



SAFETY DIRECTIVE

<p>Title: Forklifts, Material Carts and Lifts Issuing Department: Town Manager's Safety Office Effective Date: September 1, 2014 Approved: Gilbert Davidson, Town Manager Type of Action: New</p>
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1.0 PURPOSE

This safety procedure has been established to assure safe operation and use of all Powered Industrial Trucks within the Town of Marana. All powered equipment which is used for lifting and handling material is covered under this program, including Powered Industrial Trucks (Forklifts) and Lifting Devices, Jacks, and Material Carts.

The policies and procedures contained in this directive are intended to assist in identifying and complying with regulations and rules set forth by the Occupational Safety and Health Administration Code of Federal Regulations. In all cases where there is a difference between specific OSHA standards, local fire code and policies set forth in this procedure, the stricter of the three shall prevail.

2.0 DEPARTMENTS AFFECTED

2.1 This directive applies to all departments and employees of the Town of Marana.

3.0 REFERENCES

3.1 29 CFR 1910.178 – Powered Industrial Trucks OSHA Standard

4.0 DEFINITIONS

Note: Additional definitions regarding the stability of forklifts are found in Appendix A.

- 4.1 Annual Inspection: A safety and operational inspection of the forklift, conducted by an independent vendor.
- 4.2 Certification: Documentation that each operator has been trained and evaluated as required by this directive. The certification shall include the name of the operator, the date of the training, the date of the evaluation, and the identity of the person(s) performing the training or evaluation.

- 4.3 Dock Bridge: A bridge or plate, normally made of steel that covers the gap between a loading dock and a truck parked for loading or unloading.
- 4.4 Extensions: Fork extensions slip over the existing forks to assist in picking up deep and/or heavy loads.
- 4.5 Forklift: A motorized truck and other specialized industrial truck powered by electric motor or internal combustion engine.
- 4.6 Grade: A change in travel surface, elevation, or slope.
- 4.7 Jack: For the purpose of this directive, a manually operated lifting device, including pallet jacks, rider pallet jacks, floor jacks, and hydraulic jacks.
- 4.8 Load: The material to be lifted, transported, or placed.
- 4.9 Mast: The section of the forklift located directly in front of the operator that rises or lowers in segments.
- 4.10 Material Carts: Motorized equipment (fuel or electric) with or without a “bed” in the rear to carry materials. Examples include golf carts, EZ-GO, John Deere, 3 or 4 Wheel ATVs or similar vehicles not licensed for operation on the public right-of-way and designed for field operations. A vehicle is licensed to operate in the public right-of-way when it has a roof, windshield and wipers, headlights and taillights, and seat restraint devices.
- 4.11 Mechanical Lift Device: Means a device other than a forklift, but similar in operation to a forklift, such as a pallet stacker, walking stacker or WAV (Work Assist Vehicle).
- 4.12 Nameplate: Sometimes called a “marking” plate, identifies the load capacity of the forklift dependent upon the position of the load.
- 4.13 Personal Fall Arrest System (PFAS): A means of personal fall protection that shall be utilized by employees who are lifted in a forklift personnel basket.
- 4.14 Personnel Basket: A device that attaches to the mast of the forklift, designed to lift personnel.
- 4.15 Powered Industrial Trucks (Forklifts) and Lifting Devices, including:
 - 4.15.1 Manually-powered (walk behind) forklifts;
 - 4.15.2 Electric pallet stackers;
 - 4.15.3 Work Assist Vehicles.
- 4.16 Pre-use Inspection: A safety inspection conducted by the operator before the beginning of each shift during which the forklift will be operated. The results of each pre-inspection shall be documented in a pre-inspection log.
- 4.17 Tilt: A function by where the mast will tilt backward past 90 degrees to travel with material, or move forward past 90 degrees, to place material.
- 4.18 Tire (wheel) Chock: A method of securing vehicle tires by placing a “chock”, normally constructed of rubber, in the shape of a triangle, the chock is placed in the center of the dual rear wheels of a truck or trailer, or in front and behind the wheels of a truck with a single axle.

5.0 POLICIES AND PROCEDURES

5.1 General

- 5.1.1 The procedures set forth in this directive apply to Town-owned and -operated equipment, as well as any equipment, including all forklifts rented, leased or utilized by Town personnel.
- 5.1.2 A valid Arizona Driver's License is required to operate any motorized equipment for the Town of Marana, including the equipment delineated in this directive.
- 5.1.3 All Town employees who operate a powered industrial truck must receive pre-operational use training conducted by their supervisor or manufacturer.
- 5.1.4 For forklift or lift device operation during their employment, employees shall complete the Forklift Safety Classroom Training and Practical Evaluation to receive certification to operate a forklift. This certification process must be completed **before** an employee operates a forklift for the Town of Marana and shall be repeated every three years unless indicated by equipment change or operating behavior.
- 5.1.5 Employees intending to operate Material Carts should receive familiarization training consisting of reading that manual supplied by the manufacturer and receive verification of operating knowledge by the supervisor, prior to operation.

5.2 Employee Forklift Certification

- 5.2.1 Authorized Forklift Trainers shall attend a specialized training class on the principles of forklift stability and operation and shall be certified in the operation of the forklifts for which they are conducting training. Authorized Trainers will re-certify every three (3) years.
- 5.2.2 Employee operators shall be certified in the forklift by designated type of lift under the specific conditions of operation. Operators shall attend classroom training on the stability and dynamics of forklift operation and shall complete a practical examination conducted by the Authorized Trainer under simulated work conditions, utilizing each forklift the employee will be certified to operate.
- 5.2.3 The training shall cover the following truck-related topics:
 - 5.2.3.1 Characteristics of the forklift during operation and the limitations of the forklift;
 - 5.2.3.2 Operating instructions, warnings or precautions for the specific forklift(s) to be operated;
 - 5.2.3.3 Controls and instrumentation, including specific function;
 - 5.2.3.4 Power plant operations and maintenance;
 - 5.2.3.5 Steering and maneuvering;
 - 5.2.3.6 Visibility while operating a forklift or while backing;
 - 5.2.3.7 Fork attachments; adaptation, operation and limitations;
 - 5.2.3.8 Vehicle load capacity, load rating and load chart;
 - 5.2.3.9 Vehicle stability;

- 5.2.3.10 Inspection procedures;
- 5.2.3.11 Re-fueling or re-charging;
- 5.2.3.12 Operating limitations as delineated by the manufacturer's instruction manual.
- 5.2.4 The training shall cover the following workplace-related topics:
 - 5.2.4.1 Surface conditions where the forklift will operate;
 - 5.2.4.2 Composition of anticipated loads and stability of loads;
 - 5.2.4.3 Load manipulation, stacking and un-stacking;
 - 5.2.4.4 Pedestrian traffic;
 - 5.2.4.5 Aisles and other areas of restricted operation;
 - 5.2.4.6 Operating in hazardous locations;
 - 5.2.4.7 Operating on trucks, docks, ramps, and grades;
 - 5.2.4.8 Forklift operation in areas where ventilation is restricted or insufficient.
- 5.2.5 Re-certification is required every three (3) years, or:
 - 5.2.5.1 When changes in equipment or workplace deem previous training obsolete;
 - 5.2.5.2 The operator is involved in a forklift accident;
 - 5.2.5.3 The operator is observed by a supervisor or Authorized Forklift Trainer committing an unsafe act while operating a forklift.

5.3 Avoidance of Duplicative Training

- 5.3.1 If an operator has previously received forklift operator training that can be documented by the operator presenting their certification card, within the valid three (3) year period, additional classroom training is at the option of the department.
 - 5.3.1 The operator shall be required to complete a practical training and examination under the direction of the Authorized Trainer, on the forklift(s) the employee will be expected to operate, under circumstances identical or similar to the operating conditions.
- 5.4 Annual Inspection. The Town of Marana requires that an annual safety and operating inspection shall be performed by a third party vendor on all forklifts and mechanical lift devices within the Town inventory. This third party inspection process shall be coordinated by the Fleet Services Division of the Development Services Department.

5.5 Pre-use Inspection

- 5.5.1 A pre-use inspection to identify damage or safety defects on a forklift or lift device shall be performed by the operator at the beginning of each work shift. If at any time a forklift is in need of repair, is defective or is in anyway unsafe, the forklift shall be immediately removed from service, dead lined and tagged "Out of Service", with a notation regarding the reason for removal from service and shall not be utilized until repairs have been completed.
- 5.5.2 Pre-use inspections shall cover the following points:

- 5.5.2.2 Inspect mast for broken or cracked weld points and/or obvious damage;
- 5.5.2.3 Ensure roller tracks are greased and chains are free to travel;
- 5.5.2.4 Forks should be equally spaced and free from cracks along the blade and at the heels;
- 5.5.2.5 Check hydraulic fluid levels;
- 5.5.2.6 Check each hydraulic line for wear or crimping;
- 5.5.2.7 Check lift and tilt hydraulic cylinders for leaks or damage;
- 5.5.2.8 Inspect cylinder mounting hardware;
- 5.5.2.9 Check solid tires for excessive wear, splitting, or missing rubber;
- 5.5.2.10 If pneumatic, check air pressures for proper inflation rate noted on tire.

5.6 Documentation of Inspections

- 5.6.1 Annual inspections shall be documented by the placement of an inspection sticker on the forklift or lift device, signifying the date of the last annual inspection conducted by the contract vendor.
- 5.6.2 Pre-use inspections shall be documented on the Pre-use Inspection Form referenced in Appendix B, and retained by the department. Completed pre-use inspection forms shall be kept with/on the forklift or lift device for a period not less than thirty (30) days and then shall be filed at the work site in a manner by the department to ensure that inspections records for the forklift are retained for a period of one (1) year.

5.7 Power Source Inspection

5.7.1 Battery Power

- 5.7.1.1 Personal Protective Equipment in the form of apron, rubber gloves, face shield, and safety glasses shall be worn when checking the battery, the battery fluid levels or adding water from a “car boy” tilter.
- 5.7.1.2 Batteries shall be inspected for:
 - 5.7.1.2.1 Cracks, holes, leaks;
 - 5.7.1.2.2 Frayed cables with bare wire visible;
 - 5.7.1.2.3 Tight cable connections.

5.7.2 Propane Power

- 5.7.2.1 All Liquefied Propane (LP) cylinders shall be examined by the operator before replacement for the following defects or damage:
 - 5.7.2.1.1 Dents and gouges;
 - 5.7.2.1.2 Damage to the valves and gauges;
 - 5.7.2.1.3 Debris in the relief valve;
 - 5.7.2.1.4 Damage to the relief valve cap;
 - 5.7.2.1.5 Indication of leaks at the threaded connection.

5.8 Forklift Fuel Handling and Storage. Liquid fuels (gasoline, diesel) shall only be stored in approved safety cans. Smoking is prohibited during the re-fueling process for both liquid fuels and LP cylinder exchange. The engine shall be shut-off and the operator shall not be in the cab of the vehicle while the forklift is being fueled or the cylinders are being changed.

5.9 LP Cylinder Storage – Forklifts

5.9.1 Cylinders not in use shall be protected by a screw type cap and collar to protect the valve assembly. Cylinders shall not be temporarily stored in or near building exits or stairwells.

5.9.2 Cylinders shall be permanently stored outside of buildings, a minimum of ten (10) feet from any building exit. Cylinders shall be stored a minimum of 20 feet from a liquid fuel dispenser (gas/diesel pumps or drums). Cylinders shall be stored in an approved rack constructed of metal frame with vented sides, or cylinders shall be enclosed in a fenced area, with a designated area for cylinder storage demarcated. Cylinders in this area will be secured upright and protected from impact and tipping.

5.9.3 Smoking is prohibited in LP Storage areas and shall be signified by the posting of signage.

5.10 Battery Handling and Storage – Forklifts and Material Carts

5.10.1 Battery charging facilities for forklifts or other equipment shall be located in a well-ventilated, designated charging area that has immediate, unobstructed access (10-15 seconds) to eye wash and drench facilities.

5.10.2 Smoking is prohibited in battery charging areas and shall be signified by the posting of signage.

5.10.3 Personal Protective Equipment shall be worn when connecting and disconnecting charging leads to the battery terminals. Chargers shall be turned off before connecting or disconnecting leads. Battery vent caps shall be opened and the equipment cover opened or removed to dissipate heat. When returning the forklift to service, the battery vent caps shall be re-secured.

5.11 Fire Extinguisher – Forklifts. A fire extinguisher shall be mounted on the forklift or shall be mounted and readily available at the point of refueling (liquid, LP gas, or battery charging).

5.12 Forklift Operation. The following mandatory rules are in effect when operating a forklift:

5.12.1 Only certified forklift operators shall operate a forklift;

5.12.2 Operators shall wear a seat belt;

5.12.3 Operators must be 18 years of age or older;

5.12.4 Employees shall not pass under the raised forks, regardless of the presence of a load;

5.12.5 Passengers are prohibited from riding on a forklift, nor shall employees ride the forks of a forklift;

5.12.6 Arms and legs shall remain outside the mast;

- 5.12.7 Operator shall never dismount a moving vehicle;
- 5.12.8 Operators shall check all overhead clearances before operating a lift;
- 5.12.9 Operators shall inspect truck/trailer flooring for breaks or weakness before driving a forklift into the truck/trailer;
- 5.12.10 Operators shall assure that truck wheels and trailer wheels are chocked, and the truck/trailer brakes are engaged to prevent truck or trailer movement away from the dock;
- 5.12.11 Operators shall assure Dock Bridges or Dock Plates are secure against movement
- 5.12.12 Operators shall maintain a safe distance from elevated dock edges.
- 5.12.13 The operator shall not leave a forklift “running”, while the forklift is unattended. A forklift is considered unattended when:
 - 5.12.13.1 The operator is 25 feet or more from the forklift, while the forklift is within the view of the operator;
 - 5.12.13.2 When the operator cannot see the forklift, regardless of distance.
- 5.12.14 When unattended, a forklift shall:
 - 5.12.14.1 Have the mast fully lowered to the ground;
 - 5.12.14.2 Have the controls in neutral;
 - 5.12.14.3 Have the operating power shut off;
 - 5.12.14.4 Have the parking brake set.
- 5.12.15 Areas where fuel powered (gasoline, diesel, LP gas) forklifts will be operated shall be evaluated for hazardous atmospheres and adequate ventilation, before forklift operation. Fuel powered forklifts shall not be left at idle while operating indoors.
- 5.13 Personnel Lifts. When a forklift is equipped with a personnel basket, the following precautions shall be mandated:
 - 5.13.1 The locking bolts shall be secured near the heel of each fork;
 - 5.13.2 The platform shall be secured by a chain placed behind the mast, attached to each side of the lift. The chain shall be just long enough to secure the lift while not interfering with the operation of the mast;
 - 5.13.3 The combined weight of the employees in the personnel lift shall not exceed the load capacity of the forklift;
 - 5.13.4 Employees in the personnel lift shall be wearing a Personal Fall Arrest System (PFAS), tied off to the manufacturer’s specified attachment point and connected by a lanyard or positing device of a length that will not allow the employee(s) to leave the floor of the basket;
 - 5.13.5 Employees shall not climb the guardrail of the personnel lift, nor improve their height in the lift by means of standing on planking, ladder or other unapproved device(s).
- 5.14 Material Carts

5.14.1 All material carts shall be operated per manufacturer's specifications. Employees shall only ride while seated in the manufacturer's seat and where present, shall utilize and wear a seat restraint device. Employees shall not ride in any other location of the material cart, such as the bed or dashboard of the vehicle. The rider and material weight limit set by the manufacturer shall not be exceeded. Material Carts shall be driven directly up/down grades (hills) and not across the grade (hill) as to prevent roll-over.

5.14.2 Material Carts licensed to operate in the public right-of-way shall be inspected prior to use to determine if all safety features are functioning as designed by the manufacturer. Inspection should include verification of functioning or intact:

5.14.2.1 Head and tail lights

5.14.2.2 Windshield and roof

5.14.2.3 Windshield wipers

5.14.2.4 Seat belt

5.14.2.5 License plate

5.14.3 Deficiencies shall be repaired or replaced prior to operation.

5.15 Jacks

5.15.1 All jacks shall be inspected prior to use. Jacks shall be inspected for the following deficiencies that will prevent safe operation:

5.15.1.1 Hydraulic leaks

5.15.1.2 Cracked or broken lifting cup

5.15.1.3 Bent or deformed lifting shaft

5.15.1.4 Broken, cracked or otherwise damaged jack body

5.15.1.5 Broken, cracked or deformed wheels

5.15.2 Deficiencies shall be repaired or replaced prior to operation by an authorized repair entity.

5.15.3 Every jack shall have the label signifying the lifting capacity plainly visible, or in the absence of the manufacturer's label, the lifting capacity shall be plainly marked on the device in conformance with the manufacturer's specification.

6.0 RESPONSIBILITIES

6.1 The Safety Coordinator has overall responsibility for the Town's safety programs. The Safety Coordinator shall consult with the Town Manager regarding appropriate changes and amendments to this administrative directive.

6.2 An employee designated by the department to conduct classroom and practical training utilizing the course materials developed by Town Manager's Safety Office. Trainers shall renew their certification by attending a specialty course in the operation of forklifts conducted by a third-party representative (ex. ADOSH).

- 6.3 For material handling carts and lifting devices, the Supervisor or Lead Personnel shall serve as the Authorized Trainer.
- 6.4 Town Manager's Safety Office shall create and manage the training materials for the Authorized Trainers and shall facilitate the production of the Forklift Certification Cards that must be carried at all times by the forklift operator.
- 6.5 Town Manager's Safety Office shall document all forklift training conducted at the department level.
- 6.6 Town Manager's Safety Office shall have available training programs that compliment manufacturer's safe and prudent operating procedures for material handling carts and lifting devices.
- 6.7 Department Heads, managers and supervisors are responsible for ensuring that the requirements of this directive are fully implemented in their work areas.
- 6.8 The supervisor shall designate and identify employees that will operate a forklift within their division. The supervisor shall ensure that no employee, whether under their direction or not, operates a forklift without training and certification. Supervisors shall ensure that safety deficiencies identified during pre-inspection or annual inspection are promptly repaired, before the unit is returned to operation.
- 6.9 Supervisors shall ensure that each affected employee has specific training in the operation of material handling carts and lifting devices.
- 6.10 Employees are responsible for attending all mandatory training classes, and understanding the policies and procedures outlined in this directive, as well as all Town health and safety procedures.
- 6.11 The employee responsible for the operation of the forklift shall complete the classroom and practical training conducted by the department trainer before operating a forklift and shall re-certify operator training once every three (3) years.
- 6.12 The operator shall operate the forklift in a safe manner according to the provided training and shall immediately report all safety discrepancies to their supervisor.
- 6.13 Employees shall operate material handling carts and lifting devices in a safe and prudent manner according to manufacturer instruction.
- 6.14 The Safety Coordinator and the Safety Committee are authorized to halt any operation of the Town where there is danger of serious personal injury.

7.0 ATTACHMENTS

- 7.1 Appendix A - Stability of Powered Industrial Trucks
- 7.2 Appendix B - Forklift Pre-use Inspection Form

Appendix A

Stability of Powered Industrial Trucks

Definitions:

The following definitions help to explain the principle of stability:

Center of gravity is the point on an object at which all of the object's weight is concentrated. For symmetrical loads, the center of gravity is at the middle of the load.

Counterweight is the weight that is built into the truck's basic structure and is used to offset the load's weight and to maximize the vehicle's resistance to tipping over.

Fulcrum is the truck's axis of rotation when it tips over.

Grade is the slope of a surface, which is usually measured as the number of feet of rise or fall over a hundred foot horizontal distance (the slope is expressed as a percent).

Lateral stability is a truck's resistance to overturning sideways.

Line of action is an imaginary vertical line through an object's center of gravity.

Load center is the horizontal distance from the load's edge (or the fork's or other attachment's vertical face) to the line of action through the load's center of gravity.

Longitudinal stability is the truck's resistance to overturning forward or rearward.

Moment is the product of the object's weight times the distance from a fixed point (usually the fulcrum). In the case of a powered industrial truck, the distance is measured from the point at which the truck will tip over to the object's line of action. The distance is always measured perpendicular to the line of action.

Track is the distance between the wheels on the same axle of the truck.

Wheelbase is the distance between the centerline of the vehicle's front and rear wheels.

General

Determining the stability of a powered industrial truck is simple once a few basic principles are understood. There are many factors that contribute to a vehicle's stability: the vehicle's wheelbase, track, and height; the load's weight distribution; and the vehicle's counterweight location (if the vehicle is so equipped).

The "stability triangle," used in most stability discussions, demonstrates stability simply.

Appendix A (continued)

Stability of Powered Industrial Trucks

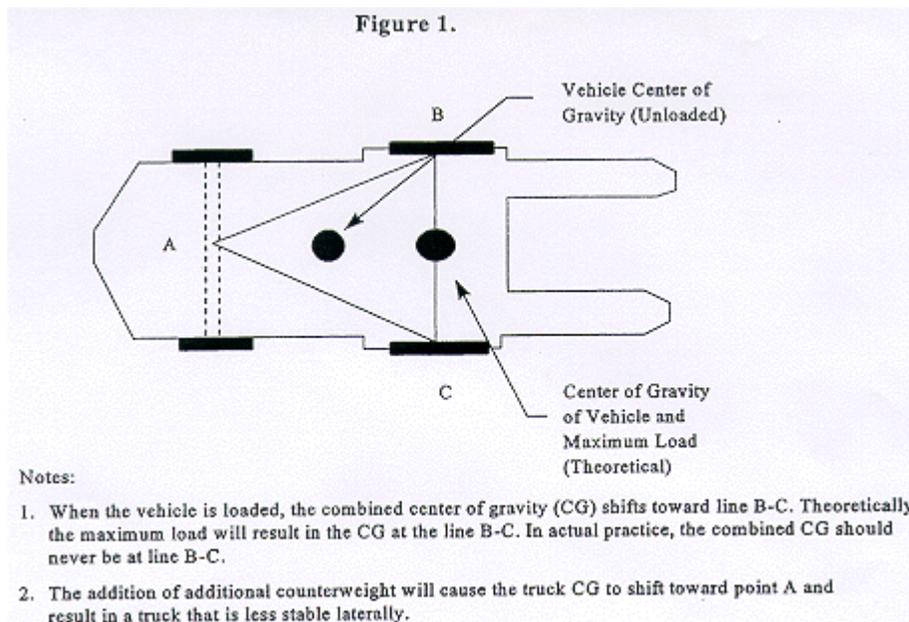
Basic Principles.

Whether an object is stable depends on the object's moment at one end of a system being greater than, equal to, or smaller than the object's moment at the system's other end. This principle can be seen in the way a see-saw or teeter-totter works: that is, if the product of the load and distance from the fulcrum (moment) is equal to the moment at the device's other end, the device is balanced and it will not move. However, if there is a greater moment at one end of the device, the device will try to move downward at the end with the greater moment.

The longitudinal stability of a counterbalanced powered industrial truck depends on the vehicle's moment and the load's moment. In other words, if the mathematic product of the load moment (the distance from the front wheels, the approximate point at which the vehicle would tip forward) to the load's center of gravity times the load's weight is less than the vehicle's moment, the system is balanced and will not tip forward. However, if the load's moment is greater than the vehicle's moment, the greater load-moment will force the truck to tip forward.

The Stability Triangle.

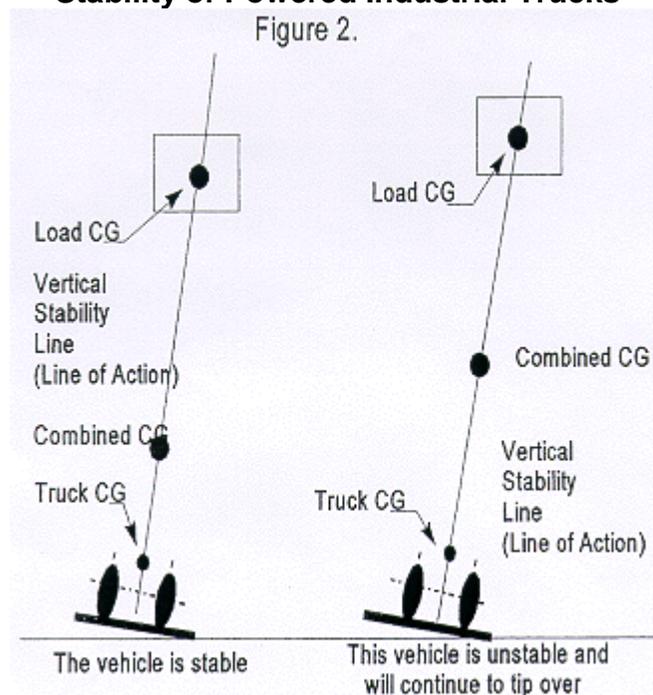
Almost all counterbalanced powered industrial trucks have a three-point suspension system, that is, the vehicle is supported at three points. This is true even if the vehicle has four wheels. The truck's steer axle is attached to the truck by a pivot pin in the axle's center. When the points are connected with imaginary lines, this three-point support forms a triangle called the stability triangle. Figure 1 depicts the stability triangle.



When the vehicle's line of action, or load center, falls within the stability triangle, the vehicle is stable and will not tip over. However, when the vehicle's line of action or the vehicle/ load combination falls outside the stability triangle, the vehicle is unstable and may tip over. (See Figure 2.)

Appendix A (continued)

Stability of Powered Industrial Trucks



Longitudinal Stability.

The axis of rotation when a truck tips forward is the front wheels' points of contact with the pavement. When a powered industrial truck tips forward, the truck will rotate about this line. When a truck is stable, the vehicle-moment must exceed the load-moment. As long as the vehicle-moment is equal to or exceeds the load-moment, the vehicle will not tip over. On the other hand, if the load moment slightly exceeds the vehicle-moment, the truck will begin to tip forward, thereby causing the rear to lose contact with the floor or ground and resulting in loss of steering control. If the load-moment greatly exceeds the vehicle moment, the truck will tip forward.

To determine the maximum safe load-moment, the truck manufacturer normally rates the truck at a maximum load at a given distance from the front face of the forks. The specified distance from the front face of the forks to the line of action of the load is commonly called the load center. Because larger trucks normally handle loads that are physically larger, these vehicles have greater load centers. Trucks with a capacity of 30,000 pounds or less are normally rated at a given load weight at a 24-inch load center. Trucks with a capacity greater than 30,000 pounds are normally rated at a given load weight at a 36- or 48-inch load center. To safely operate the vehicle, the operator should always check the data plate to determine the maximum allowable weight at the rated load center.

Although the true load-moment distance is measured from the front wheels, this distance is greater than the distance from the front face of the forks. Calculating the maximum allowable load-moment using the load-center distance always provides a lower load-moment than the truck was designed to handle. When handling unusual loads, such as those that are larger than 48 inches long (the center of gravity is greater than 24 inches) or that have an offset center of gravity, etc., a maximum allowable load

Appendix A (continued)

Stability of Powered Industrial Trucks

moment should be calculated and used to determine whether a load can be safely handled. For example, if an operator is operating a 3000 pound capacity truck (with a 24-inch load center), the maximum allowable load-moment is 72,000 inch-pounds (3,000 times 24). If a load is 60 inches long (30-inch load center), then the maximum that this load can weigh is 2,400 pounds (72,000 divided by 30).

Lateral Stability.

The vehicle's lateral stability is determined by the line of action's position (a vertical line that passes through the combined vehicle's and load's center of gravity) relative to the stability triangle. When the vehicle is not loaded, the truck's center of gravity location is the only factor to be considered in determining the truck's stability. As long as the line of action of the combined vehicle's and load's center of gravity falls within the stability triangle, the truck is stable and will not tip over. However, if the line of action falls outside the stability triangle, the truck is not stable and may tip over. Refer to Figure 2.

Factors that affect the vehicle's lateral stability include the load's placement on the truck, the height of the load above the surface on which the vehicle is operating, and the vehicle's degree of lean.

Dynamic Stability.

Up to this point, the stability of a powered industrial truck has been discussed without considering the dynamic forces that result when the vehicle and load are put into motion. The weight's transfer and the resultant shift in the center of gravity due to the dynamic forces created when the machine is moving, braking, cornering, lifting, tilting, and lowering loads, etc., are important stability considerations.

When determining whether a load can be safely handled, the operator should exercise extra caution when handling loads that cause the vehicle to approach its maximum design characteristics. For example, if an operator must handle a maximum load, the load should be carried at the lowest position possible, the truck should be accelerated slowly and evenly, and the forks should be tilted forward cautiously. However, no precise rules can be formulated to cover all of these eventualities.

Appendix B

Forklift Pre-use Inspection Form

Forklift Pre-use Inspection		
Forklift Model: _____ Forklift ID: _____		
	Key Off	Initial
1.	Inspect mast weld points, inspect mast for general damage	
2.	Inspect rollers and roller tracks for adequate grease	
3.	Run mast to ensure chain is free to travel	
4.	Inspect forks for bending, cracks in the blade and at the heel	
5.	Check hydraulic fluid levels	
6.	Check hydraulic lines for wear points or crimp points	
7.	Check lift and tilt hydraulic cylinders for leaks or damage	
8.	Inspect all hydraulic cylinder mounting hardware	
9.	Check tires – Solid tires; wear, splitting, missing rubber Pneumatic; Air pressure	
10.	Check integrity of overhead guard	
11.	Check applicable engine fluid levels (oil, transmission, coolant)	
12.	Check battery fluid levels	
	Key On	
13.	Seat Belt Function	
14.	Gauges and Indicator lamps	
15.	Steering function	
16.	Brake function	
17.	Back-up alarm and horn function	

Operator Signature: _____

Date: _____

Retain this form on the forklift for thirty (30) days. Retain all copies for one (1) year.

REVISION HISTORY

<i>REV</i>	<i>DESCRIPTION OF CHANGE</i>	<i>DATE</i>
OR	Original Release	9/1/14

Caution: A copy of this Administrative Directive is an uncontrolled document. It is your responsibility to ensure you are using the current version. The electronic version is the only acceptable and controlled Administrative Directive.