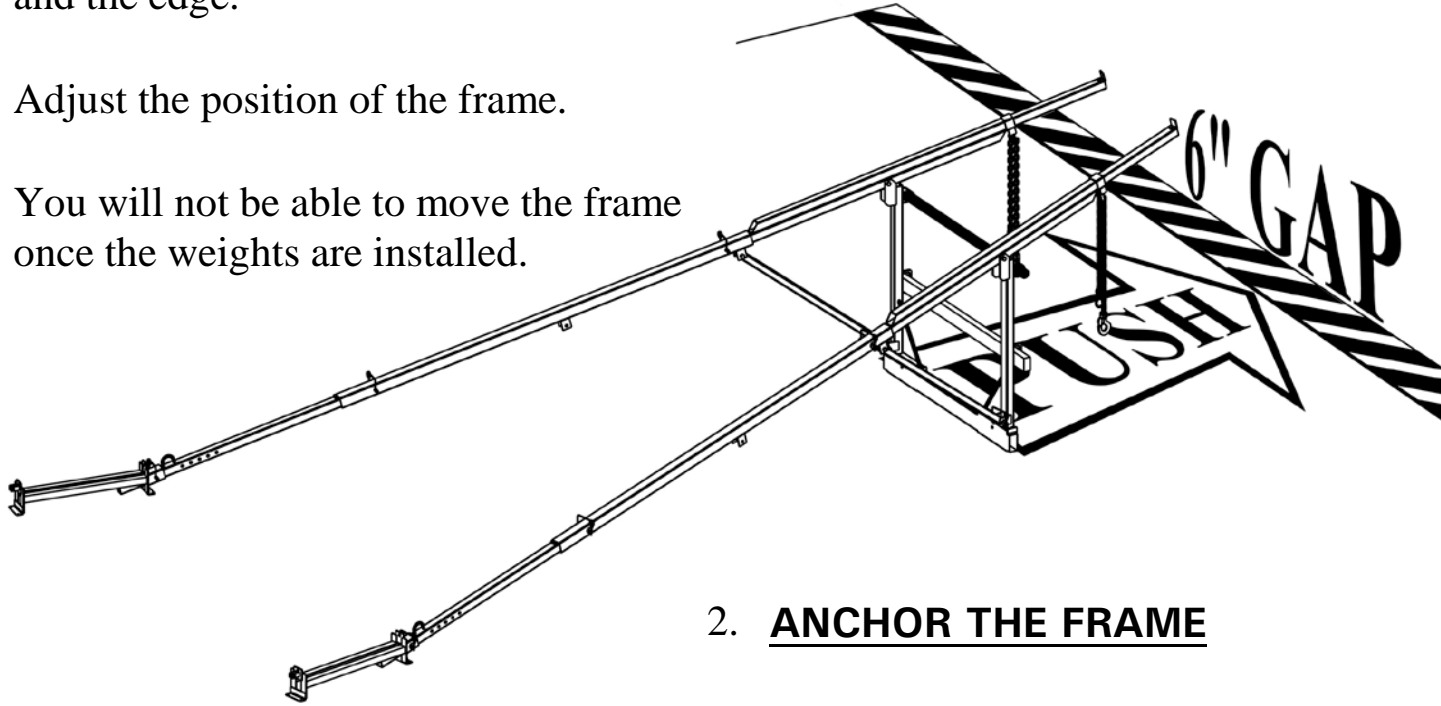


8. • Use the Toprail and Toeboard to join the half-frames.  
 • To prevent falls between the Toprail and Toeboard OSHA requires a Midrail.  
 • Meet this regulation by installing a 5 ft. long 2" x 4" wood stud between the masts.

## 12. POSITION, ANCHOR, & TIE-BACK THE FRAME

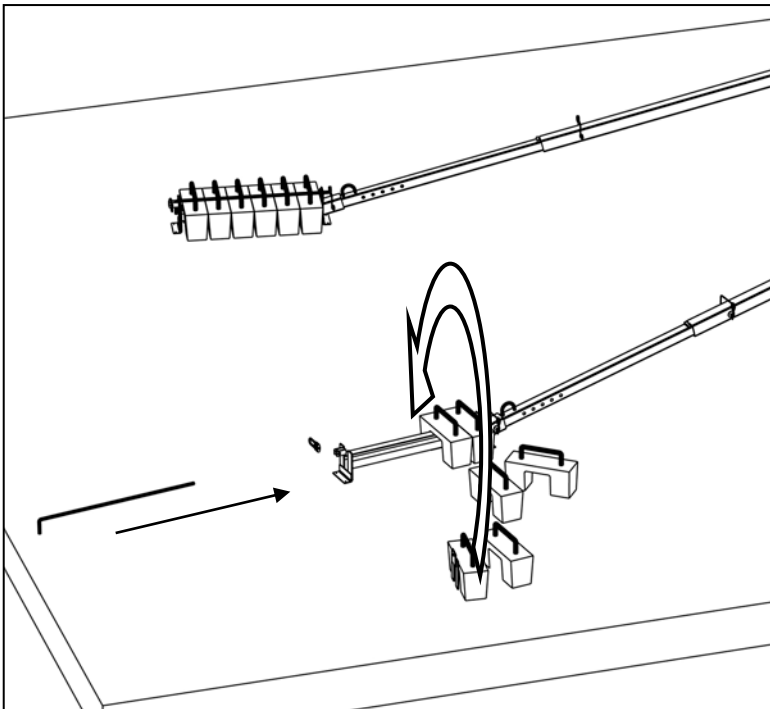
### 1. POSITION THE FRAME

- Shift the frame to the desired position near the roof, floor, or wall edge.
- Leave a 6" gap between the Toeboard and the edge.
- Adjust the position of the frame.
- You will not be able to move the frame once the weights are installed.



### 2. ANCHOR THE FRAME

- Place 6 counterweights in each weight carriage.
- In total there should be 12 cast iron weights (55 lb. each) on the hoist.
- Always install all of the weights.
- Pass the weight retaining rods through the handgrips.
- Use the 2 supplied padlocks to lock the retaining rods and prevent weight removal.



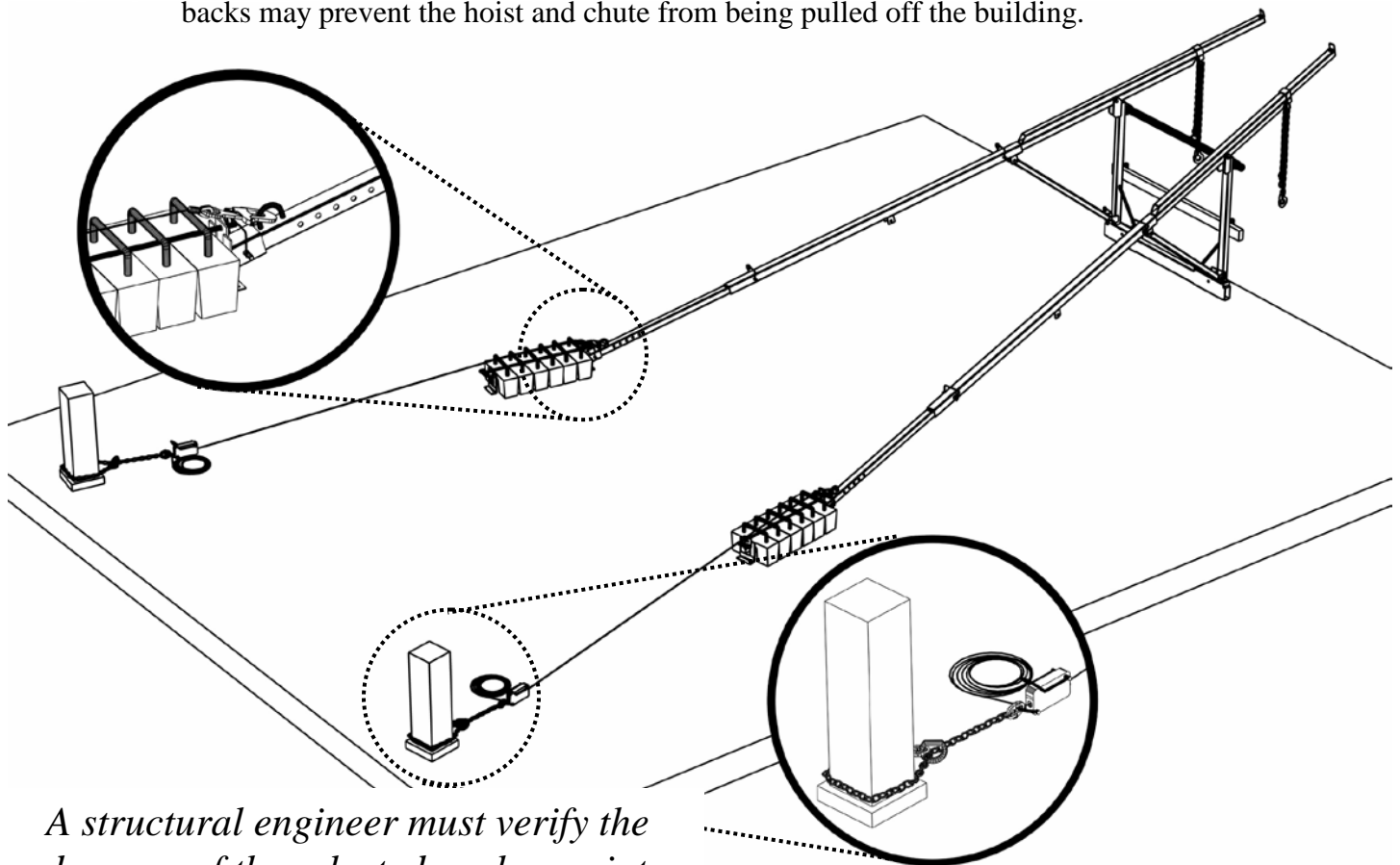
### 3. TIE-BACK THE FRAME

Secure the hoist frame to the building by attaching a length of 5/8" nylon rope or 5/16" wire rope to each of the tie loops located on the Weight Beams.

Affix these two tie-backs to suitable structural members of the building (portions of the building structure, and window cleaning anchors are usually adequate, while roof vents, air conditioners, and parapets are usually not adequate). Avoid tying or running the rope over any sharp surfaces. **DO NOT** tie back to anchors that will be used concurrently by personal fall arrest systems.

- **Nylon Rope:** install snug, using recognized safety knots (eg. figure eight).
- **Wire Rope:** install snug, using proper hooks and fittings.
- **Tie Back Kits:** are available from Superchute® for quicker & safer tie-backs.

Tie-backs provide back-up for worst-case situations. For example: if a blockage occurs in the chute and the weight of the chute increases, the tie-backs may prevent the hoist and chute from being pulled off the building.



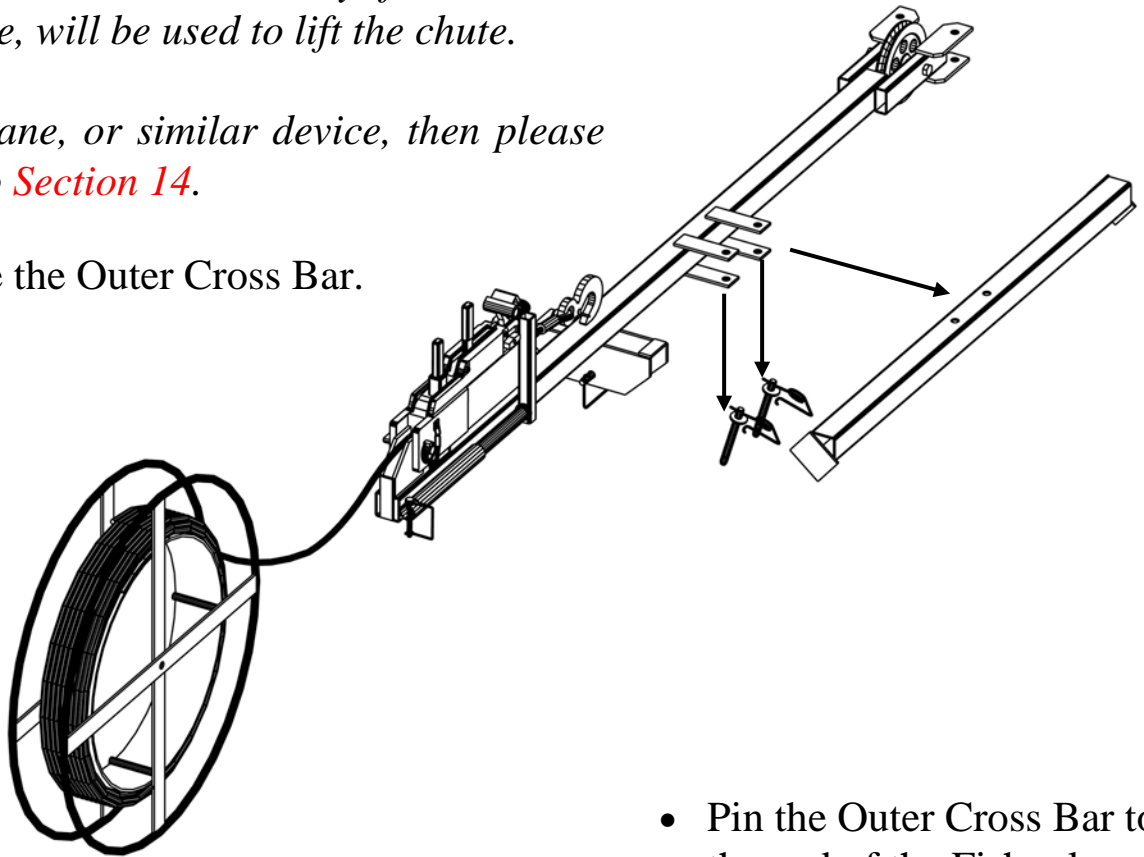
*A structural engineer must verify the adequacy of the selected anchor points.*

### 13. PREPARE & INSTALL THE FISHPOLE (if applicable)

*The Fishpole will be unnecessary if a crane, or similar device, will be used to lift the chute.*

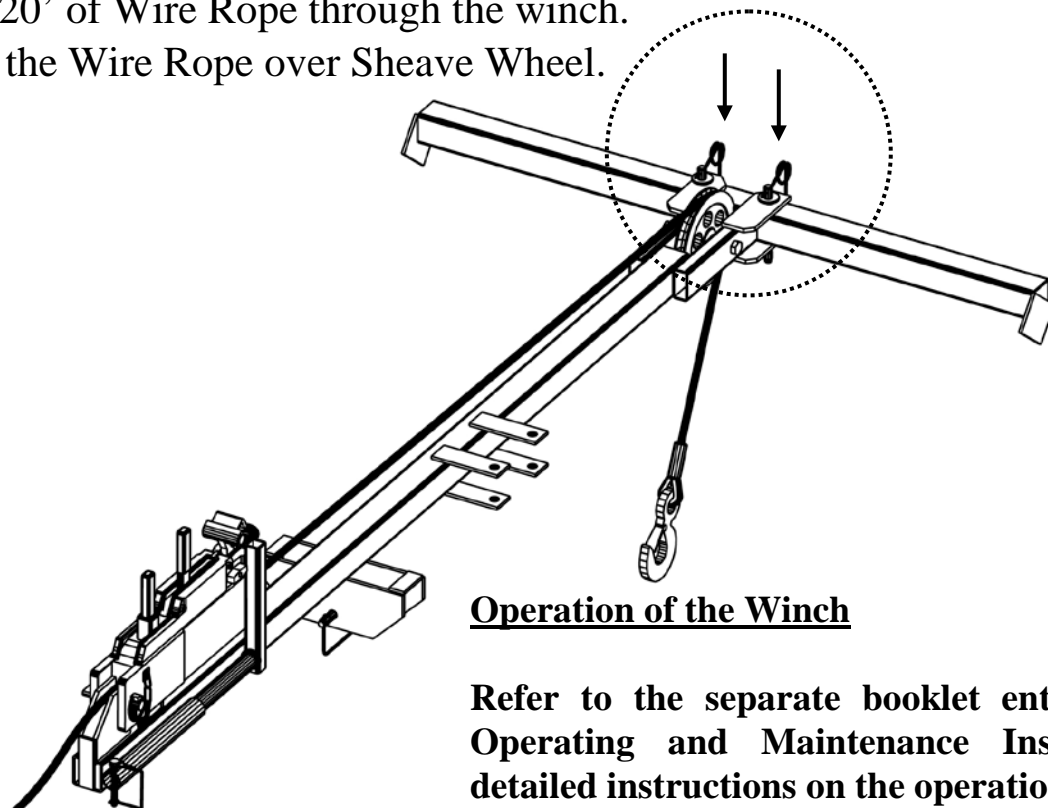
*If using a crane, or similar device, then please go directly to **Section 14**.*

- Release the Outer Cross Bar.



- Pull 20' of Wire Rope through the winch.
- Pass the Wire Rope over Sheave Wheel.

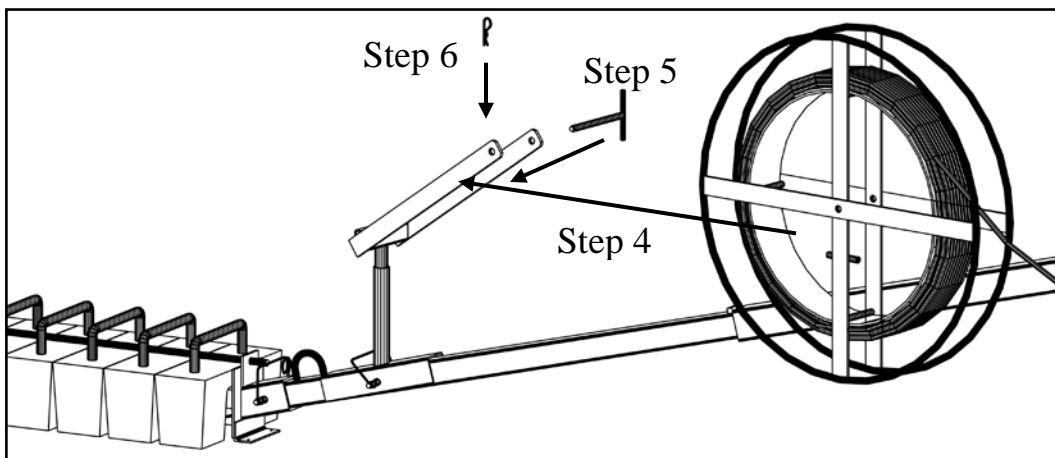
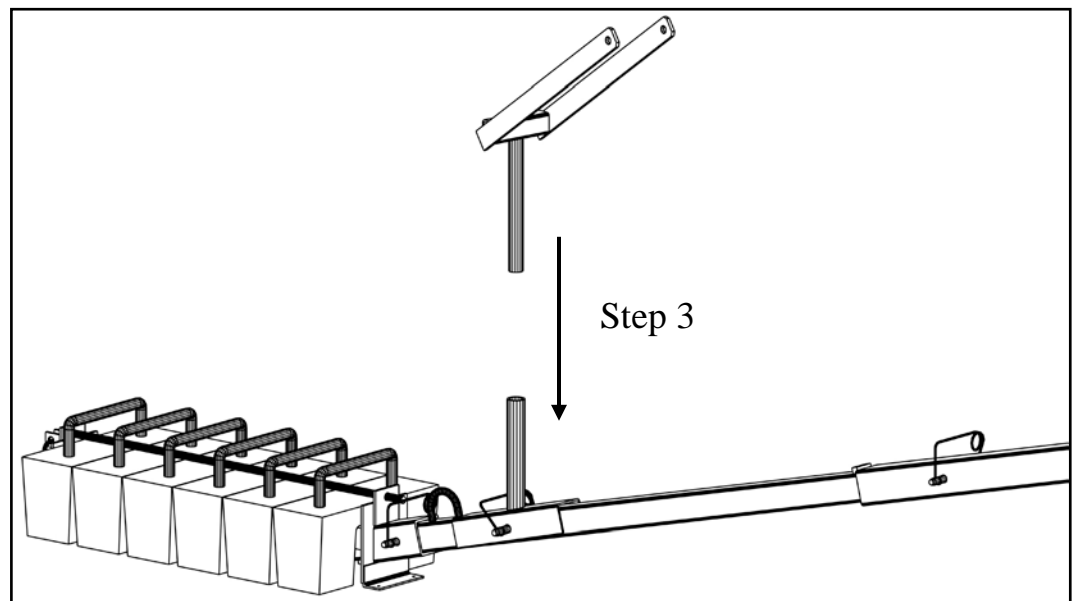
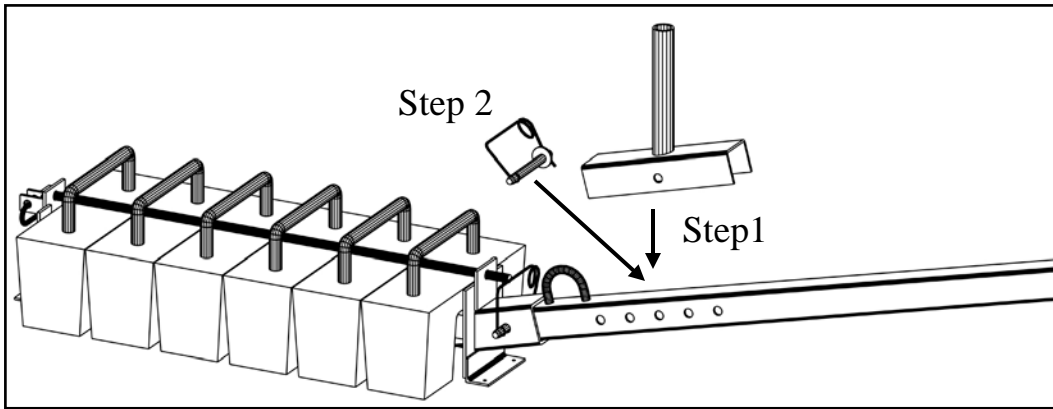
- Pin the Outer Cross Bar to the end of the Fishpole.



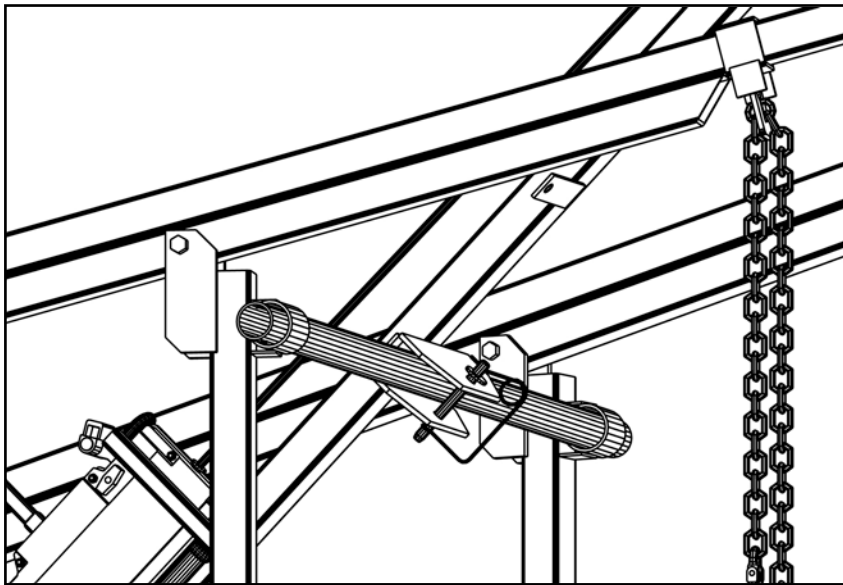
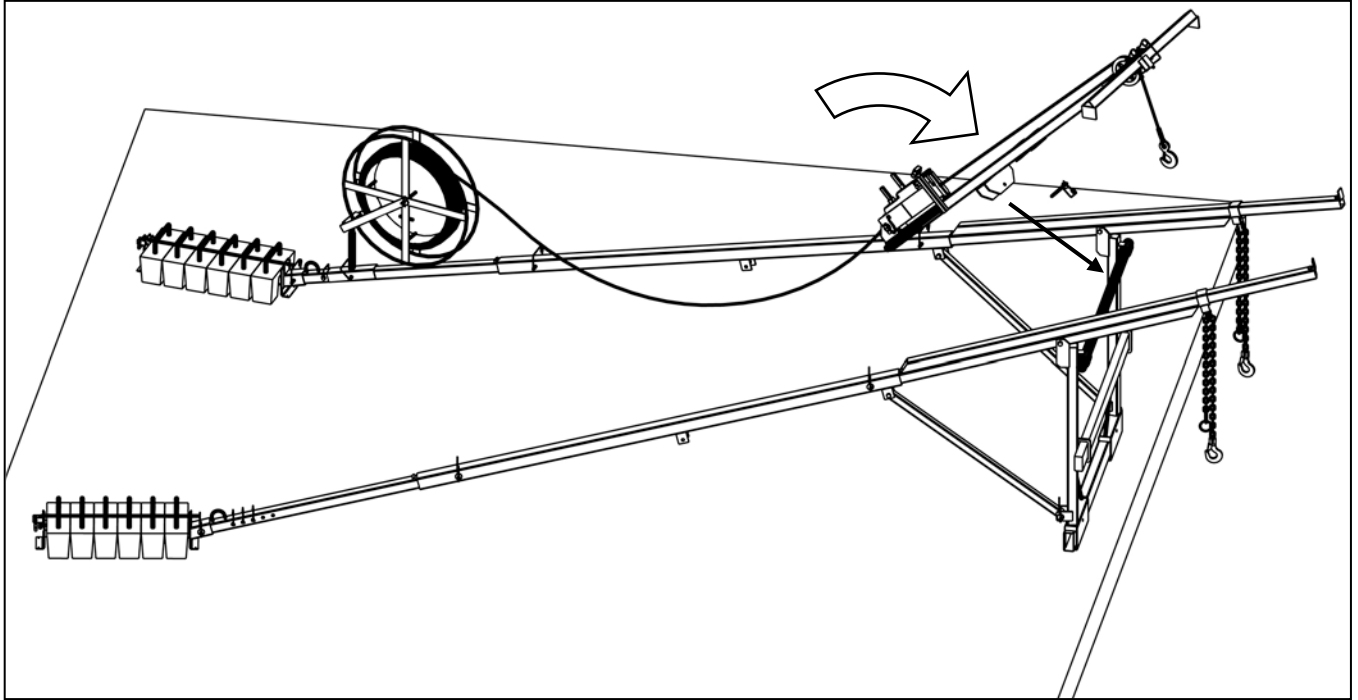
#### Operation of the Winch

Refer to the separate booklet entitled “Tirfor - Operating and Maintenance Instructions” for detailed instructions on the operation of the winch.

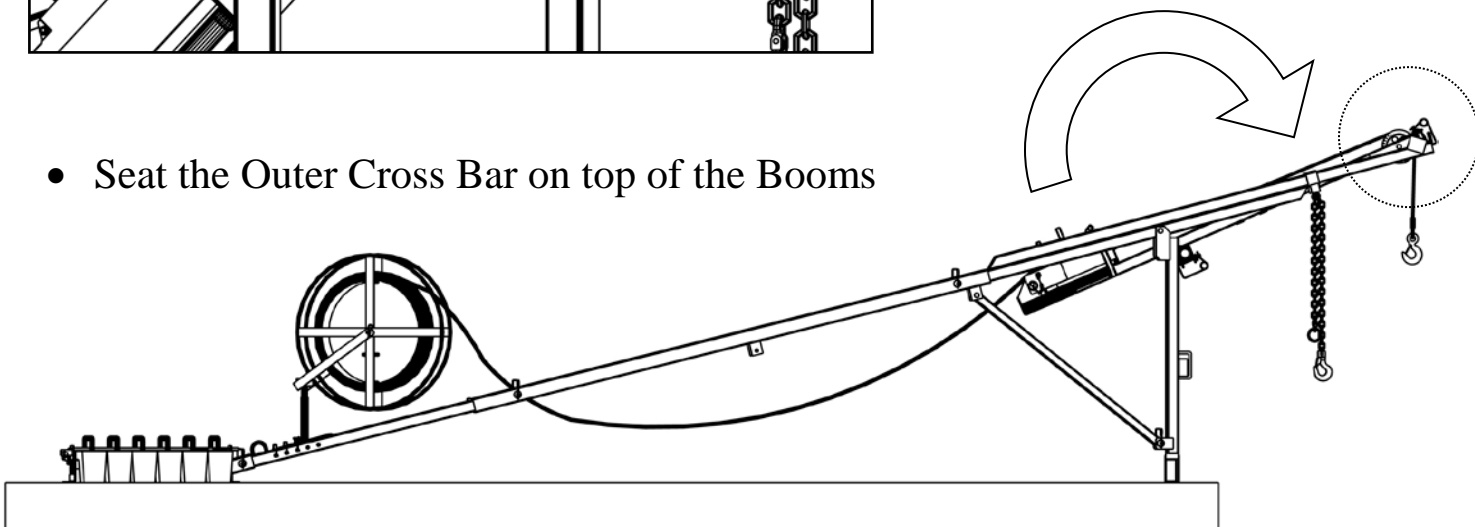
- Install the Wire Reeler



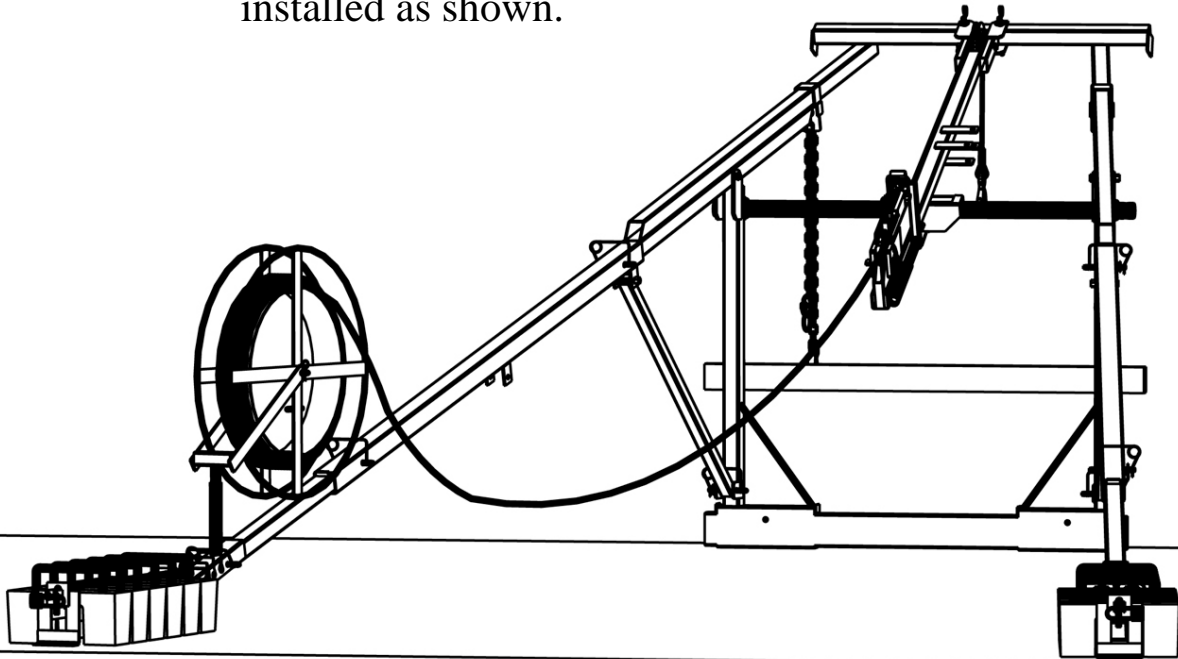
## Pin the Fishpole to the Toprail



- Seat the Outer Cross Bar on top of the Booms



- The Fishpole is installed as shown.



- Lower a few feet of cable. As the cable unspools, check it for wear and tear. If it is frayed or kinked, postpone the installation and order a new cable from Superchute Ltd.
- Never substitute the cable for another size or strand design.

## **Winch Operation**

### **Winch Handle**

A pin holds the handle in its storage tube.

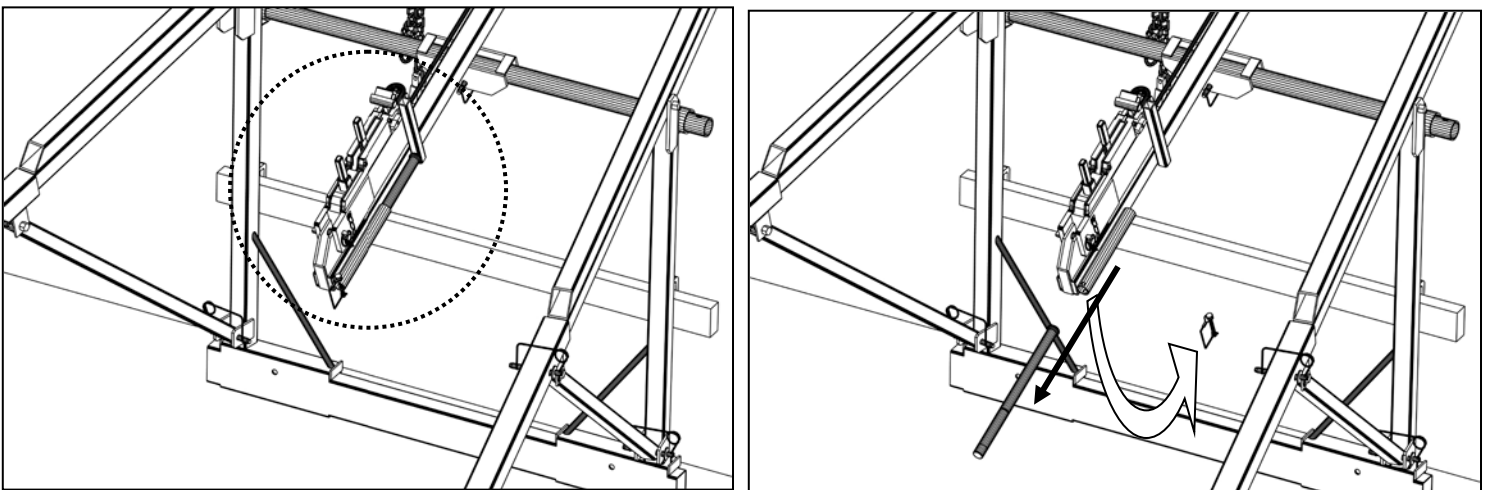
### **Warning!**

When the pin is removed the handle will quickly slide out of the Storage Tube.

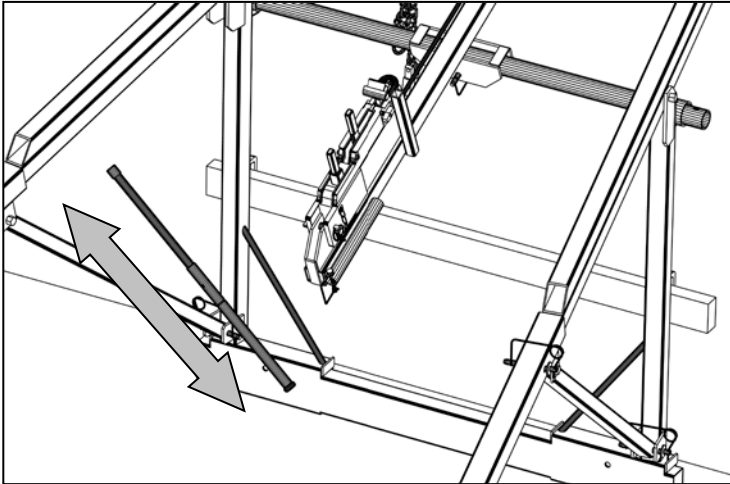
The falling handle could land on your toes!

Remove the pin & be ready to catch the handle.

Remove the Winch Handle from the Storage Tube

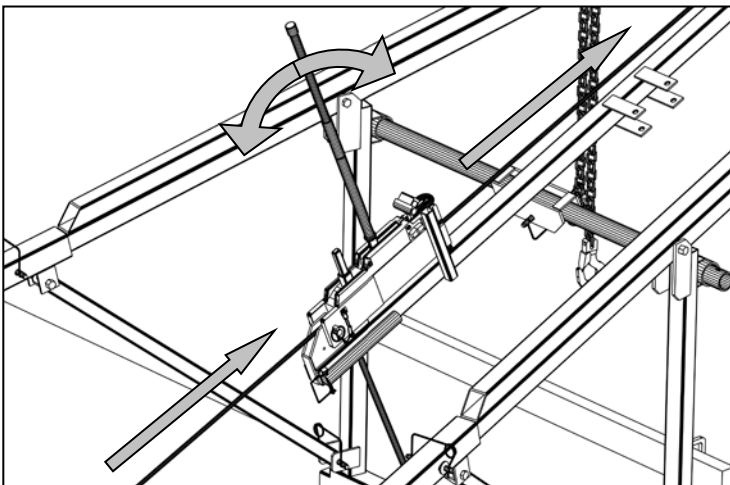
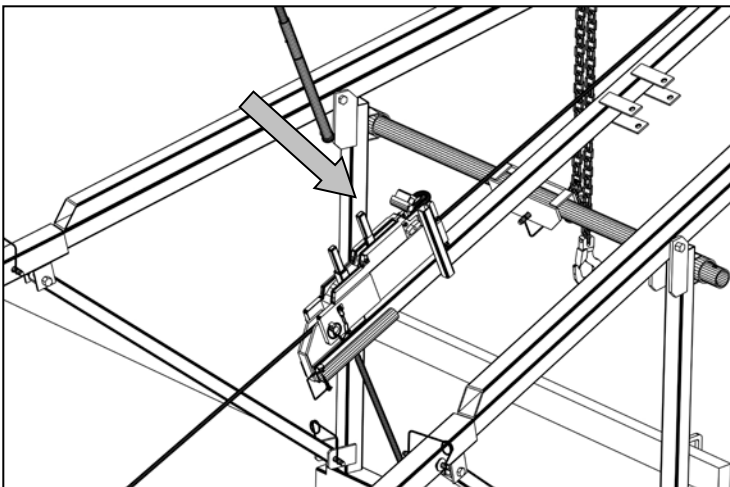


The handle is telescopic.



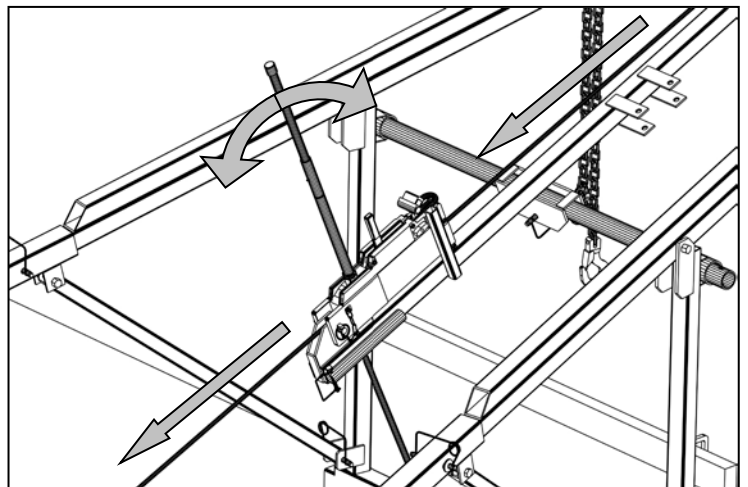
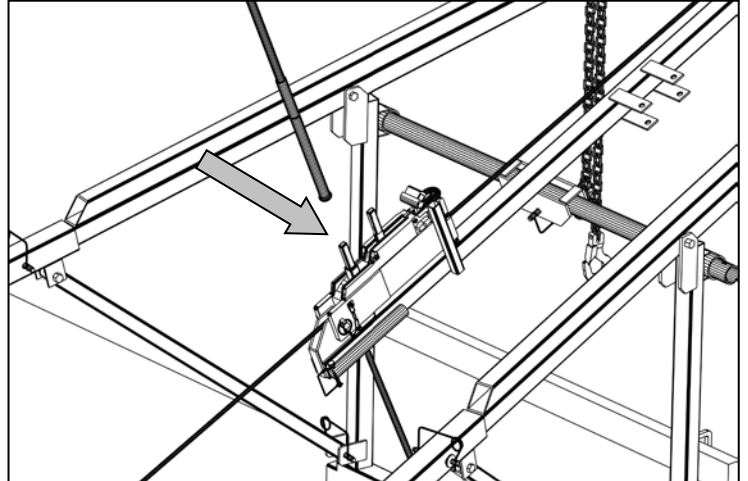
### **To Pay Out Wire Rope**

- Attach handle to Forward Operating Lever
- Move handle back and forth
- The winch will pay out the wire rope



### **To Take In Wire Rope**

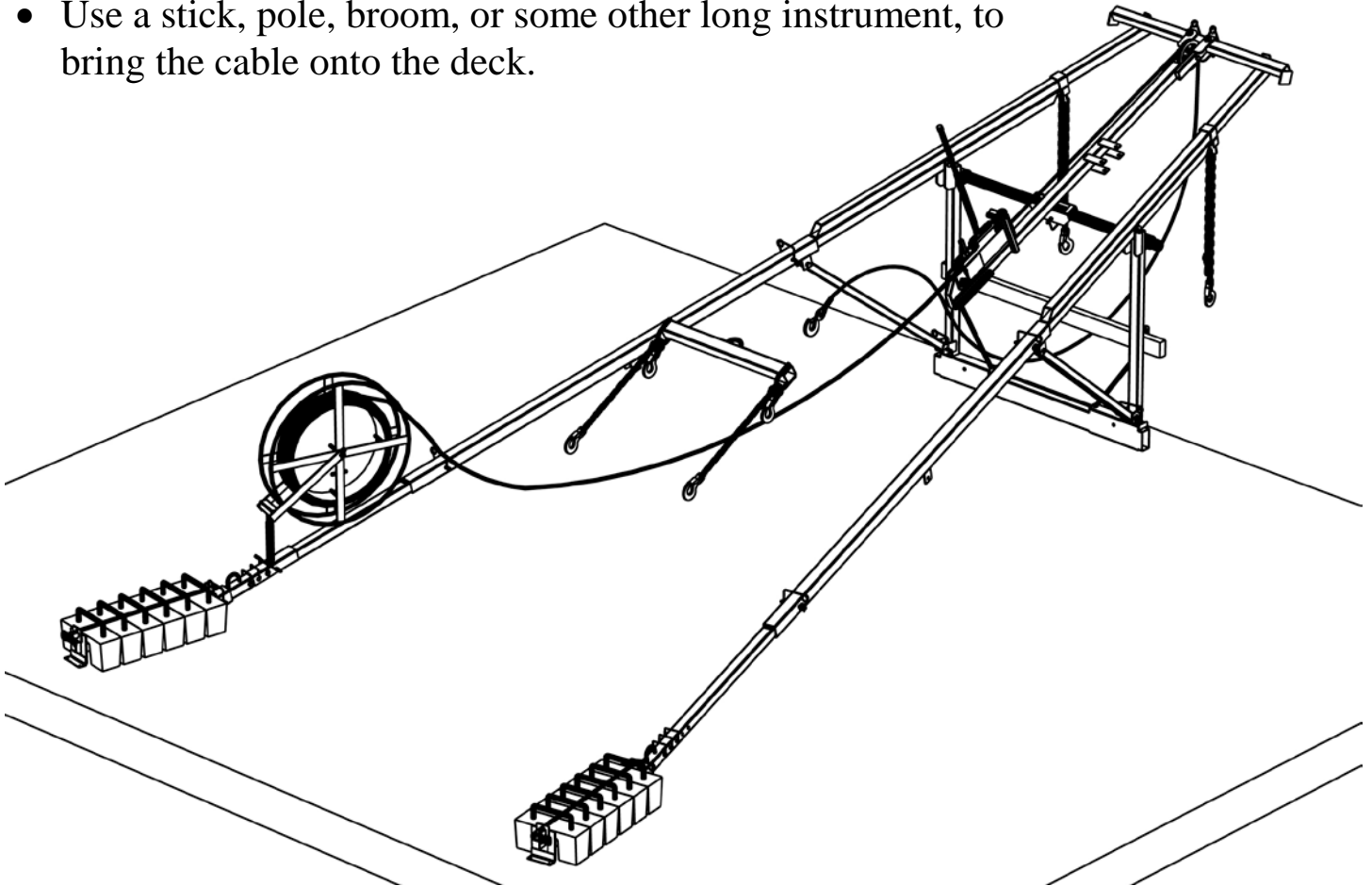
- Attach handle to Reverse Operating Lever
- Move handle back and forth
- The winch will take in the wire rope



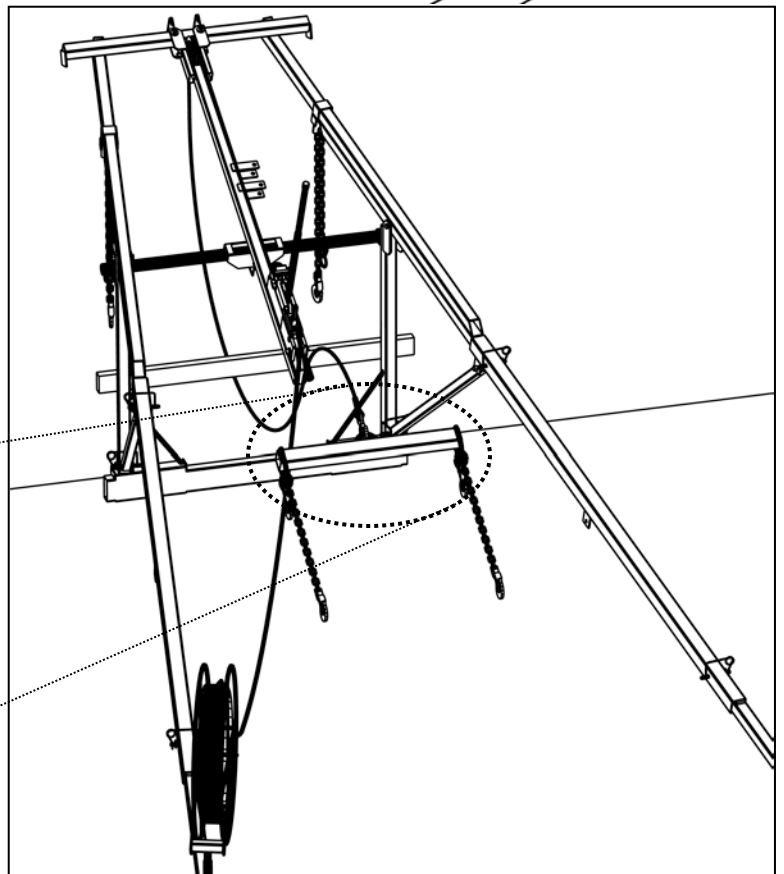
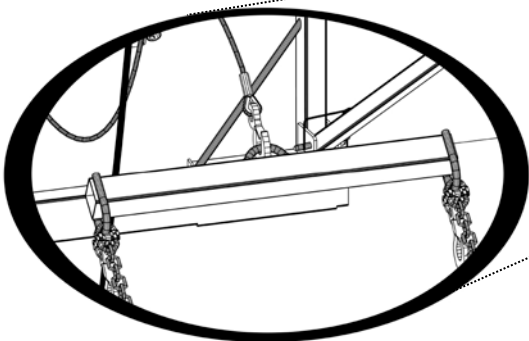
### **Operation of the Winch**

Refer to the separate booklet entitled “Tirfor - Operating and Maintenance Instructions” for detailed instructions on the operation of the winch.

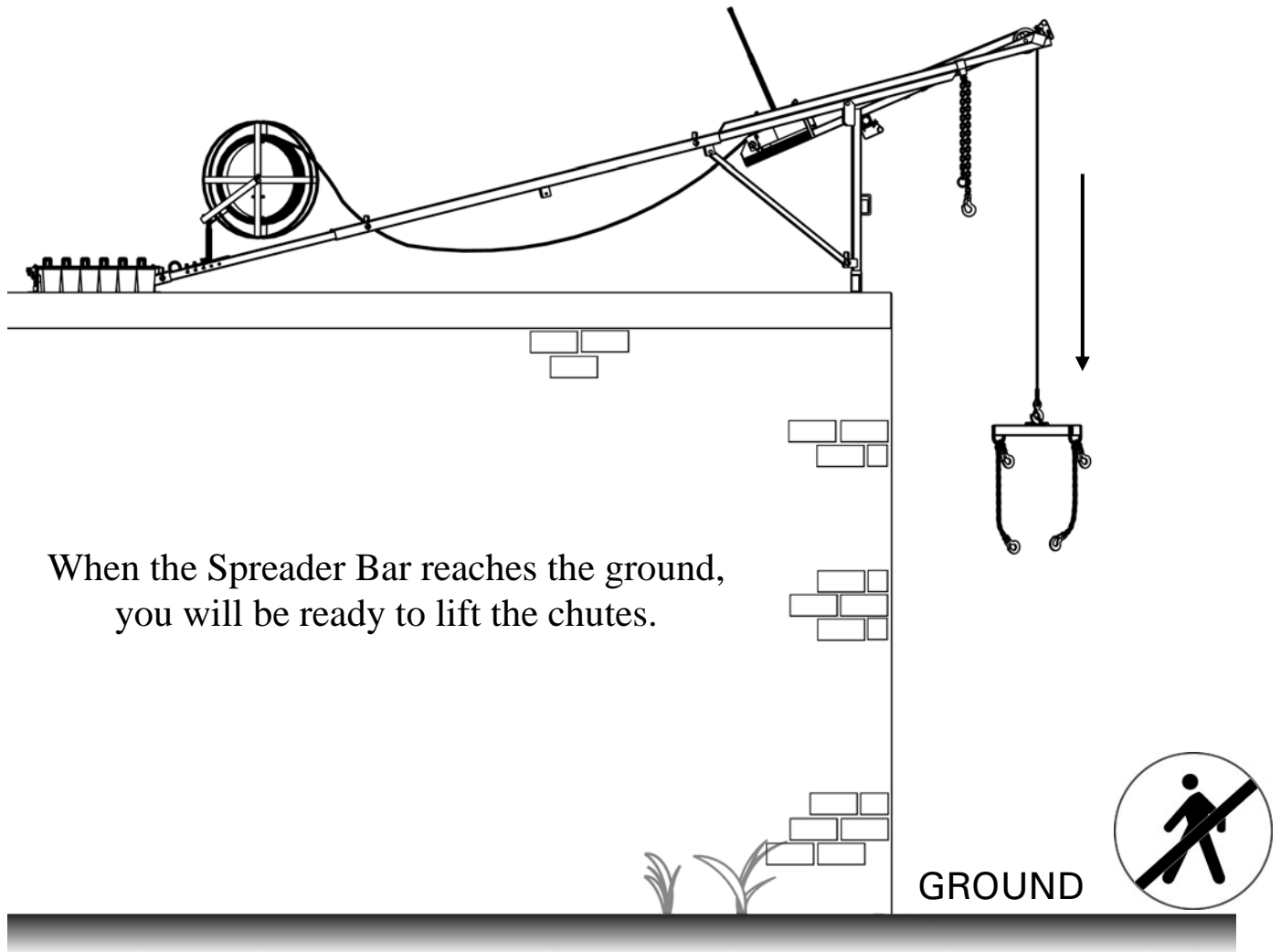
- Use a stick, pole, broom, or some other long instrument, to bring the cable onto the deck.



Attach the cable's hook to the Spreader Bar.



- Lower the Spreader Bar to the ground.
- Continue checking cable for wear & tear.

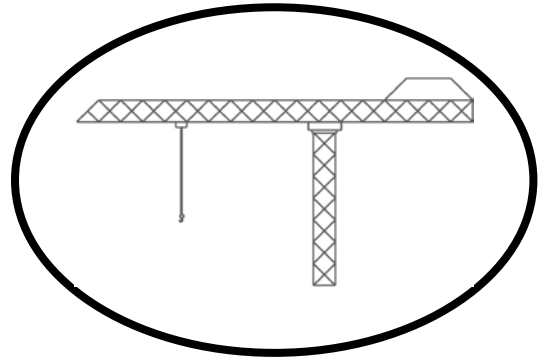


## WARNING

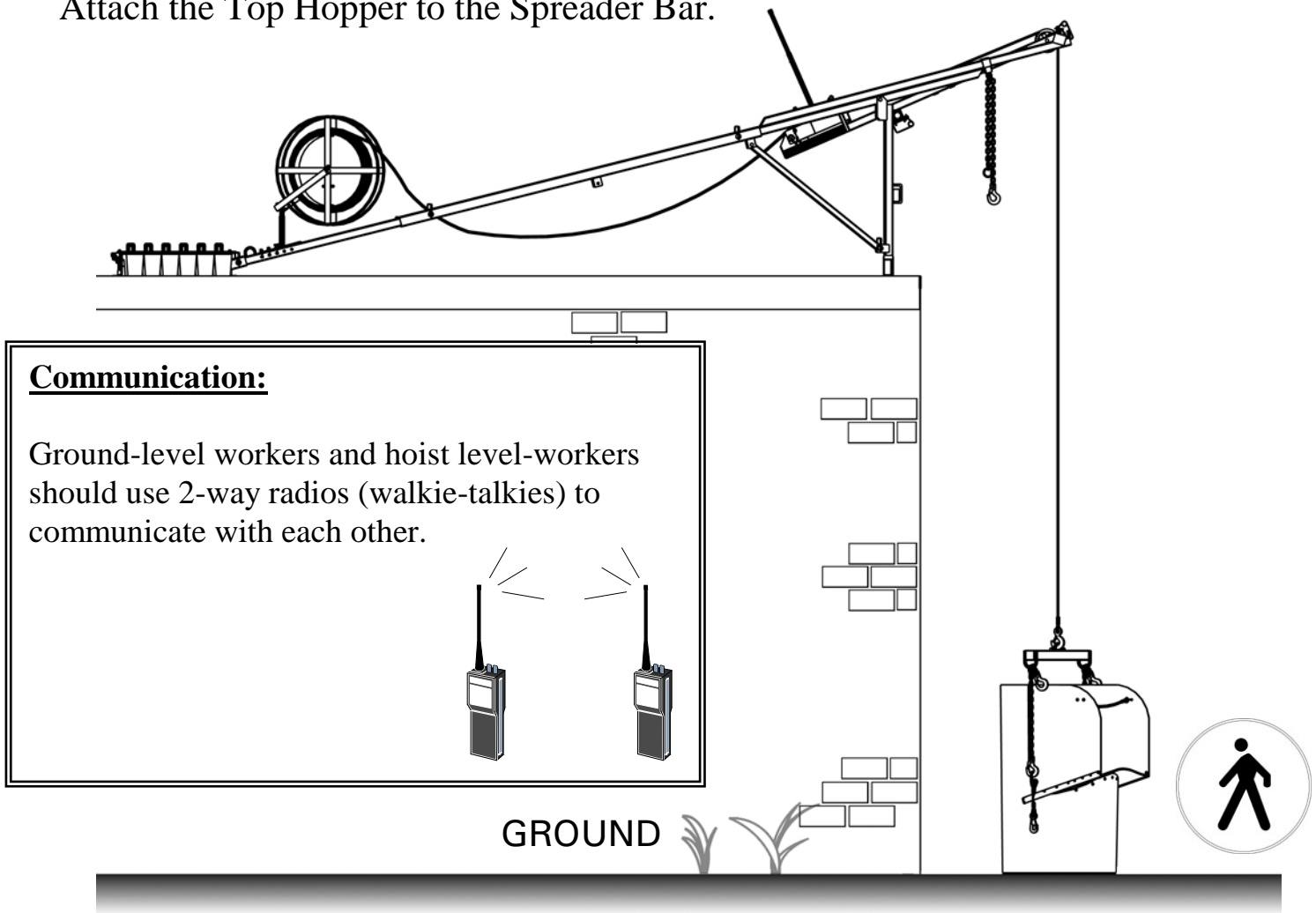
- The Spreader Bar can descend quickly.
- If the descending Spreader Bar were to hit a worker or bystander it could seriously injure or kill.
- Ensure the area below the hoist is clear of workers and bystanders while the Spreader Bar is descending.

## 14. HOIST THE CHUTES INTO PLACE

*Although the following sketches show the Fishpole in use, other lifting devices, such as cranes, material hoists, or boom lifts, may be appropriate as long as they can safely manage the chute load. All lifting devices require the procedure shown in this section.*

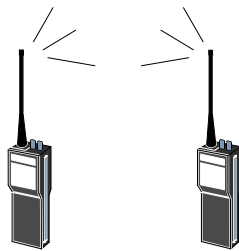


Attach the Top Hopper to the Spreader Bar.



### Communication:

Ground-level workers and hoist level-workers should use 2-way radios (walkie-talkies) to communicate with each other.



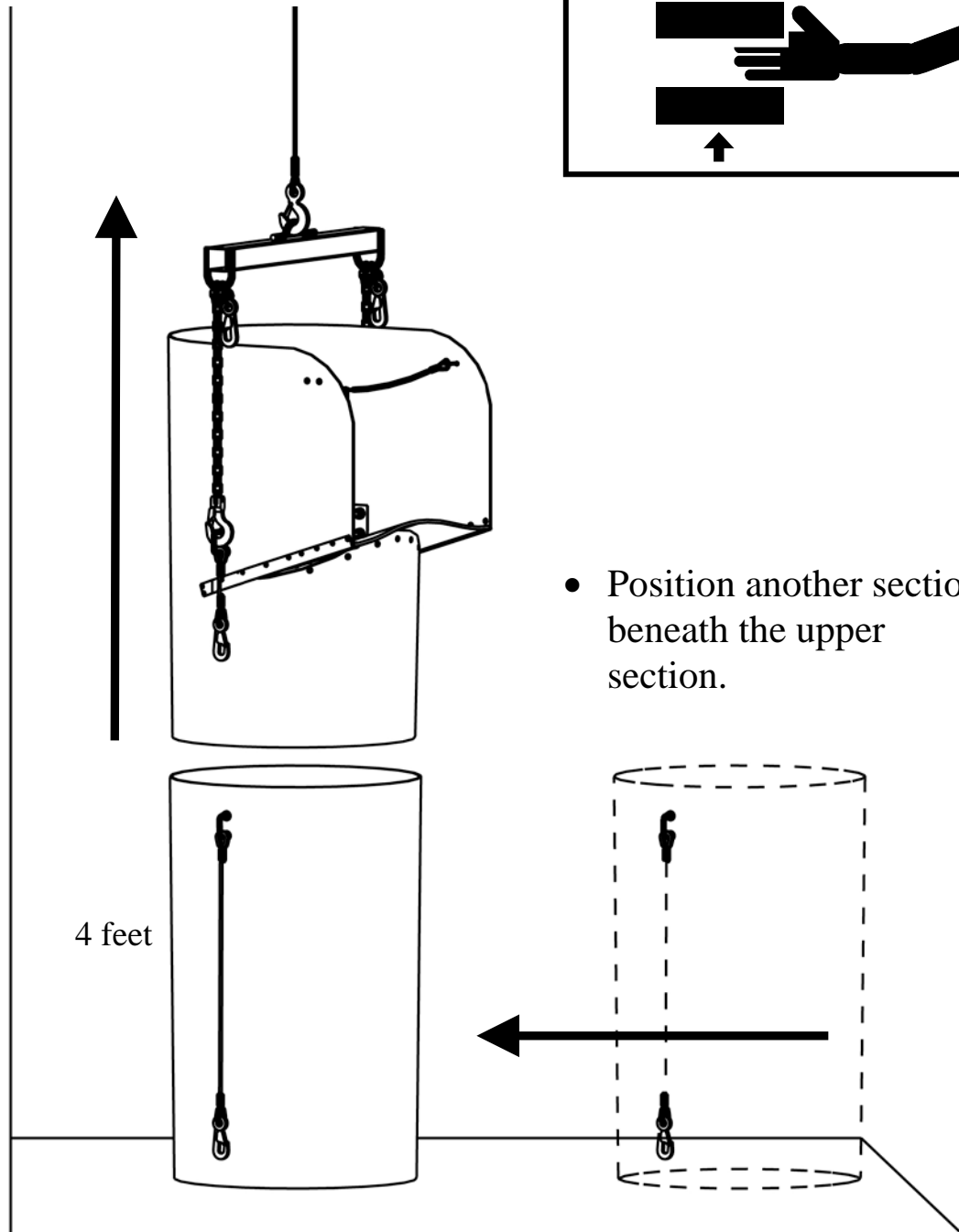
GROUND



# WARNING

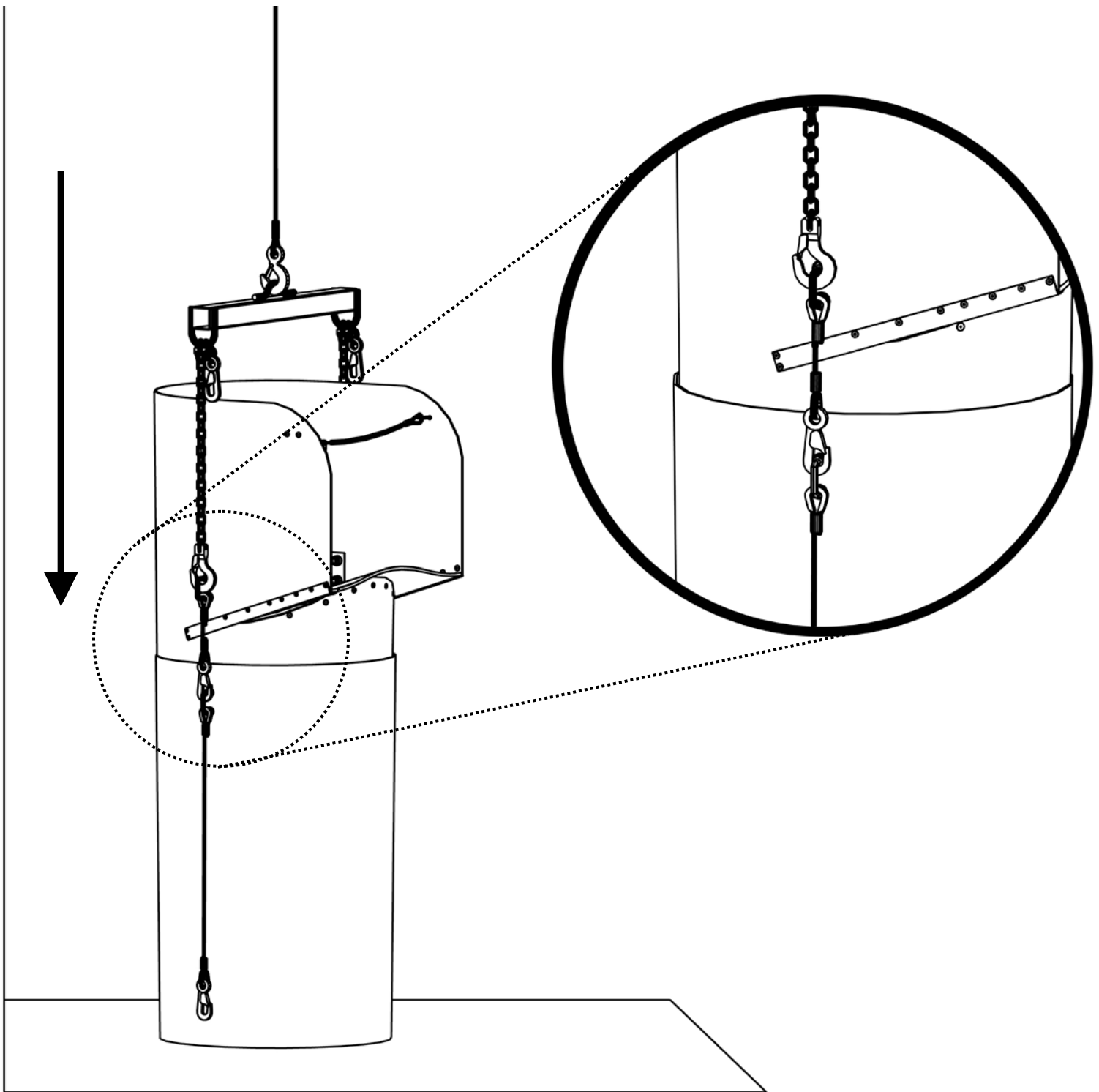
- GROUND WORKERS MUST WEAR HARDHATS

- Raise the section 4 feet.



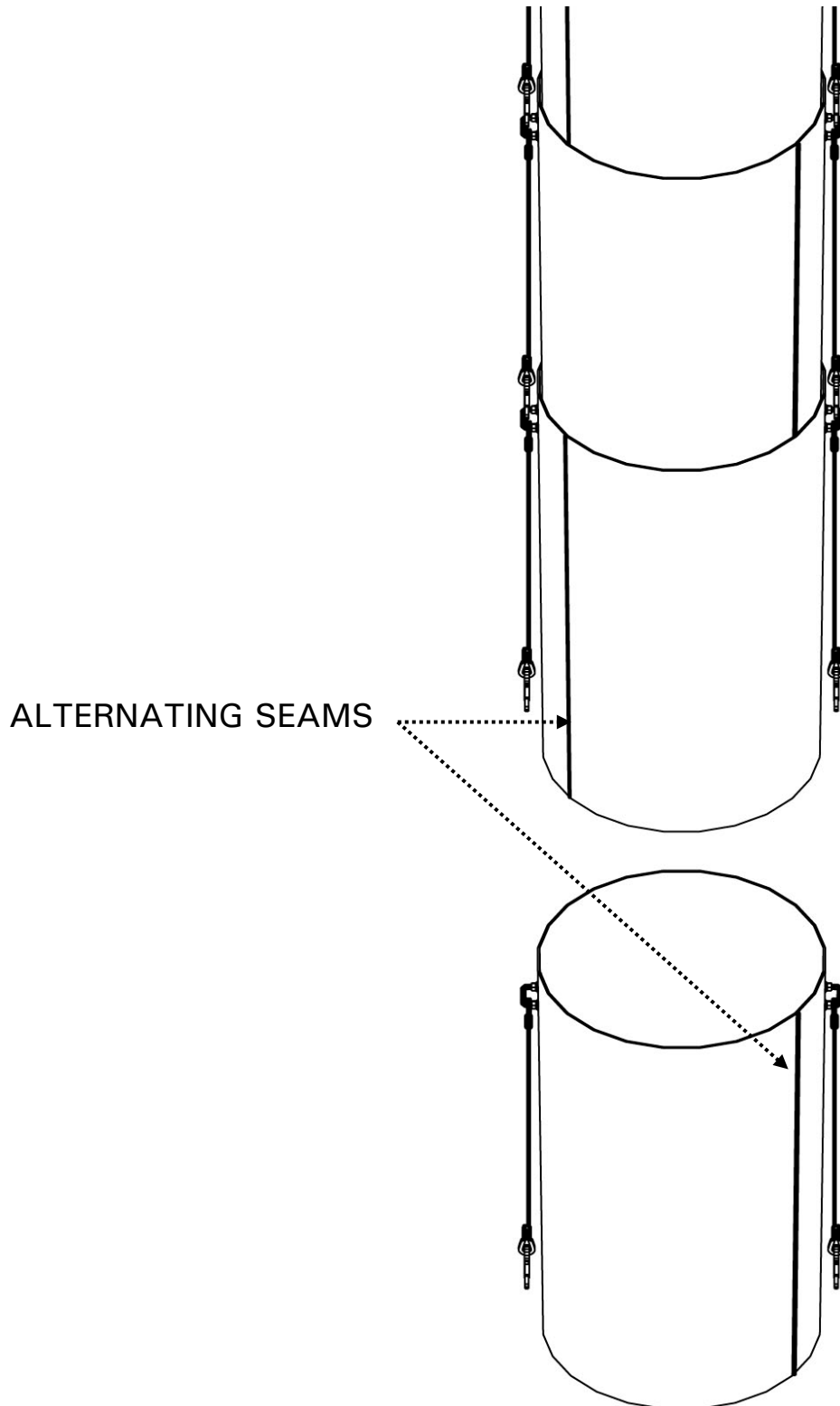
- Position another section beneath the upper section.

- Lower the suspended section into the section beneath it.
- Connect the two sections with the upper section's cable assemblies.

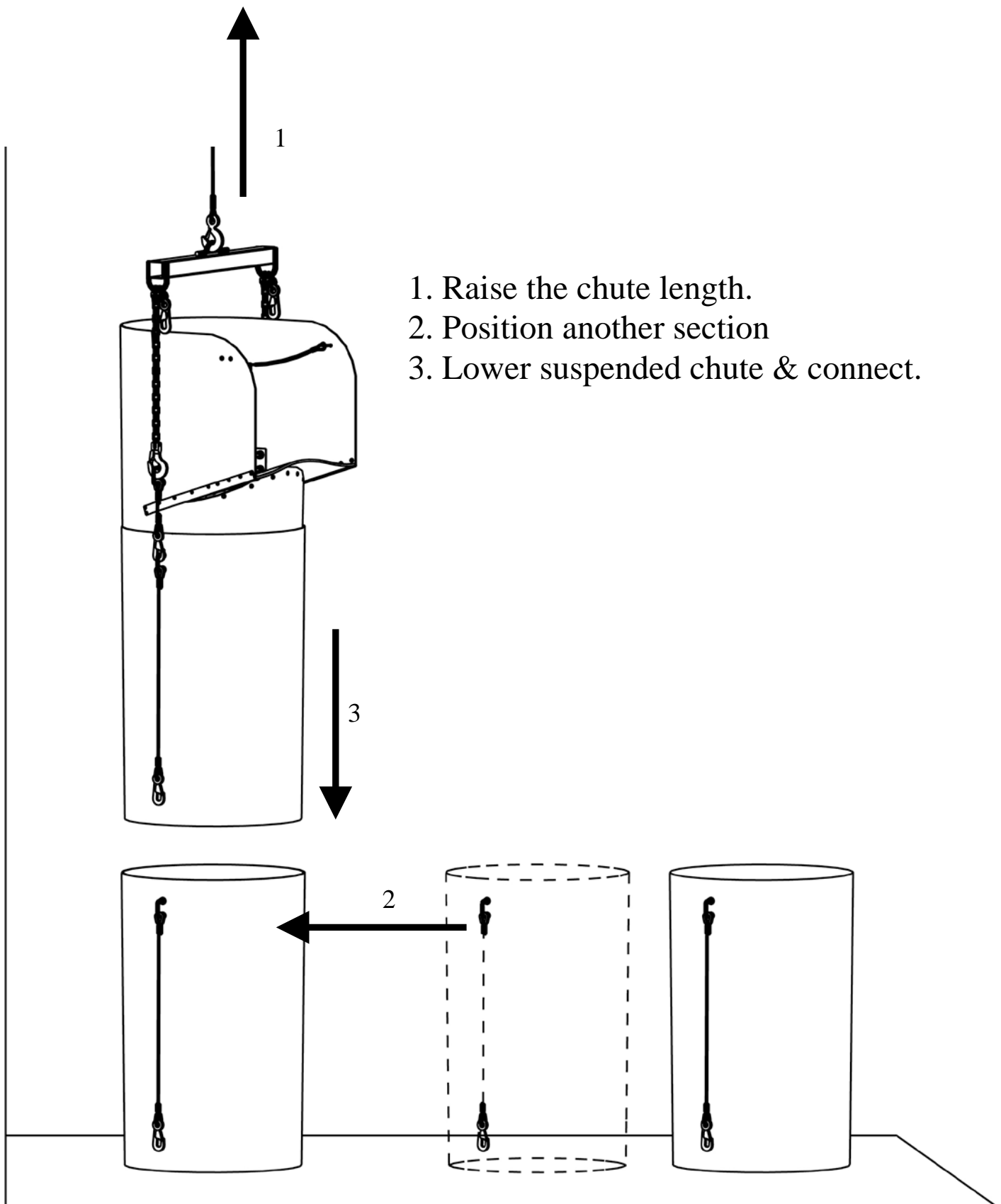


## ALTERNATE THE SEAMS

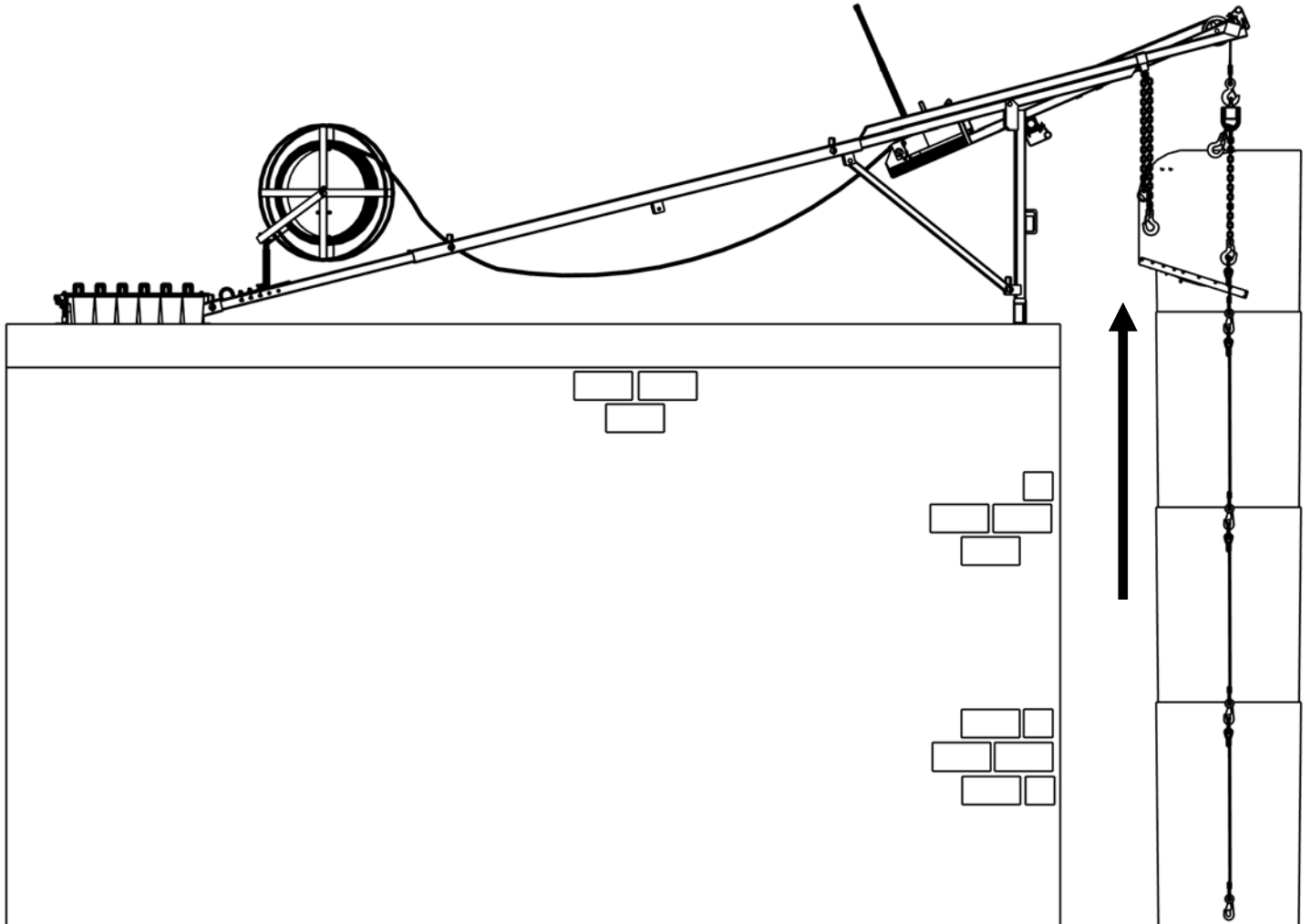
As you add Regular sections, arrange them so that the **plastic weld seams** or **Wraparound® clasp seams** alternate from side to side, as depicted in the sketch below. Alternating the seams from side to side will help the chute hang straight.



Repeat the following instructions until the Top Hopper arrives at the hoist level:



Repeat the last step until the Top Hopper arrives at the hoist level.

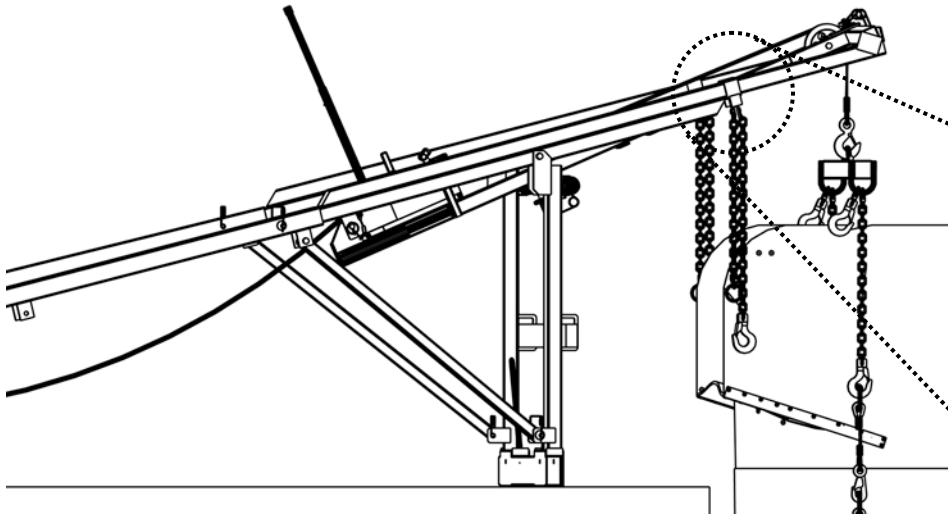


## WARNING

- The SC-905-cb has a Working Load Limit of 900 lb. (It is designed to safely lift, support, and lower a chute load weighing up to 900 lb).
- The hoist frame and/or Fishpole may fail if more than 900 lb. is applied.
- A falling chute system can seriously injure or kill.
- Do not overload the hoist frame or the Fishpole.
- Use the information in **Sections 7 & 8** to calculate the maximum number of Superchute® sections you can safely lift, suspend, & lower.

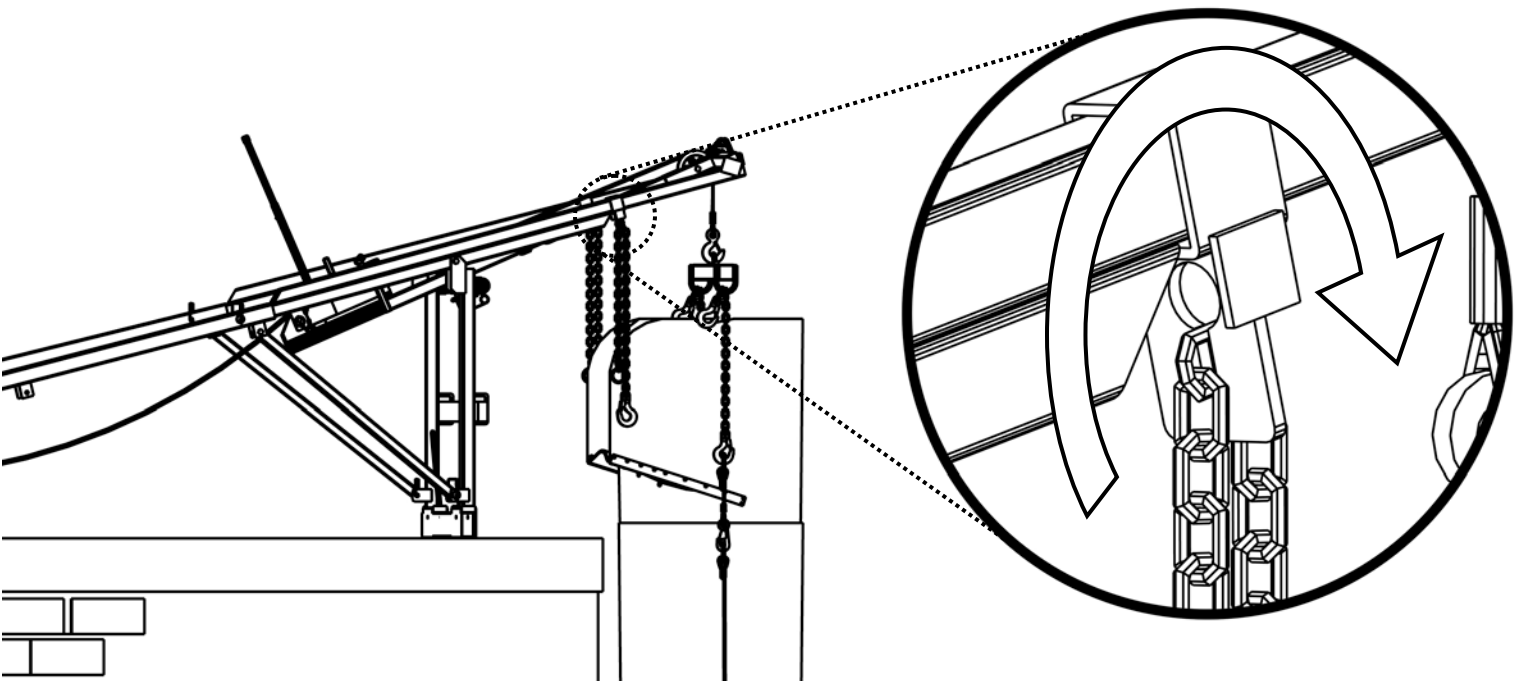
## 15. TRANSFER THE CHUTE LOAD FROM THE LIFTING DEVICE TO THE BOOM CHAINS

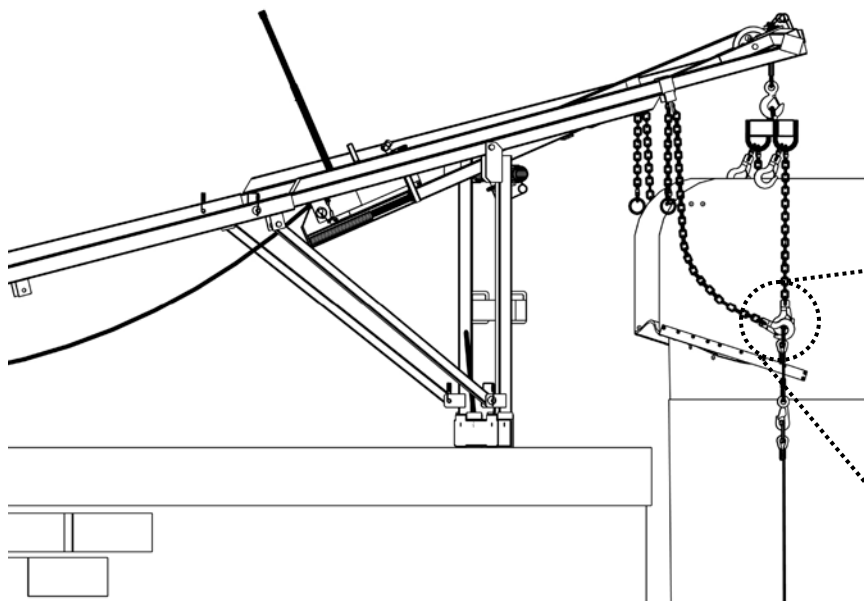
*Although the following sketches show the Fishpole in use, other lifting devices, such as cranes, material hoists, or boom lifts, may be appropriate as long as they can safely manage the chute load. All lifting devices require the procedure shown in this section.*



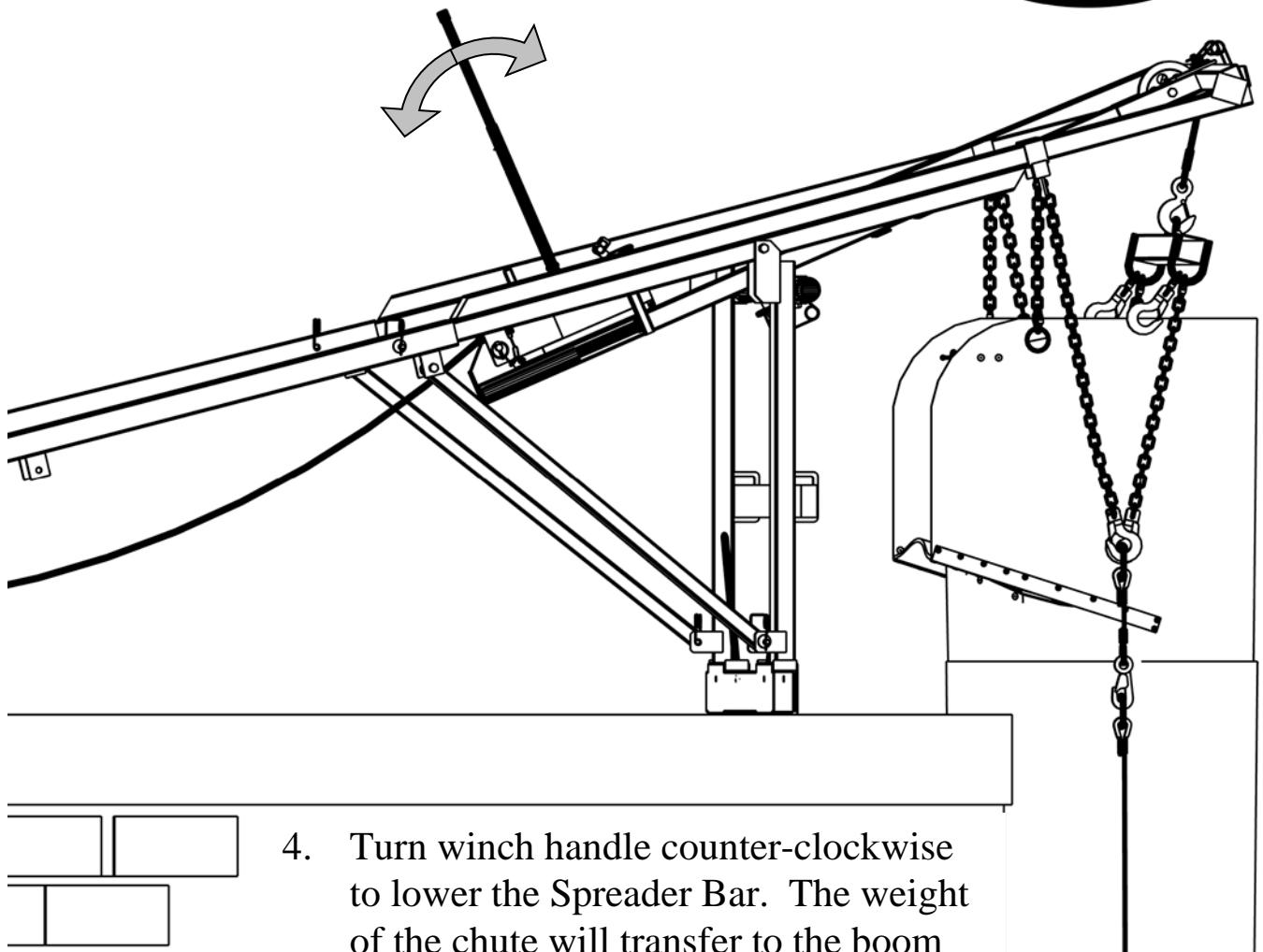
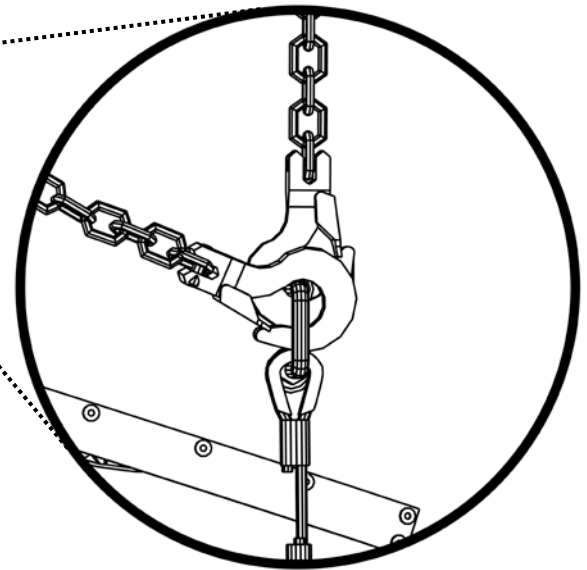
1. Pull the hangers & chains towards the Masts.

- 2.
- Fine-tune the Top Hopper height.
  - Attach a chain clip to each U-Bolt.
  - Adjust the chain lengths.
  - **The chain lengths must be equal (count the links).**
  - If the chain lengths are not equal the weight of the chute will be unevenly distributed on the hoist frame.



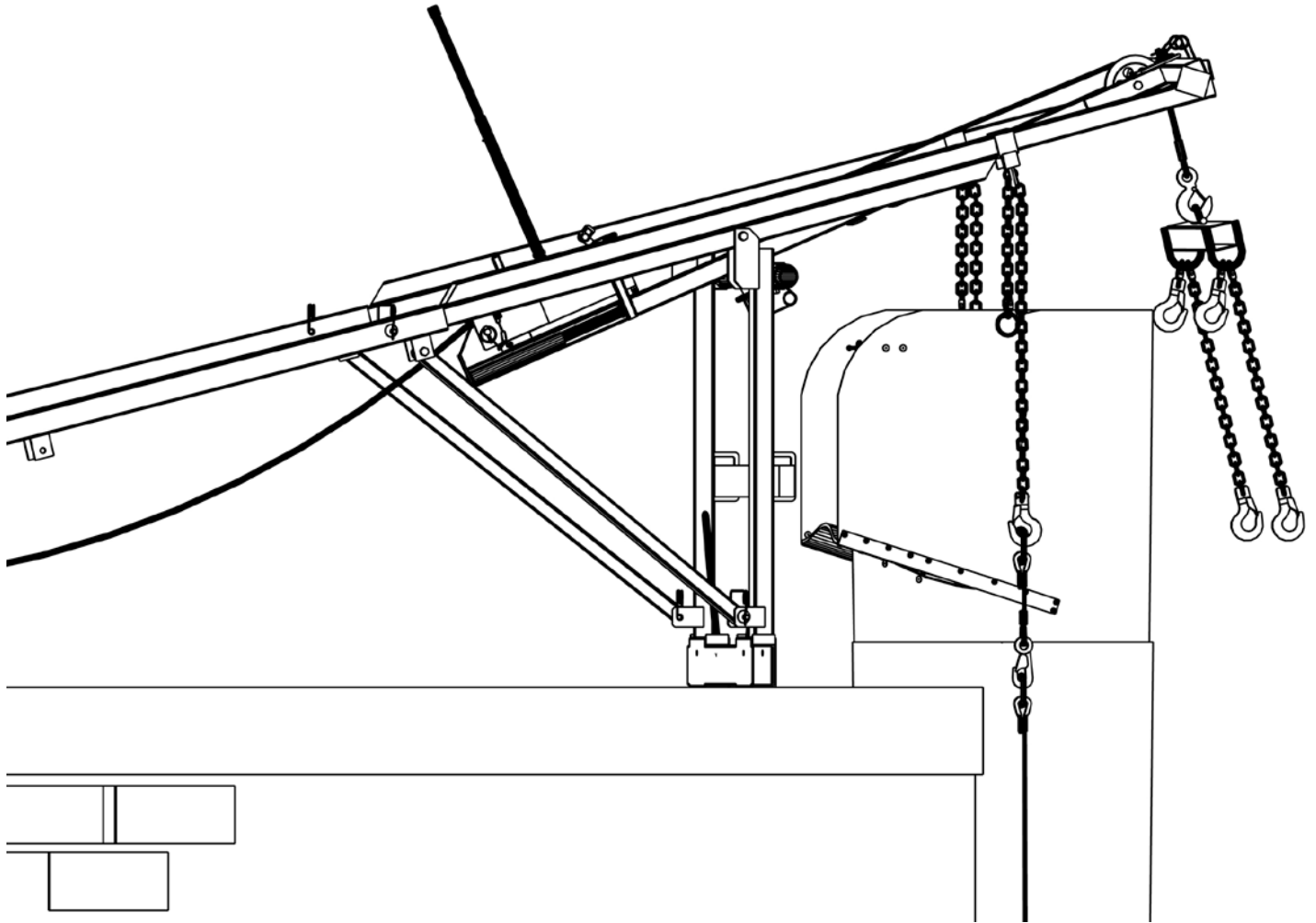


3. Attach a clip to each U-Bolt.



4. Turn winch handle counter-clockwise to lower the Spreader Bar. The weight of the chute will transfer to the boom chains.

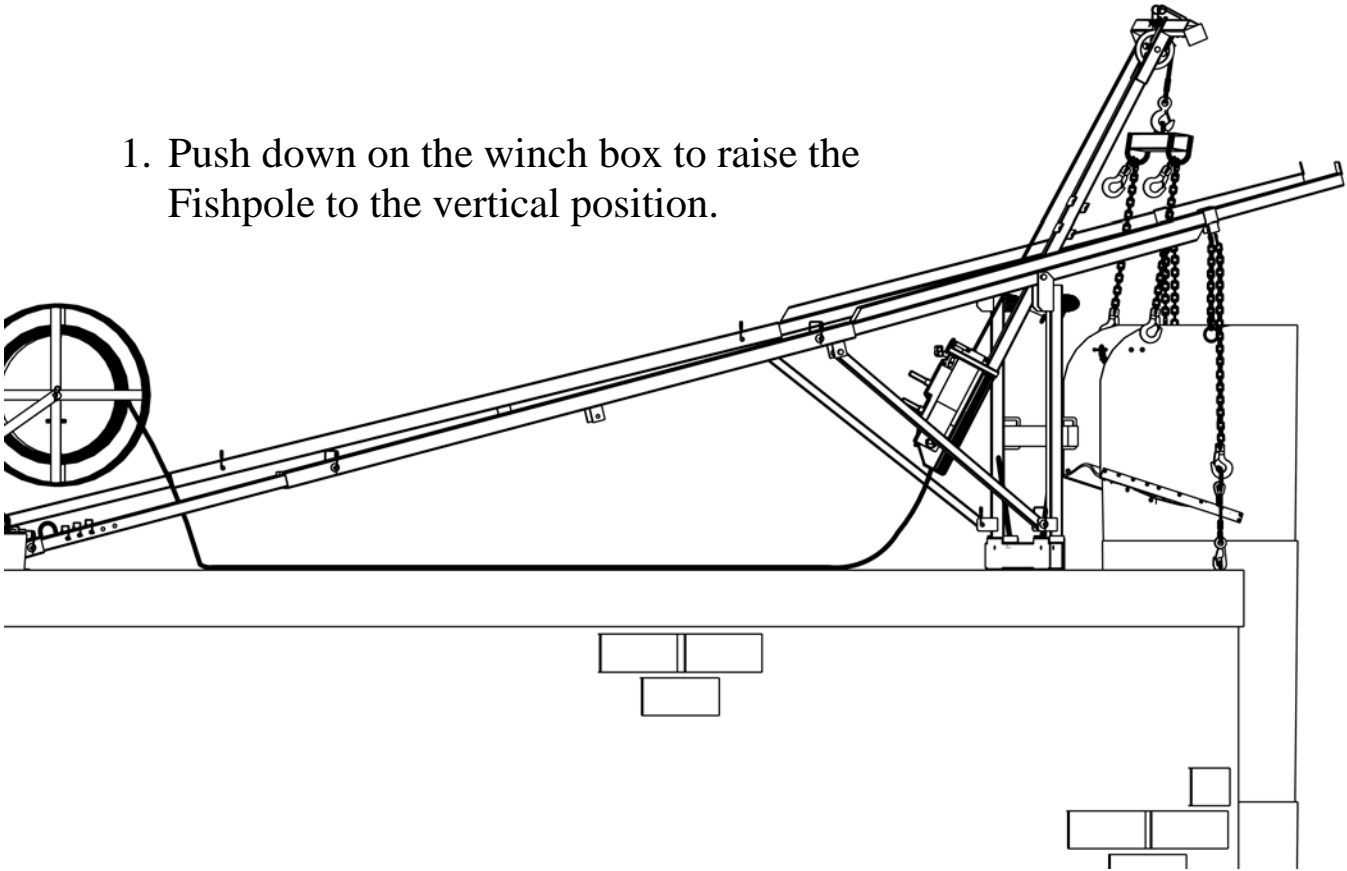
5. Unhook the Spreader Bar from the Top Hopper U-bolts.



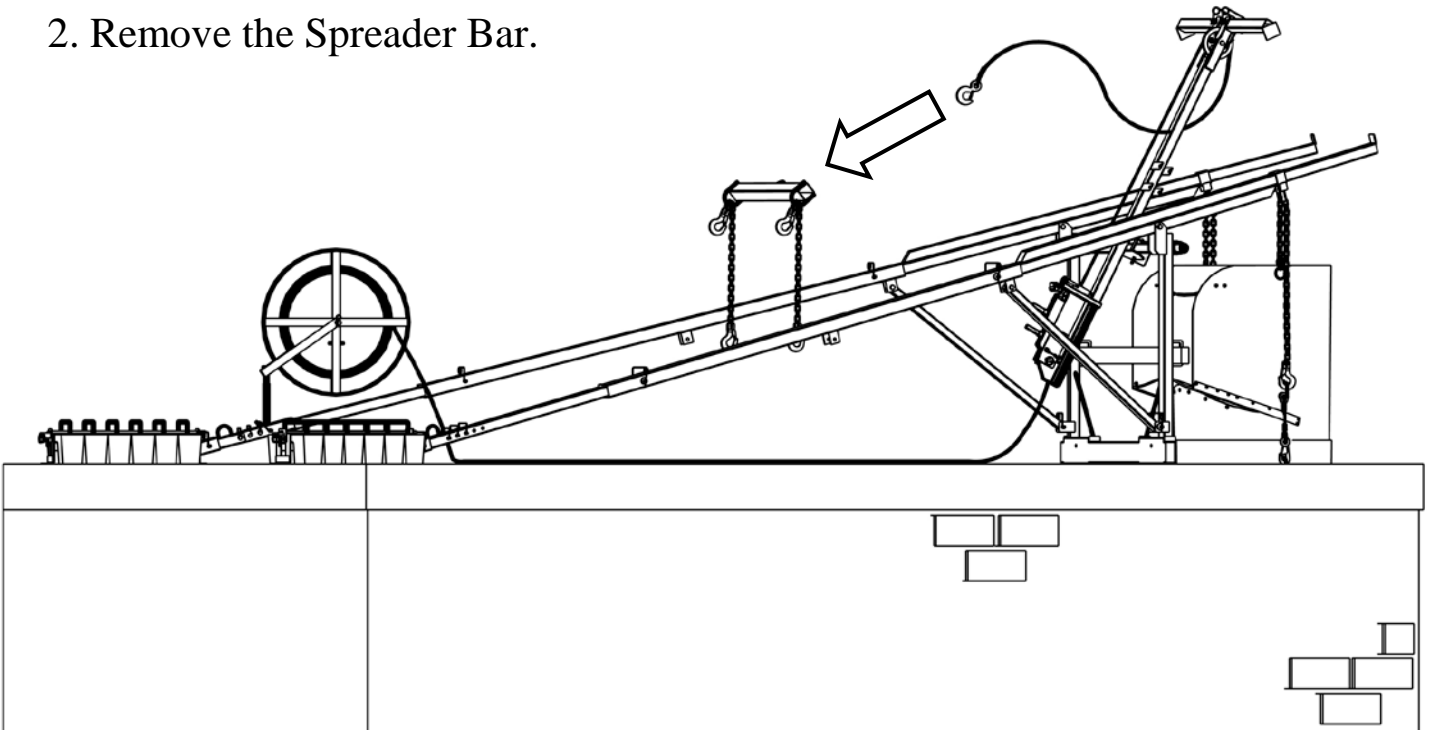
## 16. REMOVE THE FISHPOLE (if applicable)

*If using a crane (or similar device), please go directly to **Section 17**.*

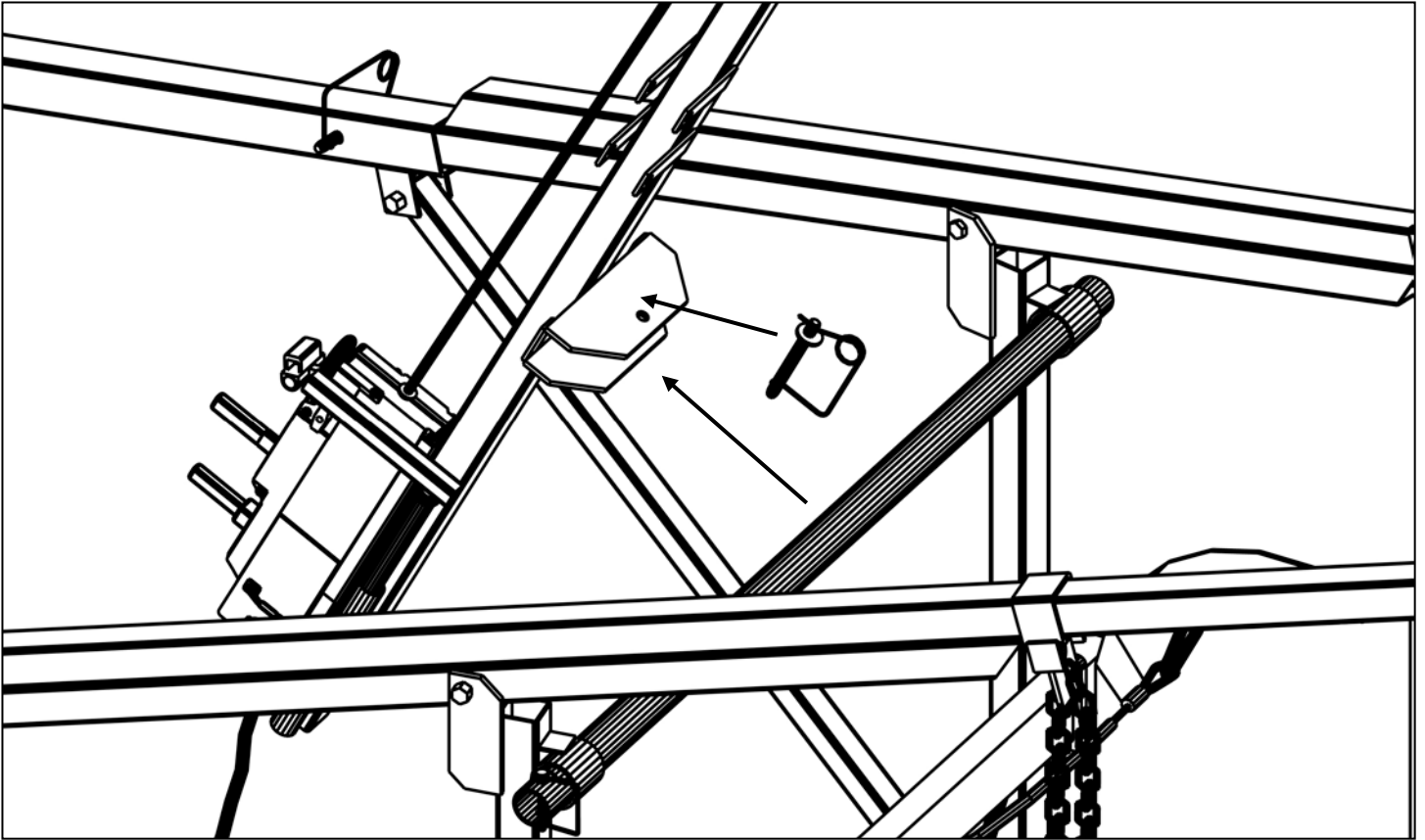
1. Push down on the winch box to raise the Fishpole to the vertical position.



2. Remove the Spreader Bar.

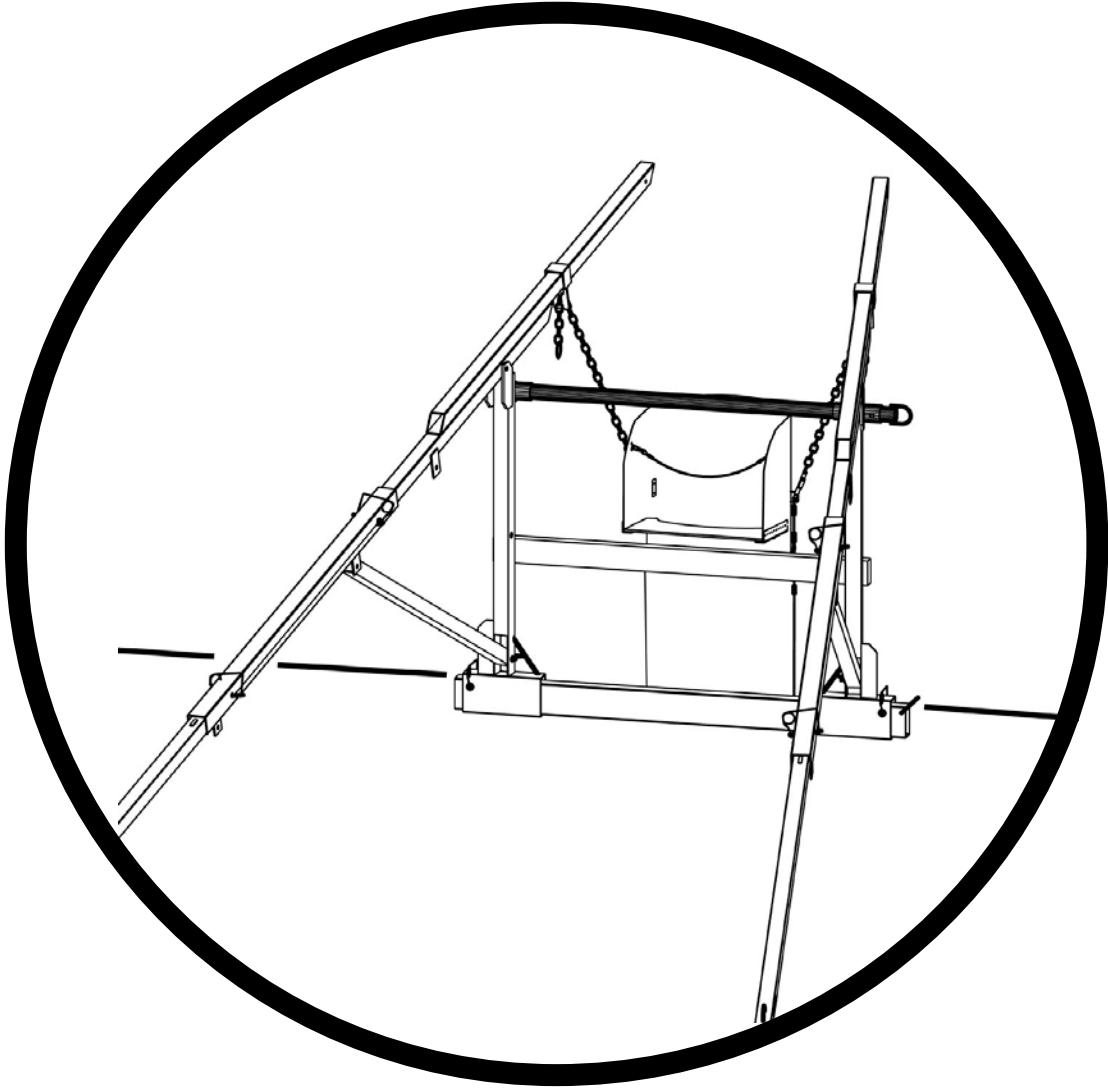


3. • Unpin the Fishpole as shown.  
• Detach & store in a safe place.



## **17. CONGRATULATIONS!**

*The installation of your SC-905-cb Roofer Hoist is complete!*



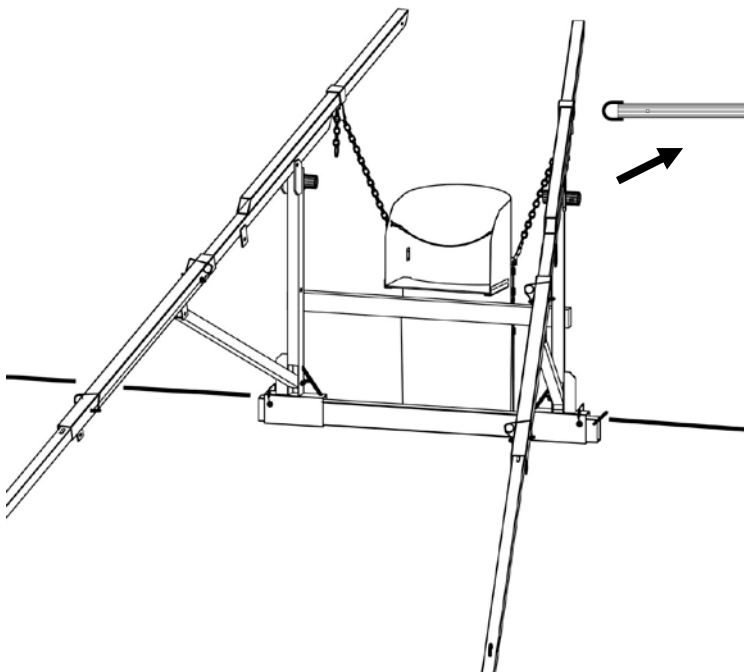
*Please see the next few pages for more important information.*

## 18. FALL PROTECTION & THE GATEKEEPER



### WARNING

- The Toprail is a substantial fall prevention barrier. If the Toprail is removed, and an alternate fall prevention barrier does not exist, a person could easily fall into the chute or off of the building.
- A fall from a height of 6 ft. is enough to seriously injure or kill.
- OSHA requires that fall prevention barriers be at least 42" high, plus or minus 3". Guardrail systems, parapet walls, and window sills may be acceptable fall prevention barriers provided they meet OSHA's height criteria.
- The Toprail may be detached if it is interfering with the debris removal process, as long as personal fall arrest systems are used, or alternate fall prevention barriers are present.
- Keep the debris removal process quick and safe in areas without adequate fall protection by designating a worker as the **Gatekeeper**.
- The Gatekeeper is secured by a personal fall arrest system to an anchor that is independent of the chute system. Because he is protected against falls, he can work near the exposed edge. At a demarcated "stop line" (where there is no risk of falling over the edge), the Gatekeeper receives full wheelbarrows from unprotected workers. He empties the wheelbarrows into the chute and returns them to the stop line in exchange for full ones.



In this situation, the Toprail has been removed, and there isn't any other fall barrier, at least 39" high. Fall protection is required to prevent people from falling over the edge.

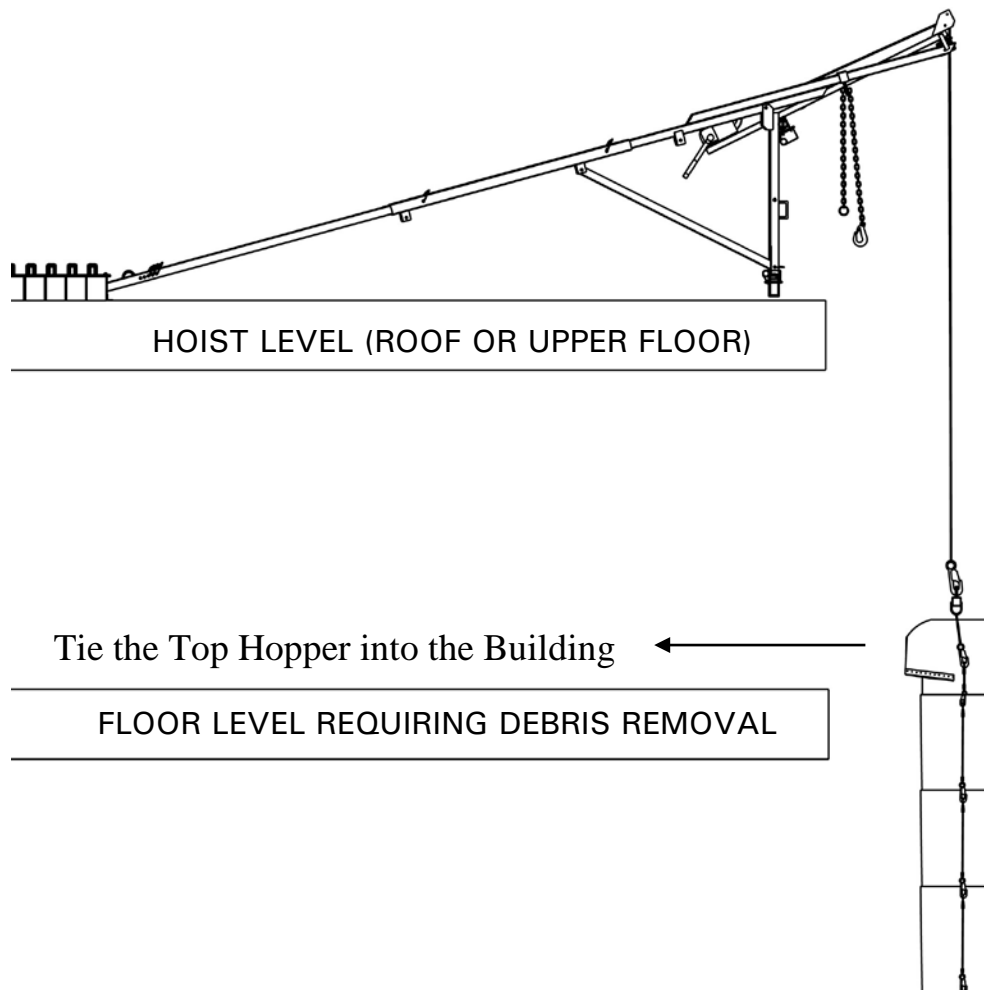
## **19. USING THE HOIST TO REMOVE DEBRIS FROM DIFFERENT LEVELS**

The Roofer Hoist can be used to remove debris from different floor levels, one floor at a time.

Lower or raise the chute sections until the Top Hopper is aligned with the desired floor level.

The chute may be left hanging from the Fishpole if there is a small quantity of debris to remove at that floor level.

Always tie the Top Hopper into the building to prevent people and debris from falling between the chute and the building. Ensure that appropriate fall protection is available.



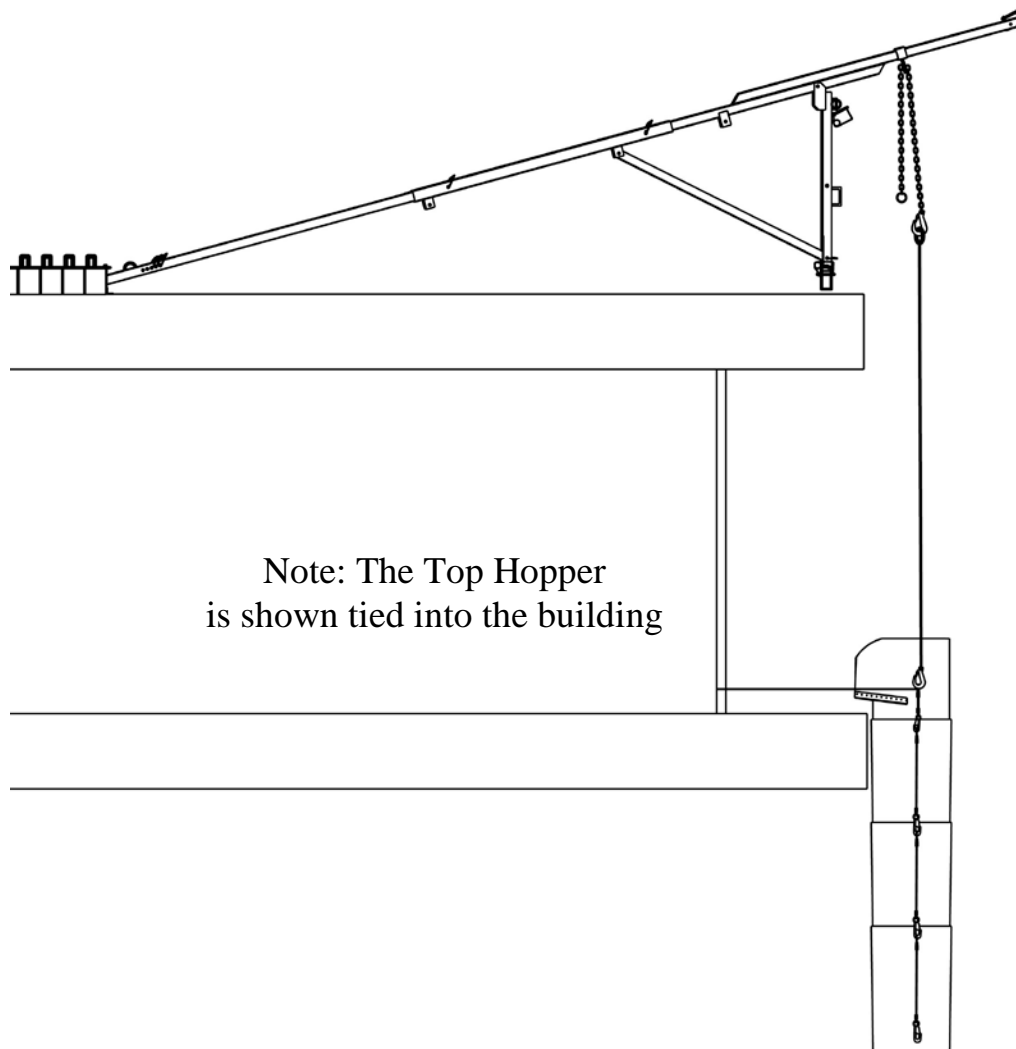
### Removal Of Debris From Different Floor Levels (continued)

If the Top Hopper will be needed at a particular level for some time, it is preferable to transfer the chute load to the boom chains. Because the boom chains are only 5 ft long, they will need to be lengthened using a pair of wire rope extensions.

Transferring the load to the boom chains/ wire rope extensions confers these advantages:

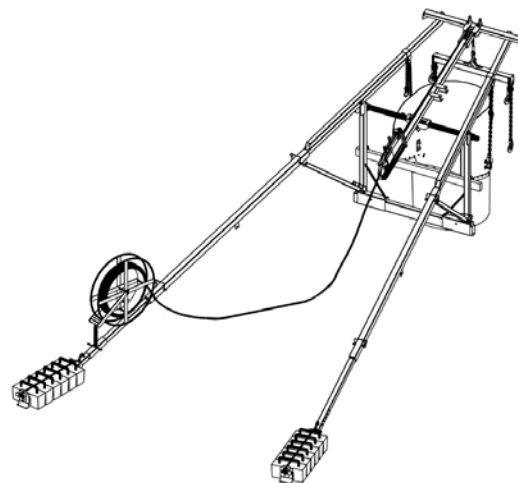
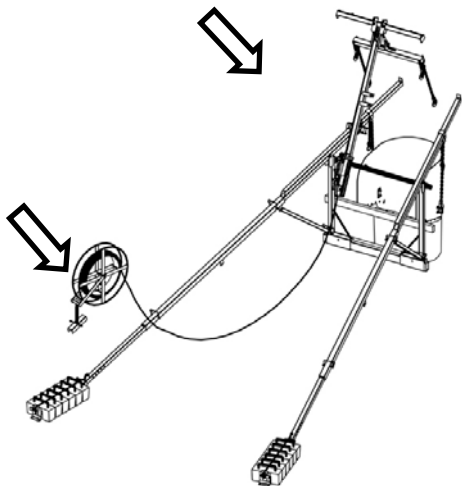
- The Fishpole can be removed to prevent the chute from being easily lowered and stolen.
- The Spreader Bar can be removed, so it does not obstruct the Top Hopper opening.
- The Fishpole cable will not be susceptible to damage caused by the debris removal process.

Wire rope extensions are available from Superchute Ltd. Please specify the precise length(s) that you require.



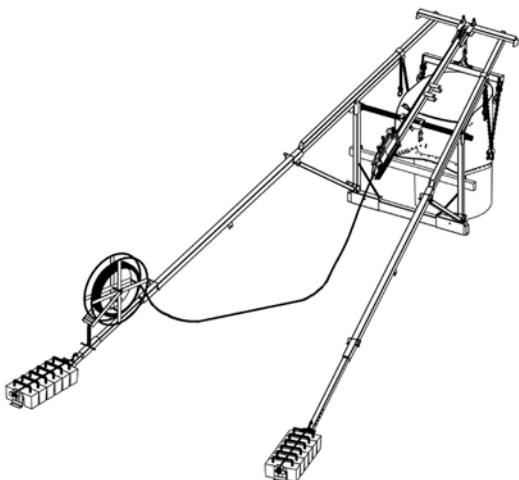
## 20. DISMANTLE THE CHUTE & HOIST

1



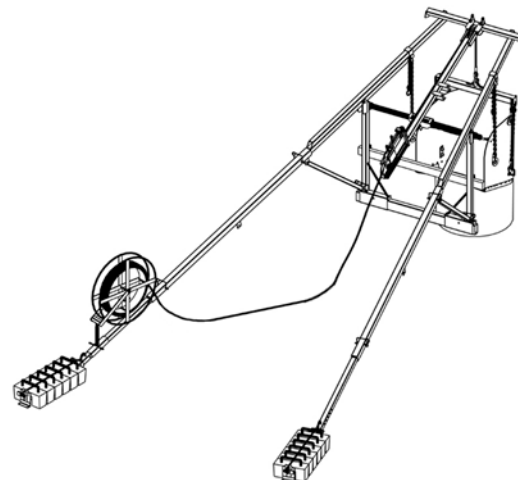
Install the Fishpole & Reeler.

2



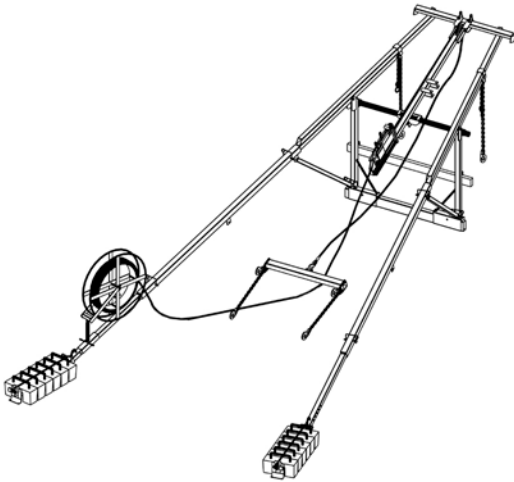
Attach the Spreader Bar to the Top Hopper.

3



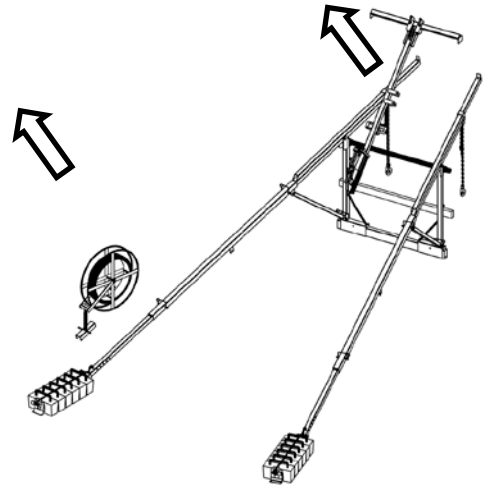
Lower the chute using the Fishpole or the crane.

4



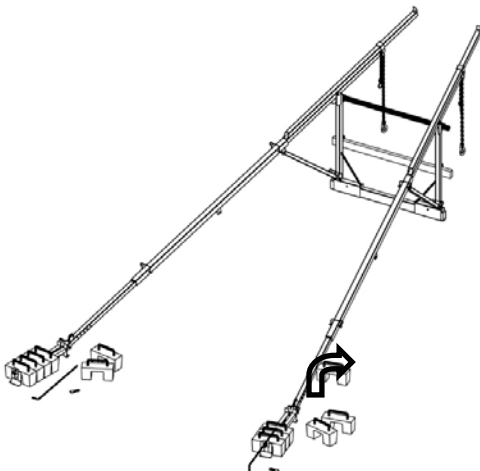
Reel in the cable & remove the Spreader Bar.

5



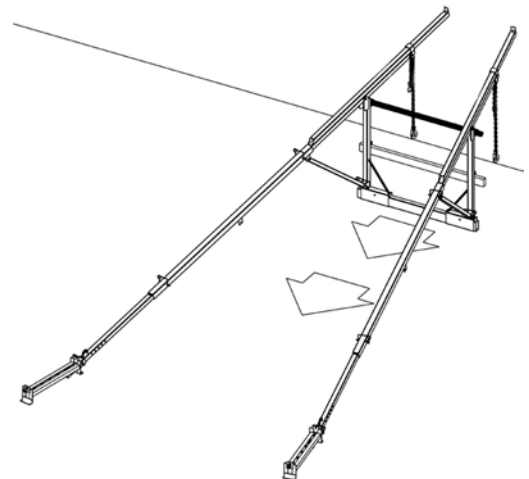
Remove the Reeler and Fishpole.

6



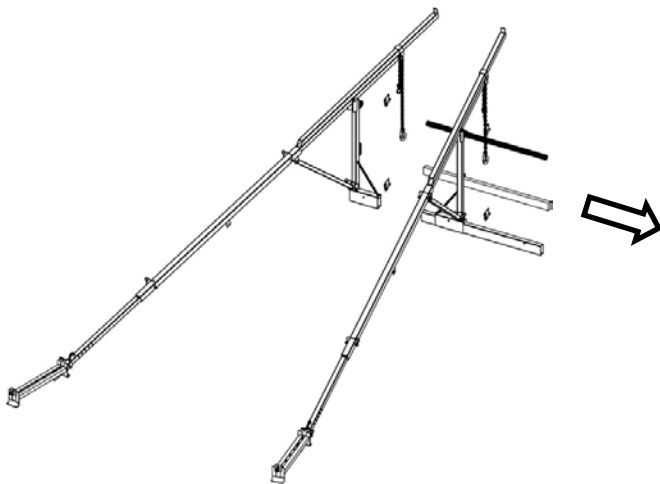
Remove the weights from the weight carriage.

7



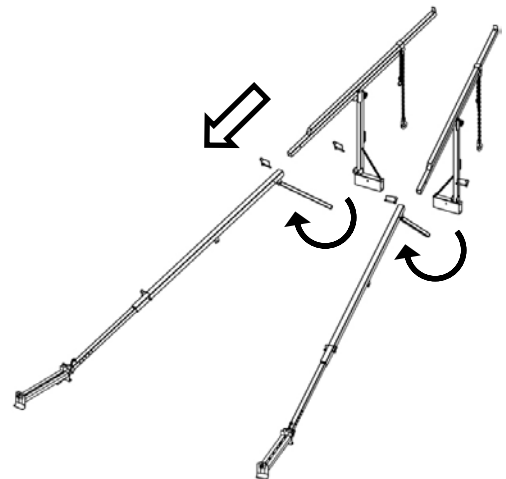
Shift the hoist away from the roof edge.

8



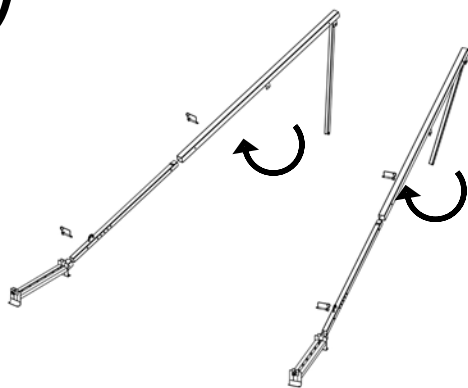
Remove the Toprail, Midrail, & Toeboard.

9



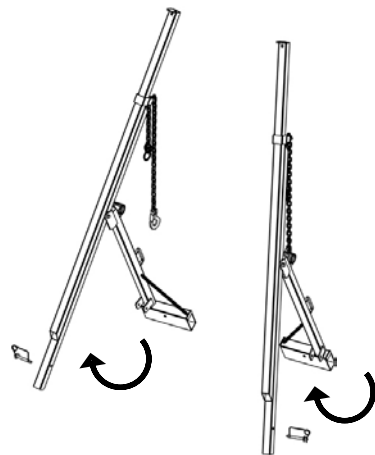
Unpin Booms & Masts from Connector Beams.

10



Separate Weight Beams from Connector Beams.  
Fold & pin Connector Beam & X-brace packets.

11



Fold & pin Boom and Mast Packets.

## 21. RAMPS

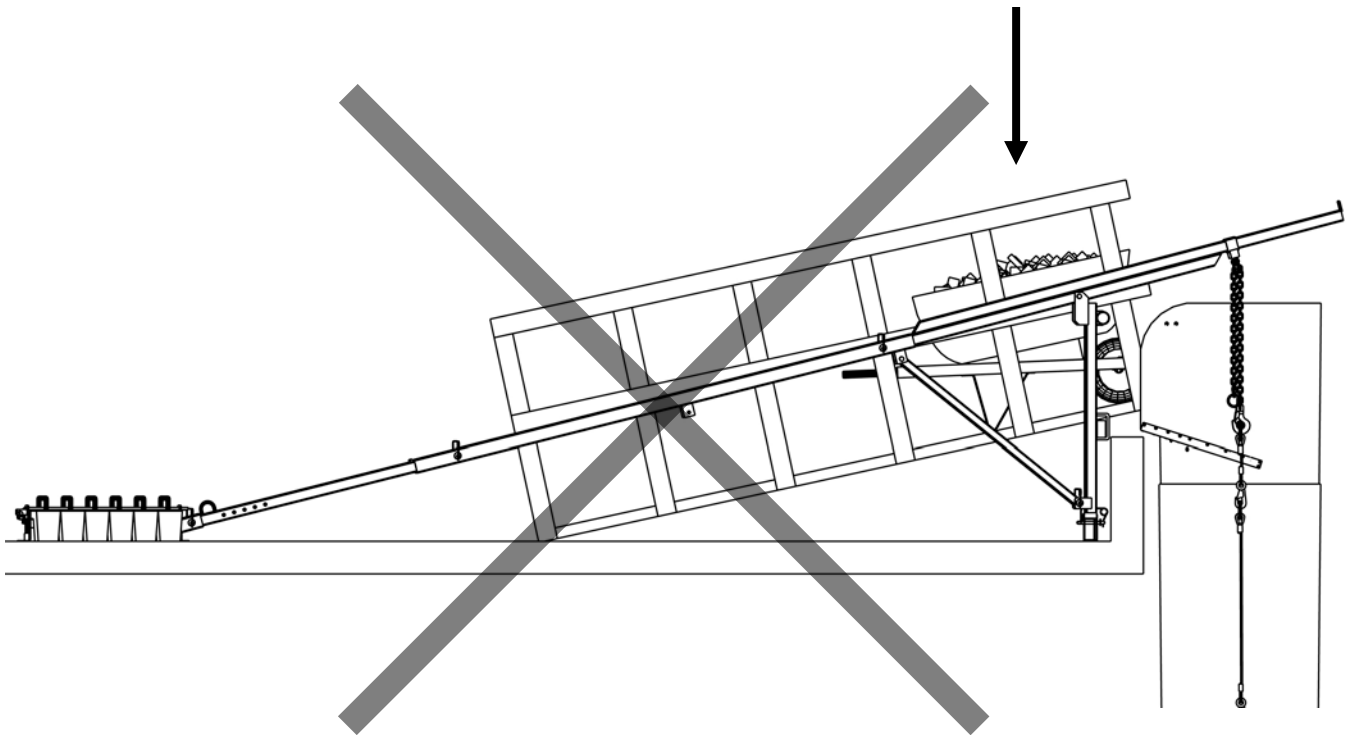


### WARNING

- A ramp resting on the hoist frame could greatly increase the loading on the hoist frame.
- The load increase could cause the hoist frame to fail.
- Do NOT rest ramps on the hoist frame. Do NOT attach ramps to the hoist frame.
- Ramp designs should be approved by a structural engineer.

#### WRONG:

The wheelbarrow ramp increases the load on the hoist frame.



## **APPENDIX A: WARRANTY**

Superchute® chute hoists are made for heavy wear, but like all tools, time and use will take its toll. There is no warranty for wear and tear, or misuse of the hoist. Superchute® warrants all products against manufacturing defects, which must be reported in writing to Superchute® Ltd. upon receipt of goods. Thorough overhaul servicing is offered by Superchute® Ltd.

## **APPENDIX B: STAY INFORMED**

The Superchute® factory sends out regular notices regarding new products, changes, recalls, and upgrades. Stay informed by filling out the form below and sending it in. Please feel free to enclose any other comments. Thank you for choosing Superchute® Ltd.

<p>Your Name: _____</p> <p>Company: _____</p> <p>Address: _____</p> <p>Phone: _____</p> <p>Fax: _____</p>	<p>E-mail address: _____</p> <p>Website: _____</p>
<p>Number of chute sections owned: _____</p> <p>Diameter(s) of the chute sections: _____</p> <p>Date(s) of purchase: _____</p> <p>Name of the Supplier: _____</p>	
<p>Number of chute hoist(s) owned: _____</p> <p>Models &amp; Serial Numbers: _____</p> <p>Date(s) of purchase: _____</p> <p>Name of the Supplier: _____</p>	

**Fax to: 514-365-8987, or mail to: Superchute® Ltd., 8810 Elmslie Road, Montreal, QC, Canada, H8R 1V6**

## **APPENDIX C: PARTS LIST**

# ROOFER HOIST MODEL SC-905-cb

### **1. Frame Components**

	<b>Quantity</b>	<b>Factory</b>	<b>Office Initials:</b>
Weight Beam	2		
Weight Carriage	2		
Connector Beam with attached Cross Brace	2		
Mast with attached Boom and Chain	2		
Toeboard	1		
Toprail	1		
55 lb. cast iron counterweights	12		
½" diameter locking pins	11		
½" diameter locking pins: SPARE	3		
Padlocks	2		

### **2. Hoisting Components**

Fishpole + sheave	1		
Tirfor T-508 winch + Instruction Booklet + 150' cable + reeler	1		
Reeler Arm + Reeler Arm Yoke (labeled SC-905-cb)	1		
Outer Cross Bar	1		
½" diameter locking pins	5		
Light Duty Lifting Bar (WLL 1000 lb.)	1		

## **APPENDIX D: TEST CERTIFICATE**

I \_\_\_\_\_ certify that 3 tests (see below) were performed on the enclosed hoist:  
use capitals

1. The Frame was fully assembled and checked.
2. The Fishpole was attached to the frame & proof tested to 900 lb.
3. The Boom Chains were proof tested to 900 lb.

Serial Number(s):

\_\_\_\_\_  
signed: production crew member

\_\_\_\_\_  
date

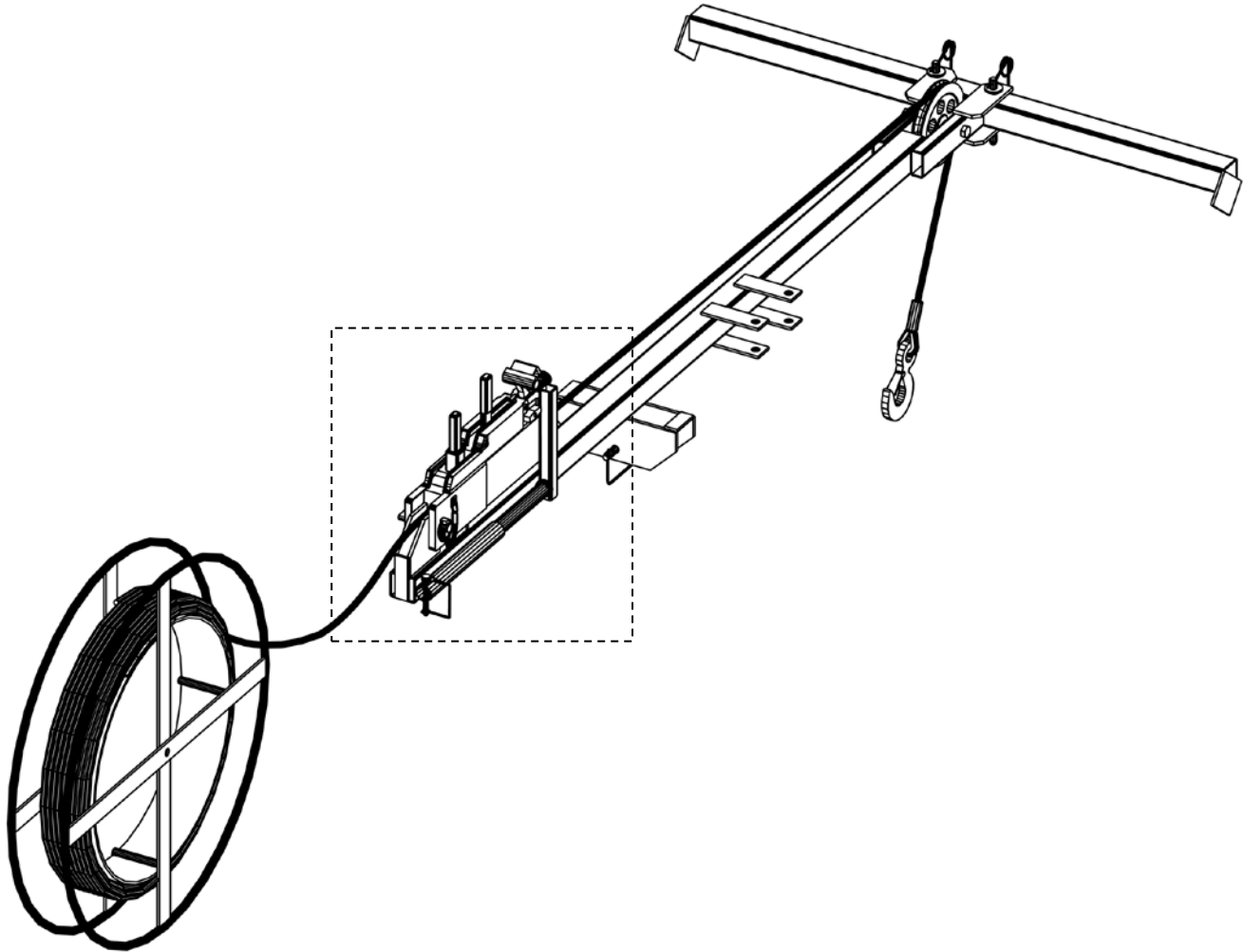
**PHOTOCOPY THIS FORM AND ATTACH TO CLIENT'S FILE**

## **APPENDIX E: GLOSSARY**

- Breaking Strain:** The average load at which a new component (for example: a cable or chain assembly) will fail. The breaking strain is obtained by applying direct tension to a component at a uniform rate of speed, in a testing machine.
- Chute:** A series of linked chute sections that are used to convey debris.
- Chute Hoist:** An engineered device that has been designed specifically to raise, anchor, and lower a chute. A chute hoist consists of a support frame and a detachable winch apparatus (known as the Fishpole). The support frame, without the Fishpole, can still be referred to as a chute hoist.
- Chute Sections:** Modular conical tubes that can be linked together in series to form a chute.
- Chute System:** A suspended chute and the anchors (including chute hoists) that support it.
- Design Factor:** Also known as the “safety factor”, it is a product’s theoretical reserve capacity. The design factor is calculated by dividing the Breaking Strain by the Working Load Limit. The design factor is generally expressed as a ratio, for example: 10 to 1, or 10:1.
- Users:** The term “users” includes planners, supervisors, installers, and end-users of the chute hoist.
- Working Load Limit:**  
The maximum load which can be applied to the component, when the component is new, or in “good as new” condition, and when the load is applied in the intended manner. This term can be abbreviated to WLL.  
  
The Working Load Limit of the SC-905-cb chute hoist is 900 lb.

## **APPENDIX F: WINCH INFORMATION (IF APPLICABLE)**

*If a Fishpole is part of your SC-905-cb Roofer Hoist, then the following information applies:*



The Fishpole is equipped with a traction-style winch.

Winch manufacturer: Tractel Group

Telephone (Canada): (800) 561-3229

Telephone (USA): (800) 421-0246

Winch model: Griphoist®-Tirfor® T-508

Cable specification: 8.3 mm diameter, 45 meter length (150 ft)

Further information: Consult the separate booklet for more information on the winch unit.