

Clear Span Tent Hoist Operations and Safety Manual



Patent Pending



Clear Span Tent hoist

Operation and safety manual

WARNING

Read carefully and understand all ASSEMBLY AND OPERATION INSTRUCTIONS before operating. Failure to follow safety rules and other basic safety precautions may result in a serious injury or death.

Thank you for choosing RAM INDUSTRIES LLC. And the Clear Span Tent Hoist. For future reference, please complete the owner's record below.

Purchase Date_____

Save the receipt, warranty, and instruction. It is important that **YOU READ THE ENTIRE MANUAL** to become familiar with this product before you begin to use it.

This machine is designed for a certain application only. The distributor or manufacture cannot be responsible for issues arising from modification(s). We strongly recommend this machine not be modified and/or used for any application other than for which it was designed. If you have any question relative to a application, DO NOT use the machine until you have first contacted the manufacture, to determine if it can or should be performed with the product.

For technical question please Email bob@tenthoist.com

INTENDED USE

This TENT HOIST is designed to be attached to a industrial fork truck. The industrial fork truck with the Tent Hoist attachment is specially designed to be used on hard level ground to vertically raise and lower the arches of a clear span tent that has been fully assembled and anchored or ballasted to ground per the manufacturer's specifications.

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Tent Hoist Benefits

- It's specifically designed for installing 25m wide or smaller clear span tents.
- It's compact, portable, light weight, and low maintenance.
- Useable with a Moffett or Princeton piggyback fork truck with the addition of a mast and power cord extension.
- Able to be transported with Non-CDL Truck/Trailer.
- Standard Industrial Fork Truck Certification only requirement to be in compliance.
- Industrial Fork Trucks are much smaller & easier to safely navigate on jobsite than a Reach Fork Truck
- One-year warranty
- Developed & Tested by Tent Guys!

Tent Hoist Features

- Fits on any 5000lbs 3 mast industrial fork truck or bigger
- Fork pockets are 3" h x 8" w fitting small and large fork trucks.
- Dimensions 30" w X 36" d X 76" h 490 lbs.
- High Limit Warning signal at 2000 lbs.
- 12 volt Industrial planetary gear hoist with mechanical brake.
- Wireless remote up to 50 ft.
- 12-volt battery with 800 cold crank amps.
- Battery charge Gauge
- Battery charger / maintainer
- 250 V circuit breaker with manual reset
- 1-year warranty

EQUIPMENT WARRANTY

Ram Industries LLC warrants all Ram Industries equipment to be free of defects in material and workmanship for a period of (1) year from the date of purchase. This warranty is in lieu of all other warranties, whether written or implied, and is limited to:

1. Replacement of parts that have been determined defective shall be replaced at no charge.

2. Warranty does not apply to damage caused by abuse or neglect. Time and materials required for normal maintenance and service are also excluded from warranty coverage.

The Warn hoist and battery is warranted by the original manufacturers and are not covered by the Ram Industries Equipment Warranty

Specs

Lift Weight capacity	1500/lbs.
Weight	490/lbs.
Height disassembled	76"
Length	36"
Width	30"
Fork pockets	3"x8"x30"

Specifications Subject to Change Without Notice

Lifting height chart, with and without fork truck

	Tent hoist	fork truck	Total height
Tent hoist overall height (no extension)	12.5ft	15'7"	28ft
Tent hoist lifting height w/ 4' sling (no extension)	6'8"	15'7"	22'3"
Tent hoist overall height w/ 5ft extension	17'5"	15'7"	33ft
Tent hoist lifting height w/ 4' sling (w/ 5ft extension)	11'6"	15'7"	27'1"
Tent hoist overall height w/ two 5ft extension	22'	10'	32'
Tent hoist lifting height w/ 4' sling (w/ two 5ft extensions)	16'6"	10ft	26'6"

Note: Manufactures show max peak height of structure. Remember when lift clear span arches with sling you are lifting from the bottom of the arch. This will normally give you additional 10" of additional lifting that you need to add to the lifting height chart.

LIMITATION OF LIABILITY.

10.1. RAM WILL NOT BE LIABLE FOR AND IS NOT (AND SHALL NOT BE) RESPONSIBLE FOR ANY INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THIS AGREEMENT UNDER ANY CIRCUMSTANCES, INCLUDING, BUT NOT LIMITED TO, LOSS OF LIFE, PERSONAL INJURY, LOSS OF INCOME (BUSINESS OR PERSONAL), DAMAGE OR LOSS (INCLUDING ANY INCREASED COSTS SUFFERED OR INCURRED BY CUSTOMER) RESULTING FROM CUSTOMER'S INABILITY TO USE THE HOIST, OR ANY INCREASED OPERATING COSTS OR LOSS OF PRODUCTION OR OTHER COSTS INCURRED BY CUSTOMER (OR ANY CUSTOMER OF CUSTOMER) IN REMOVING, REINSTATING OR REPAIRING ALLEGEDLY DEFECTIVE OR NONCONFORMING HOIST, DELAY DAMAGES OR ANY OTHER SUCH DAMAGES, WHETHER ARISING FROM CAUSES SIMILAR TO OR DISSIMILAR TO THOSE ENUMERATED (COLLECTIVELY, "SPECIAL DAMAGES").

10.2. RAM DISCLAIMS ANY LIABILITY FOR FAILURE OF PERFORMANCE OR MALFUNCTION OF THE HOIST SUPPLIED BY RAM PURSUANT TO THE AGREEMENT WHICH IN RAM'S OPINION IS THE DIRECT OR INDIRECT RESULT OF ANY ACTION OR INACTION BY CUSTOMER OR ANY PARTY OTHER THAN RAM (INCLUDING, WITHOUT LIMITATION, ANY CUSTOMER OF CUSTOMER OR OTHER USER OF THE HOIST) INCLUDING, WITHOUT LIMITATION, ABUSE, NEGLIGENCE, ACCIDENT, IMPROPER INSTALLATION, MODIFICATIONS OR REPAIRS NOT MADE BY RAM, INCORRECT OR INAPPROPRIATE USE OR APPLICATION, FAILURE TO MAINTAIN, UNSUITABILITY OR INCOMPATIBILITY WITH OTHER PRODUCTS OR EQUIPMENT NOT SUPPLIED BY RAM.

10.3. NOTWITHSTANDING ANY PROVISION HEREOF WHICH MAY BE OR APPEAR TO BE TO THE CONTRARY, IN NO EVENT WHATSOEVER SHALL RAM'S LIABILITY IN RESPECT TO ANY CLAIM OR ACTION OF ANY KIND ARISING OUT OF, IN CONNECTION WITH, OR RESULTING FROM THE MANUFACTURE, SALE, DELIVERY, RESALE, USE OR REPAIR OF THE HOIST OR ANY BREACH BY RAM OF ANY TERM OF THE AGREEMENT, EXCEED THE PRICE FOR THE HOIST. CUSTOMER ASSUMES ALL OTHER LIABILITY FOR ANY LOSS, DAMAGE OR INJURY TO PERSONS OR PROPERTY ARISING OUT OF, CONNECTED WITH OR RESULTING FROM THE USE OF THE HOIST, EITHER ALONE OR IN COMBINATION WITH OTHER PRODUCTS, INCLUDING, WITHOUT LIMITATION, ANY "SPECIAL DAMAGES" OR ANY LOSS, DAMAGE OR INJURY TO CUSTOMER (OR TO CUSTOMER'S EMPLOYEES OR PROPERTY OR TO THE EMPLOYEES OR PROPERTY OF ANY CUSTOMER OF CUSTOMER OR OTHER USER OF THE HOIST) DUE TO THE ACTS OR OMISSIONS OF CUSTOMER, ITS AGENTS, EMPLOYEES OR CUSTOMERS, IN THE INSTALLATION, MAINTENANCE, USE OR OPERATION OF SUCH HOIST.

10.4. NOTWITHSTANDING ANYTHING TO THE CONTRARY SET FORTH IN THIS AGREEMENT, INCLUDING ANY INDEMNIFICATION OBLIGATION, RAM SHALL HAVE NO OBLIGATION TO CUSTOMER FOR ANY

LIABILITY ARISING FROM (A) ANY PERSONNEL (INCLUDING ANY 3RD PARTY CONTRACTOR) OF CUSTOMER (I) PLACING ANY BODY PART IN MACHINERY, (II) OPERATING MACHINERY WITHOUT PROPER BODY PROTECTION, (III) OPERATING OF MACHINERY WITHOUT APPROPRIATE TRAINING, (IV) OPERATING OF MACHINERY THAT HAS NOT BEEN MAINTAINED IN A MANNER CONSISTENT WITH INDUSTRY STANDARDS, (V) OPERATING MACHINERY THAT HAS BEEN TAMPERED, REWIRED OR BYPASSED BY CUSTOMER OR ANY THIRD PARTY OR (B) A MECHANICAL DEFECT, MALFUNCTION OR FAILURE IN MACHINERY OR COMPONENT THEREOF OR OTHERWISE RESULTING FROM CUSTOMER'S BREACH OF THE AGREEMENT.

10.5. THE PARTIES ACKNOWLEDGE THAT THE ALLOCATION OF RISKS AND BENEFITS UNDER THIS AGREEMENT IS BASED ON, AND THE FEES PAID UNDER THIS AGREEMENT WOULD BE GREATER IN THE ABSENCE OF, THE LIMITATIONS DESCRIBED ABOVE. THIS SECTION WILL SURVIVE TERMINATION OF THIS AGREEMENT.

CHOICE OF LAW

This Agreement shall, for all purposes, be governed by and construed under the laws of the State of Indiana. Without limitation of the foregoing, Customer irrevocably agrees that all actions or proceedings in any way, manner or respect arising out of or from, or relating to, the Agreement shall be litigated only in Indiana state courts having situs in Allen County, Indiana or in the United States District Court for the Northern District of Indiana, Fort Wayne Division. Customer consents and submits to the jurisdiction of any local, state or federal court located within said county and state, and waives any and all objections to jurisdiction that Customer may have under the laws of the State of Indiana or the United States, including any claim or objection that any such court is an inconvenient forum. Further, Customer hereby waives, to the fullest extent permitted by law, all rights to have any dispute or claim arising under the Agreement litigated before a jury.

General Safety Rules

Warning: Read and understand all instructions. Failure to follow all instructions listed below may result in serious injury.

Caution: Do not allow persons to operate or assemble the tent hoist until they have read this manual completely and have developed a thorough understanding of how the Tent Hoist works. Formal training and certification of all employees should occur by the company that owns the Hoist.

Warning: The Warnings, Cautions, and Instructions discussed in this manual cannot cover all possible conditions or situations that could occur. It must be understood by the operator that common sense and cautions are factors that cannot be built into this product, but must be supplied by the operator

Tent hoist operator's job is vital to the safe operation of Tent Hoist. It is a position of responsibility that the operator must be qualified to hold. There are rules and regulations everyone involved shall obey and responsibilities that shall be accepted. It is the responsibility of the employer of the tent hoist operator to see that all tent hoist operators are qualified to fill this important position. Since the tent hoist is an attachment to be installed on a forks of a fork truck. IT'S THE LAW THAT YOU MUST TRAINED AND CERTIFIED TO OPERATE THE FORK TRUCK. Federal law states that only properly trained operators are permitted to operate a powered industrial truck and that an employer must train operators and have them certified that they are qualified to operate a power industrial truck (OSHA 1910.178, Rev 1999)

The following information is an overview of the responsibilities of a tent hoist operator.

This manual may be used as a summary in the overall training and authorization of a prospective Tent Hoist operator. The manual however should not be used as the only source of education for a tent hoist operator.

Employers and employees need to be aware that a tent hoist has specific operation and safety instructions that must be followed at all times

It is essential that you understand operating characteristics, safety measures, inspection process and maintenance requirements for the Tent Hoist.

You must have read the complete operating manual along with the Tent Hoist Warning Operators Guide as well as hands on training and certification prior to use of Tent Hoist.

Hoist Operator Requirement:

The minimum qualifications for an operator selected to operate a Hoist are as follows:

- Have corrected vision that meets the same requirements as vision for a valid driver's license.
- Have effective use of all 4 limbs.
- Be of sufficient height to operate the controls and to have an unobstructed view over the controls into the work area.
- Have coordination between eyes, hands, and feet.
- Be free of known convulsive disorders and episodes of unconsciousness.
- Be properly educated / trained to perform these duties.
- The operator must also have the ability to understand written signs and labels and be capable of understanding written and verbal instructions.

Certification

It is recommended that prospective Tent Hoist operators be trained and tested by a qualified operator before being allowed to operate a Tent Hoist. Upon passing a written test and meeting other operator requirements (including demonstrating proficiency in running the hoist) as determined by the Trainer, a certificate of compliance should be issued to the trainee. The Hoist Owner and Operator should both keep a copy of this certification and be able to make it available upon request.

Tent Hoist Training

Start by identifying potential Tent Hoist related hazards, and continues with finding ways to eliminate the hazards, or compensate for them in some way. All

workplace safety is important, but Tent Hoist safety is particularly critical because of how devastating accidents related to lifting clear span tent arches can be. The following are some key areas that should be included with any good tent hoist safety plan.

Common Tent Hoist Hazards

Fork truck operators with a Tent Hoist attachment, and those working around them, should be taught what the most common Tent Hoist hazards are. Being aware of these risks will help ensure that everyone is watching out for them and taking steps to avoid them whenever possible. The following are some of the hazards and safety plans that should be taken into account because of how frequently they can occur, and how serious they can be:

Tent hoist DO NOTS

- **Never assemble or disassemble Tent Hoist unless it is attached and secured to a fork truck that meets minimum Tent Hoist Requirements**
- **Once tent hoist is assembled with mast extension it should never be removed from the fork truck until it is disassembled**
- **Never drive the fork truck with tent hoist attached on soft or unlevel ground**
- **Never lift anything with Tent hoist at any angle other than vertical lift.**
- **Never use the fork truck lifting hydraulic for final lift of arches.**
- **All final lift of clear span arches should be done by the 12 volt hoist.**

Surface- Fork truck must be operated on a hard level surface at all times. Soft or unlevel ground can cause the fork truck with Tent Hoist attachment to tip over causing severe injury or death.

Fork truck operator- Fork truck operator must always drive forward or backward and have the Tent Hoist attached to the Center of the arch being lifted. Operator must drive the fork truck to keep the tent hoist directly above the arch to maintain vertical lifting angle when raising or lowering a tent arch.

Overhead Clearance– the Tent Hoist mast attached to a fork truck can have an operating height of up to 30 ft, Please ensure that there are no overhead wires or obstacles that the tent hoist may come into contact with when lifted. If the tent hoist were to come into contact with overhead wires or obstacles it could result in Electrocutation, roll over, or damage to the machine.

Materials Falling – Tent Hoist must be properly secured to the Arch it is lifting. Even with proper attachment please be aware of falling objects. Any person located below or around the Tent Hoist while in operation should stay clear of fall zone and avoid working in the area and always wear hard hats and other appropriate PPE.

Overloading the Tent Hoist– The tent hoist is rated at a maximum weight of 1,500 lbs. The hoist operator, and those that load the hoist, need to know precisely how much weight it can handle, and exactly how much weight they have added at any given time. Overloading a tent hoist or fork truck can cause it to tip over, or to drop the load, which can result in serious injury or death.

Proper lifting- A fork truck with Tent Hoist attachment is designed to be used only for vertical lifting. When raising or lowering the clear span tent arches the fork truck operator must move forward and/or backward to maintain the vertical lifting position and to maintain the fork truck & Tent Hoist's centered position of the tent arch being lifted. Additionally each ClearSpan arch must be fully assembled & anchored or ballasted to the ground prior to raising or lowering the arch.

Failure to do so can result in serious injury or death as well as damage to the ClearSpan arch or Tent Hoist itself.

Dropped Loads - If The Tent Hoist were to drop its load there is a high probability of anything within fall zone to be crushed. Please note that even vehicles or structures can be crushed from the impact of a heavy load dropped from a significant height. Nobody should work directly under a Tent Hoist or the Arches is lifting for any reason, even with PPE.

Preventing Tent Hoist Accidents -Tent Hoist accidents can be catastrophic, but they can also be prevented. From initial training to pre-operation inspections, Tent Hoist owners are responsible for implementing preventive measures and

arming anyone operating or working around the Tent Hoist with the knowledge and equipment they need to stay safe on the job. It is important to first understand all the possible hazards. The owner can then go on to conduct training sessions, purchase personal protective equipment (PPE), and post safety signs.

PPE for Tent Hoist Safety

Identifying and eliminating hazards related to the tent hoist is especially important, but no matter how much effort is put in, it is impossible to make operation a Tent Hoist 100% risk free. To help ensure employees are protected should something go wrong with a Tent Hoist, it is critical that owners require Personal Protection Equipment (PPE) for those working on or around the Tent Hoist. The following are some basic requirements for PPE, but additional equipment may be necessary depending on the situation.

Hard Hats - Everyone working on or around the Tent Hoist should be wearing a hard hat at all times. It is impossible to predict when something could fall from above, and even small objects can cause serious head injuries if no protection is in place.

Eye Protection – Tent Hoist & Fork Truck operators need to be able to see what they are doing at all times. When working in an environment where dirt, dust or other things are present, it is necessary to wear protection to avoid eye irritants that could cause a temporary vision impairment.

Hand Protection - When attaching or detaching arches to the Tent Hoist, it is important to keep hands safe from pinches or being crushed. Wearing protective gloves can reduce this hazard.

Additionally - Looking at the specific hazards associated with a Tent Hoist on a case by case and location by location basis will help to determine what types of PPE are necessary. Each jobsite, and each load, may require a different type of PPE.

Work area and Safety Signs

Letting people know that a Tent Hoist is in use (or may be in use) in a given area is an important part of ensuring they are safe. Using Tent Hoist safety signs is

especially important, and in some cases, may be required by OSHA or other regulatory agencies.

These signs can be effective both for alerting people of the dangers and instructing unauthorized individuals to stay out of the area due to the hazards.

A Guide to OSHA Requirements can be found online

Pre check list before operation the tent hoist:

Fork Truck Inspection- Fork trucks must undergo documented inspection per OSHA regulations prior to each shift by a certified Fork Truck Operator. Please reference OSHA guidelines for items to be inspected.

Tent Hoist Inspection- The Tent Hoist must undergo document inspection prior to start of each shift. Tent Hoist inspection should include but not be limited to the following areas:

Hoist hook with latch / J hook – OSHA require a hook with a latch to be attached to a sling do all lifting of any metals. The optional **J hook** does not meet OSHA requirements. Check to ensure Hook is not bent and measures at proper size opening. Ensure hook is not cracked or showing signs of corrosion and make sure the throat of the hook isn't showing wear.

Hoist Wire Rope- Use the "rag-and-visual" method to check for external damage. Grab the rope lightly and with a rag or cotton cloth, move the rag slowly along the wire. Broken wires will often "porcupine" (stick out) and these broken wires will snag on the rag. If the cloth catches, stop and visually assess the rope. It is also important to visually inspect the wire (without a rag). Some wire breaks will not porcupine. Replace wire rope if damaged.

Hoist- Reference Warn Electric Hoist Manual for inspection steps.

Mast- check all around the mast and mast extension for stress cracks, dents, buckling and make sure all bolts are in place and tight.

Mounting attachment- check for any damage, cracks and that hinged mast bases bolts are installed and tightened properly. Check the safety chain to make sure it is property attached around the fork truck mounting frame and tightly secured.

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Riggers training should include the following

- Company rules, regulations, and procedures.
- The requirements of the Code of Federal Regulation; Title 29, Part 1910.184, Slings.
- Maximum capacity of the crane.
- Best practice and accepted rigging procedures.
- Basic safety guidelines for rigging a load.
- Hand Signals
- Do’s and Don’ts Sources













Additional information can be found at <http://www.safecrane.nz/news/common-crane-hazards>

Hand Signals

Setting in which the Tent Hoist is operated and worked around are often noisy and require use of Ear Protection. Because of this Verbal Communication can be difficult. Because of this while loading, unloading and operating the Tent Hoist the Hoist Operator should have a signaler in their eye site at all times and use the established code of hand signals to ensure messages are being relayed and the operator avoids potential hazards.

Both the operator and the signaler must be trained thoroughly to understand and interpret hand signals. The “stop” and “emergency stop” are arguably two of the

most important signals used and the Tent Hoist operators must know to always stop operating and obey stop signals. There is typically only one designated signaler at a time (in an effort to reduce confusion) and all signalers must be deemed qualified to give crane hand signals. The signaler must be in clear view of the operator, have a clear view of the load, and instruct safe material handling for the operator. It is also their duty to keep pedestrians from the dangerous area. Recommended Tent Hoist Hand Signals are covered below.

 Load Up	 Load Down	 Swing Left	 Swing Right
 Turn Left	 Turn Right	 Travel	 This Far To Go
 Everything Slow	 Stop Engine	 Stop	 Emergency Stop

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Hoist Does / Don'ts

General Operating Safety Measures

- Ensure that the Tent Hoist hook and cable is brought over the arch in a manner to prevent swinging.
- Inspect the hoist rope cable to ensure it is free of kinks or twist and not wrapped around the Arch, Tent Hoist Mast or any other surrounding objects.
- Keep tension on the Tent Hoist cable whenever winding or unwinding it.
- Never unwind Hoist Cable beyond a point in which it has 2 full wraps of cable around the hoist drum.
- Attach the arch to the Tent Hoist hook by means of a sling or other approved device.
- Ensure the sling & Tent Hoist Hook are centered on the arch for a balanced load

- Before Lifting ensure the Tent Hoist Mast & Arch will clear any surrounding obstacles or obstruction throughout the lifting process.
- Never utilize the Tent Hoist to make a side pull. It is designed only for vertical lifting.
- After Lifting Arch a few inches off ground re-check the sling & Tent Hoist hook to ensure it is secure, tight & not going to slip.
- While the Arch is lifted and being lifted the Fork Truck operator must make no sudden acceleration or deceleration.
- Never lift an arch while someone is standing within the fall zone.
- No Person or living being should ever ride on or be attached to the Tent Hoist.
- Ensure the tent arch is properly secured per tent manufacturer specifications before detaching the Tent Hoist from a lifted arch.
- Never leave the Tent Hoist or fork truck unattended with an arch lifted off the ground partially or fully.
- The Hoist limiting switch on the hoisting device attached to the top of the Tent Hoist Mast should NEVER be used as an operation control.
- When Tent Hoist is not in active use always turn off fork truck, tent hoist and remote battery.

The following information and check list must be performed daily before the use of the tent hoist

1. Operators must perform this inspection before each shift and submit the form to your supervisor or owner.
2. Equipment found unsafe must be removed from service. Report any deficiencies immediately to your supervisor or owner.
3. Inspection sticker: check that all safety stickers on the hoist are there and readable.

Satisfactory / Unsatisfactory

4. Upper limit switch: lower hook slightly, then raise hook slowly into switch, to check upper limit switch shuts off hoist

Satisfactory /Unsatisfactory

5. All operating mechanisms: check wiring for any wear or damages, check remote hoist control make sure proper operations

Satisfactory /Unsatisfactory

6. J Hook: check for excessive throat opening, bent/twisted elements, insure hook swivels freely,

safety latch is operational, look for any signs of wear or malfunction.

Satisfactory / Unsatisfactory

7. Spooling: check spooling of wire rope onto all sheaves and drums.

Satisfactory / Unsatisfactory

8. Check battery make sure properly charged by hold in the battery charge indicator on the right, outside of battery box and cables tight and no corrosion.

Satisfactory / Unsatisfactory

9. Hoist mast and extension are properly installed, tighten, and secured by the proper bolt that were supplied by the manufacture Bolts, nuts, and clamps tight and well secured?

Satisfactory / Unsatisfactory

10. tent hoist safety chain are proper installed securing the tent hoist to the fork mounting bracket and pins and safety pins have be installed.

Satisfactory / Unsatisfactory

Riggers / operator sling inspection

1. Is the sling affected by Tears or Cuts melting charring?

Yes / No

2. Is the sling affected by Broken or worn stitches or showing abnormal wear?

Yes / No

CAUTION

Never attempt any maintenance or repair while the hoist is suspended in the air.

SAFETY NOTES

DO NOT operate hoist if you hear any unusual noises.

DO NOT operate hoist if adjustments or repairs seem necessary.

DO NOT operate hoist if any warning, operating, or capacity instructions are unclear or damaged. Report any Problems to your supervisor and notify the next operator when changing shifts.

NEVER operate an electric hoist or any electrical equipment in an explosive atmosphere. Explosive atmospheres exist around refineries, chemical plants, grain elevators, coal mines or coal handling equipment. This is not a comprehensive list.

Consult an expert (e.g. supervisor, safety director, competent person) if you are in doubt about your safety.

Never remove tent hoist from fork truck until tent hoist has been properly disassembled.

Sign Off

Inspector's name _____ Signature _____ Date _____

Inspect the following items to ensure they are in good working condition and are not damaged. If not, contact maintenance personnel asap or send Corrective Action via iAuditor.

Assembling and disassembling the clear span tent hoist

- 1. Fork truck should be 5000 LBS or bigger with three mast with forklifting capacity of 15'6" and in good working order.**
- 2. Fork truck should be inspected per OSHA requirements**
- 3. Before mounting tent, hoist determine the lifting height of the fork truck. See lifting height page four of manual.**
- 4. Check battery power by pressing the battery charge indicator on the right outside of the battery box**
- 5. Insert the forks of the fork truck into the fork pockets of the tent hoist**
- 6. Install safety chain tightly around back side of the forks of the fork truck so the tent hoist is secure to the fork truck**
- 7. Lower the fork so the tent hoist is just setting on the ground**
- 8. With two people grab the lifting handle and remove the upper 12 volt hoist assemble that is in the center of the hoist from it storage pocket and set 15ft in front of the hoist assemble**
- 9. Remove the upper bolt that attaches the lower mast to the upper hoist support arms.**
- 10. Pivot the lower mast forward so it is resting on the kick stand.**
- 11. Add mast extensions as needed**
- 12. Once mast extension has been installed and bolted, with two people pick up upper hoist assembly and slide it into the upper mast extension**
- 13. Install bolt and tighten at each mast sleeve**
- 14. Plug in the power supply and high limit cord to the upper mast assemble and attach power cord to the mast extension with Velcro.**
- 15. Turn on the remote for the hoist**
- 16. Inspect cable on spool at the time check for any damages and that the cable is tight around spool**
- 17. Always keep tension on hoist cable so cable remains tight on spool**
- 18. Using the remote unwind hoist cable maintaining tension and keeping it on the right side of the hoist until J hook can be hook to the welded-on ring on the upper right hoist support bracket.**

- 19. before retracting hoist cable check cable on hoist to make sure is wound on spool evenly and tight**
- 20. do final inspection on hoist per Tent Hoist and Warn operation and safety manual, make sure all mast bolt are installed and tightened, check wiring for any damages check J hook and hoist cable for any damages, make sure all bolts have been installed into mast extension and have been tightened**
- 21. with the remote hit up on the remote and the hoist will raise up as cable is retracted**
- 22. once mast is up in the vertical position install upper bolt through the top of the mast and the upper braces on the hoist**
- 23. you are ready to start installing your Clear Span Tent**
- 24. inspect and install 4' sling onto J hook**
- 25. once clear span arches are assembled, and foot plates are staked or properly ballasted per manufacturer spec's you are ready to start lifting procedures**
- 26. center fork truck in the center of the arches**
- 27. attach sling around arches and attach to J hook of tent hoist**
- 28. begin lifting arch and drive fork truck so it is in position for vertical lifting of arches**
- 29. in most cases it best if the rigger is operating the wireless remote raising or lowering arches as the fork truck driver moves forward or backward.**
- 30. use the tent hoist remote to lift the arch 2 ft above the fork of the fork truck then move fork truck forward so that the hoist is in the vertical lifting position**
- 31. once you have vertical lifting begin using fork truck to lift the arches and moving forward as you lift arches**
- 32. once the fork truck forks have been raised to their max height then you should use the remote on the tent hoist to do all final lifting.**
- 33. Always make sure you are maintaining vertical lifting and your rigger is always in site and be able to watch his hand signals**
- 34. When moving forward and backward when lifting or lowering have the fork truck position in the center of arches so as you are maintaining vertical lifting**

Trouble shooting

Hoist will not operate:

1. check wireless remote make that is on the on position
2. check wire remote control that the light comes on when pressing In or Out. If no light replace remote battery and it has good connection
3. check the large 2 prongs 12-volt plug connection at upper and lower mast
4. check battery voltage by pressing battery indicator gage
5. Check the 250aAMP breaker to make sure it has not been tripped. Its located in the battery box
6. check for loose connection at battery
7. check for loose wires on the solenoid in the battery box
8. check for loose connection at hoist

Hoist will not wind up but will unwind down:

1. check the small two prong plug connection by the upper mast
2. check the high limit switch at the hoist for damages
3. check for loose connection on the small wire in the battery box
4. last option: open battery box unplug the two small red and black wire connected to two yellow wires, plug the yellow male female plugs together coming from the wireless remote. You have just disconnected the high limit and vertical pull switch, retry wireless remote if hoist then winds cable up the high limit switch needs adjusted or replaced



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