


<i>HEALTH AND SAFETY MANUAL</i>		
Title: Truck Hoist Safety		
Approved by: Greg Savoy		Rev. 1/1/08

1 Purpose/Scope:

This program establishes operations and training requirements regarding truck hoists and related operations.

Applies to all Company employees and who operate truck hoists; or work in the area while they are in operation. When work is performed on a non-owned or operated site, the operator's program shall take precedence, however, this document covers Company employees and shall be used on owned premises, or when an operator's program doesn't exist or is less stringent.

2 Responsibilities:

2.1 Responsibilities:

2.1.1 Managers/Supervisors are responsible to ensure that employees are trained and qualified on the proper truck hoist operations and have been trained in truck hoist safety.

2.1.2 Managers/supervisors are responsible to see that all provisions of this program are followed, that truck hoist inspections are performed and the equipment is in safe operating condition.

2.1.3 Employees are responsible to follow the requirements of this program and report any damage or needed repairs immediately to their supervisor.

2.1.4 Employees assigned to duties requiring the operations of truck hoists are responsible to:

- Become familiar with and store in vehicle, the owners manual from the manufacturer of the truck hoist.
- Make the required inspections,
- Ensure that the truck hoist is maintained,
- Ensure that all personnel working in the area around the crane are kept clear of all hazards related to hoist operations.

- Determine the weights, and correct rigging required for loads to be lifted.

3 Requirements:

3.1 General:

- 3.1.1 This program applies to all service truck mounted hoists utilized by Reagan Power & Compression.
- 3.1.2 Only designated employees trained in truck hoist safety shall operate equipment covered by this program.
- 3.1.3 Each truck hoist shall have the load rating plainly marked on the unit.
- 3.1.4 A load rating chart shall be clearly legible, attached to the truck hoist, and shall be located in view of the operator while at the controls.

3.2 Truck mounted hoist equipment:

- 3.2.1 Make certain the crane is installed per factory specifications.
- 3.2.2 The vehicle shall comply with the hoist manufacturer's recommendation for size and GVWR (Gross Vehicle Weight Requirement)
- 3.2.3 The vehicle shall be equipped with appropriately sized outriggers/jacklegs per hoist manufacturer's recommendations.
- 3.2.4 The maximum lifting capacity rating must be determined for each length of boom used on the hoist. Manufacturer's load charts shall be utilized.
 - The maximum lifting capacity rating will not exceed hoist or pulley maximum loads, and will be posted on all hoist equipped trucks where readily visible to operator from hoist controls.
- 3.2.5 Boom tie-downs must be used when the vehicle is in motion.
- 3.2.6 The hoist hook must have a safety catch and shall be attached to the lifting line through a spliced or cable clamped eye.
- 3.2.7 Chain is not permitted between the lifting line and the hoist hook.

3.3 Inspections:

- 3.3.1 A routine inspection of the crane is mandatory before each operation. Inspection shall include, but not be limited to:
 - Cable inspection. Check for:
 - ✓ Broken Strands.
 - ✓ Kinks and flattened sections.

✓ Corrosion and abrasion.

- Hook and safety latch inspection;
- Check for proper greasing of components;
- Check for loose fasteners; Inspect traveling block and pulleys;
- Check electrical connections;
- Check pendant control for broken wires and proper operation;
- Check crane base, boom and base to vehicle connection for cracks or deformation.

3.3.2 Annual inspections and certifications may be required to comply with client requirements.

3.4 Operations:

3.4.1 The operator must be familiar with and trained on lifting equipment before being allowed to operate the unit.

3.4.2 Safety Tips and Precautions:

- Make certain the vehicle meets minimum chassis requirements. (These requirements do not guarantee unit stability.)
- All load ratings are base on crane capacity, NOT unit stability. THESE CRANES CAN LIFT ENOUGH TO TURN THE TRUCK OVER!
- Keep objects and personnel clear of crane path during operation.
- Keep hoist cable pulled tight at all times.
- NEVER unreel the last wrap of cable from the drum.
- NEVER wrap cable around load.
- REMEMBER in lifting a heavy load, the weight can create enough tipping moment to overturn the vehicle.
- NEVER attempt to lift or drag a load from the side. The boom can fail far below its capacity.
- Oil gears as required.
- NEVER weld, modify, or use unauthorized components on any truck crane unit. This will void any warranty or liability –crane failure may also result.

- NEVER place a chain link on the tip of the hook and try to lift a load with the hoist.
 - NEVER use a sling bar or anything larger than the hook throat that could prevent the hook from closing with the block, thus negating the safety feature.
 - In using a safety hook, ALWAYS ensure that the hook throat is closed before lifting a load.
 - Proper attention and common sense applied to the use of the hoist hook and various slings will prevent possible damage to material being hoisted and may prevent personal injury.
 - NEVER hold any pendant Select switch on that will negate safe operation conditions.
 - ALWAYS store outriggers before road travel.
- 3.4.3 At the job site, the vehicle shall be positioned so that the crane can adequately reach the load within the rated capacity of the truck hoist (centerline of rotation to hoist hook).
- 3.4.4 Keep the vehicle as level as possible during operation.
- 3.4.5 Engage emergency brake and turn off ignition with transmission left in gear (or park for automatic transmissions). For extended use, leave engine running with brake set and transmission in neutral or park - this will keep battery charged.
- 3.4.6 ALWAYS use outriggers from the truck to the ground. Be sure these are firm and adequately positioned.
- 3.4.7 Plug in pendant control or unwrap pendant cable from storage - crane is ready for operation.
- 3.4.8 Always boom up before rotating so boom will clear boom support.
- 3.4.9 Always maintain clearance between the boom crown and traveling block or hoist hook when extending the boom.
- 3.4.10 Determine amount of weight to be lifted.
- 3.4.11 Use slings (or other approved devices) of adequate capacity to attach the load to the hook.
- 3.4.12 Do not overload truck, boom or hoist.
- 3.4.13 Center the load under the hoist.
- 3.4.14 Ensure slings are placed properly in the hook.

- 3.4.15 Always use slings; never wrap the hoist line around the load.
- 3.4.16 Stand clear and keep fingers clear whenever tension is applied to the hoist line.
- 3.4.17 Never walk, stand or work under a suspended load, personnel are prohibited from riding on a load being hoisted.
- 3.4.18 Never pull a load with a hoist.
- 3.4.19 Never use the hoist line for assistance in climbing up on the truck bed.
- 3.4.20 Use leather-palm gloves when handling a hoist line. Do not jerk loads or let line slip through hands.
- 3.4.21 Lift loads slowly.
- 3.4.22 Lift load a few inches to test balance and re-set slings as necessary to balance load.
- 3.4.23 Do not move truck with a load suspended on a hoist.
- 3.4.24 Tag lines must be of sufficient length to allow the employee to control the material without placing themselves under a suspended load.
- 3.4.25 The minimum vertical clearance to any overhead obstruction shall be at least 10 feet. If the voltage of an energized power line is higher than 50 kV, the clearance shall be increased 4 inches for every 10 kv over that voltage. Clearances may be reduced if the provisions of 29 CFR 1910.333 (c)(i) and (c)(iii) are followed.
- 3.4.26 Lower loads slowly
- 3.4.27 Secure hoist line when not in use.
- 3.4.28 Ensure the load is balanced.
- 3.4.29 Before attempting to rotate the load, position suspended load as low as practical to the ground; maintain proper body position where the load can be maneuvered without placing the body in the path of travel or under the load.
- 3.4.30 After lifting operation is complete, retract boom. return to stowed position on the boom support. Avoid unneeded pressure on the boom support.
- 3.4.31 Store pendant control in proper location.
- 3.4.32 Return outriggers to stowed position. Be sure they are pinned in place or returned to their assigned compartment.
- 3.4.33 Check work area for any tools not properly stored.

3.4.34 Release emergency brake.

3.4.35 Report any problems that may indicate need for repair.

3.5 Training:

3.5.1 Training shall include:

- Documentation of employee name, date of training and subject matter, including method used to test knowledge of material.
- No employee shall operate truck hoists or equipment covered by this program until training has been complete and management has approved and designated him or her as a qualified operator.

4 References:

None.

5 Exhibits:

T-3.1 Annual Truck Hoist Inspection Checklist

EXHIBIT T-3.1

Truck Hoist Inspection Checklist

Annual Inspection

Any deficiencies shall be documented and the truck hoist immediately removed from service until appropriate repairs have been completed.

TRUCK

(Circle One)

- | | | |
|--|-----|----|
| 1. All vehicle equipment functioning (i.e., headlights, brake lights, horn)? | Yes | No |
| 2. Any excessive wear noticed or maintenance required? | Yes | No |
| 3. Any excessive wear or damage to the tires? | Yes | No |

HOIST

(Circle One)

- | | | |
|---|-----|----|
| 1. Boom, hoist, hook or other lifting equipment deformed, cracked or corroded? | Yes | No |
| 2. Are there any loose bolts or rivets, welds broken? | Yes | No |
| 3. Are there any cracked or worn sheaves or drums? | Yes | No |
| 4. For the entire length of the wire rope, is wire rope showing signs of wear, breaks, kinks or crushing? | Yes | No |
| 5. Are there any worn, cracked or distorted parts such as pins, bearings, shafts, gears, rollers, brakes and locking devices? | Yes | No |
| 6. Does brake fail to prevent rotation of hoist and/or boom? | Yes | No |
| 7. Are boom-tie downs worn or corroded? | Yes | No |

Comments/Corrective Actions _____

Inspected By:

Date: