





Berkeley EH&S UNIVERSITY OF CALIFORNIA JAN EHALTH AND SAFETY

FORKLIFT SAFETY PROGRAM

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Purpose

This program guides all aspects of the **Industrial Lift Truck/Forklift Safety Program** for the University of California, Berkeley (UC Berkeley). As mandated by Cal/OSHA and other regulatory compliance codes, this program guides departments that rent/lease/own and operate Powered Industrial Lift Trucks / Forklifts to train and certify personnel who operate their equipment, conduct periodic safety inspections and preventive maintenance of the equipment, and adhere to specific safe-work practices whenever using these types of powered industrial equipment.

Applicability/Scope

This program applies to all UC Berkeley faculty, staff, and students who are required, or who request, to operate Powered Industrial Lift Trucks (forklifts), or who must oversee persons operating Powered Industrial Lift Trucks, for any portion or aspect of their research, instruction and/or work. It only applies to equipment designed to lift material and equipment that is on pallets or other "gathered" framework devices, and move it across a surface and set it down, or place it in a storage rack. It does not apply to equipment designed to lift people to create an elevated work area / platform with two key exceptions noted below. Equipment that lifts personnel are known as "Aerial Lifts" or "Elevated Work Platforms" and regulated under the UC Berkeley <u>Aerial Lift and Elevated Work Platform Program</u>.

This program DOES apply to order-picker equipment where the operator of the equipment is elevated along with the forks to place / retrieve palletized materials from high-storage racks. It also DOES apply to forklifts that have had a "personnel lifting platform" attached to the forks. In both these situations, the personnel who are elevated by the equipment must wear fall protection gear while aloft, and be trained on the requirements of the UC Berkeley **Fall Protection Program**.

Roles/Responsibilities

All UC Berkeley Staff, Faculty and Students

All UC Berkeley faculty, staff, and students who are required, or request, to operate Forklifts / Powered Industrial Lift Trucks or who must oversee persons operating Powered Industrial Lift Trucks, must know about the requirements of this program.

Departments that own/use Industrial Lift Trucks

Departments that own, operate, or allow the operation of forklifts / powered industrial trucks at their facilities assure that all UC Berkeley faculty, staff, or student operators have had current operator's training and evaluation from the Office of Environment, Health and Safety (EH&S).

Department Safety Coordinators

Assure that all aspects of this program are implemented in their department including current operator training and evaluation from EH&S, scheduling training/retraining as needed, and maintain equipment

inventories, program training and inspection records.

Industrial Lift Truck Operators

Operators must successfully complete **Forklift Safety Training**, and be **evaluated on** the safe operation of the specific manufacturer and model of powered industrial trucks that are rented, leased or owned by UC Berkeley that they will be using. Successful evaluation allows an operator to operate that specific type of equipment for a period of three years. Training and evaluation must be attained for each manufacturer / model of powered industrial equipment operated, and is NOT transferable or global to a category of equipment. Training is very specific to each manufacturer and model of equipment operated by the operator. Operators are responsible to **renew their training** and **evaluation** within 90-days of the 3-year expiration date.

Truck Drivers employed by UC Berkeley

UC Berkeley truck drivers that have a current **Forklift Safety Training** and **evaluation** issued by EH&S may operate powered industrial trucks to load or unload their truck.

Truck Drivers making deliveries to UC Berkeley

Vendor truck drivers that have been trained under their company's powered industrial trucks program, have been trained by their employer within the past three years, and have the UC Berkeley Department's permission, may operate their employer's forklifts / powered industrial trucks on UC Berkeley premises.

Contractors and Vendors using Industrial Lift Trucks on UC Berkeley Property

Contractor or vendor employees that have been trained under their company's powered industrial trucks safety program within the past three years, and have the UC Berkeley Department's permission, may operate their employer's forklifts / powered industrial trucks on UC Berkeley premises. Whether the operator is a vendor or contractor, they may be required to show verification that they have been trained within the last three years by host Department management or EH&S.

Forklift Safety Program Manager

EH&S manages this program for UC Berkeley through the direction of the "Forklift Safety Program Manager". This person is responsible for all aspects of managing and implementing this program including:

- Assures this program is updated regularly to maintain compliance with codes and regulations as they change, or at least every three years.
- Communicates program changes, objectives and requirements to all departments impacted by this program.
- Manages online training and tracking/record-keeping of all trainees
- Develops and updates training content as needed.
- Manages program databases and records of operator training.
- Arranges for safe locations to conduct "hands-on" field training.
- Conducts "hands-on" field training and assessment of operator trainees.

- Works with client departments to develop custom training for unique and "department-specific" industrial lift equipment.
- Conducts periodic program audits at client departments to assure the program is being properly implemented and followed.
- Conducts periodic "customer service" inquiries to learn how the program can be modified to better meet client department needs.
- Modifies program content and procedures as needed to improve program effectiveness and ease to implement/track.

Definitions

Counter Weight – The rear section or area of the forklift which is usually made of solid steel, and/or combination of steel and the weight of the battery on an electric lift, that counterbalances the load that is placed on the forks. (**See <u>Attachment 1</u>**)

Data Plate – Manufacturer's equipment specification and information data, which includes load rating/lift capacity, lift heights, load center measurements, vehicle weight, and vehicle attachments. This plate is required to be affixed to all Industrial Lift Equipment by regulatory code. This is the vehicle operator's primary source of basic information about their vehicle for safe-work and use planning.

Dumpster Bin – A fork-attachment used to transport a variety of materials. Always stand clear and keep hands away from all pinch points when releasing the lever to dump the bin.

Fall Protection – An approved full body safety harness w/lanyard is to be worn at all times and attached to a secure anchor point when drivers or personnel are using an Order Picker/Stock Picker Industrial Lift Truck or "Personnel Lifting Platform" fork attachment.

Fork Extensions – These attachments can be slipped over the existing forks to lift larger/longer loads with greater stability. Using Fork Extensions does not increase the forklift lift load capacity.

Load Backrest Extension – A device (permanently affixed or removable) extending vertically from the fork carriage/load apron frame.

Load Apron – The part of the fork carriage permanently affixed and extending vertically from the fork carriage upon which the forks are "hung"/attached.

Mast – Part of the lifting mechanism that the hydraulic lift cylinders are attached which allows the load to be lifted up and down.









Personnel Lifting Platform – A fork-attachment work platform designed for personnel to safely perform work in an elevated location. Fall protection is required during use of this attachment. Refer to the operating instructions for this fork-attachment and "Fall Protection" in this section.

Powered Industrial Truck – A mobile power-driven truck used for hauling, pushing, lifting, or stacking materials.

Rider Truck – Any industrial lift truck that is designed to be controlled by a riding operator. The operator may be standing or sitting on the industrial lift truck during operation depending upon its design.

Rollover Protective Structure (ROPS) – Includes protective frames, overhead guards and driver enclosures to isolate the driver from injury in a "safe zone" in the event of rollover or falling objects.

Seat Belt – The seat belt limits body movement and mechanically "connects" the operator to the equipment keeping the forklift operator inside the safety zone of the ROPS during a rollover.

Side Shifter – An equipment attachment that allows the forks and load apron carriage to be shifted side to side, allowing easier fork-load alignment.

Types of Industrial Lift Trucks

Electric Pallet Jack – An Electric Powered Lift that the operator walks behind that is made for carrying palletized material. It is designed to lift the load 6" or less, and not for stacking or placing the load up into storage racks. See <u>Attachment 5</u> for Pre-Operation Inspection Checklist.

Walkie-Stacker – An electric powered device that the operator walks behind that is designed with a mast and is made for transporting palletized materials, with the option of stacking pallets up to four (4) high. See <u>Attachment 5</u> for Pre-Operation Inspection Checklist.

High Lift Truck / "Common Forklift" – The most commonly used Powered Industrial Lift. Also referred to as a cantilever type forklift, because it has a counter weight to offset the load it is designed to carry.

- See <u>Attachment 6</u>, Pre-Operation Inspection Checklist for diesel, gasoline, or propane powered equipment.
- See <u>Attachment 7</u>, Pre-Operation Inspection Checklist for electric / battery-powered equipment.

Peti-Bone – Used to lift large/heavy loads, this lift is all-wheel drive and is made for rough, uneven or steep terrain. Powered by diesel or gasoline. See <u>Attachment 8</u> for Pre-Operation Inspection Checklist.

Rough Terrain Lift – These lifts are used mostly on construction sites for their ability to conquer rough terrain and telescope to reach high locations. Powered by diesel, gasoline, or propane depending upon design / use. See <u>Attachment 8</u> for Pre-Operation Inspection Checklist.

Narrow Aisle Lift – The Narrow Aisle Lift operates differently from other lifts in that the operator stands while riding on the lift, with a steering wheel and other controls located near their waist area on most models. They

load scissors in and out of the racking system. Powered by propane or electricity / batteries depending upon design / use. See **Attachment 9** for Pre-Operation Inspection Checklist.

Order Pickers and Stock Pickers – A lift that the operator rides on and can be raised up/down on a platform adjacent to the forks to retrieve items from storage racks. Operators using this device must wear proper fall protection (body-harness and lanyard) in compliance with Cal/OSHA fall protection codes. Powered by propane or electricity / batteries depending upon design / use. See <u>Attachment 9</u> for Pre-Operation Inspection Checklist.

Program Requirements/Operator Procedures

Administrative Requirements

The Department Management responsible for purchasing/owning the Industrial Lift Truck(s) designates the person(s) responsible for the following actions:

Procurement/Selection of Equipment Based on Evaluation of Work Area Hazards

Based upon the Lift Truck Work-Site Hazard Inspection Checklist (Attachment 4), the Department identifies hazards encountered throughout the Department during industrial truck use. The Department then procures and outfits Industrial Lift Trucks that will safely operate in the Department's work environment with the anticipated maximum load capacity required. Unusual or potential hazardous locations or operations in a department's work environment are marked with appropriate warnings via signage and paint striping, or reduced through operator training and appropriate equipment selection/maintenance.

Inventory of Department Industrial Lift Equipment

The Department conducts and maintains an inventory list of Industrial Lift Equipment owned/used by the Department using <u>Attachment 2</u> or similar. This list is used to identify training needs, equipment maintenance requirements, and to identify and limit equipment to safe use for department business activities. This list is updated periodically as the Department procures or retires equipment, and is referenced to determine what equipment requires operator's training to use.

Identification of Department Personnel Requiring Industrial Lift Truck Training

The Department identifies specific Department Personnel and others who are allowed to operate the Department's Industrial Lift Trucks. This **Operator Roster** (Attachment 3 or similar) is used to identify training needs and to identify and limit equipment to safe use for department business activities. This list is updated periodically as the Department manages compliance with this program, when lifting needs and/or equipment changes, and when personnel are enrolled or leave this program. The Department may enroll personnel in the University's **Learning Management System** (LMS) for inclusion in the Forklift Safety Program and for online tracking of training and recordkeeping.

Assuring Training/Qualification/Retraining of Department Personnel

CalOSHA codes require all powered industrial truck operators employed at UC Berkeley are enrolled in this Forklift / Industrial Lift Truck Program and receive initial training and retraining at a minimum of every three

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(3) years. The Department enrolls their select personnel in the program, and EH&S conducts the hands on training-evaluation and maintains records of all forklift / industrial lift training given at UC Berkeley.

Operator Training/Evaluating Procedures

There are two parts to the training requirements for forklift operations: the training and the evaluation.

The training is completed online through the <u>UC Learning Center</u>. After the trainee has successfully completed the training, the <u>evaluation</u> is scheduled. The evaluation is a hands-on process using the specific forklift the person is being trained to operate safely.

Each operator that is an employee of UC Berkeley must successfully complete **forklift operator safety training** and **evaluation** prior to operating a powered industrial truck on UC Berkeley property. Trainees may only operate the specific make and model type they have been trained to operate. The evaluation is conducted using the specific forklift the trainee is being trained to operate in a safe manner, and in a location where such lift truck operation does not endanger property, the trainee, or others.

The evaluation is conducted by EH&S or by the trainee's Supervisor who has been trained as a trainer by EH&S or a qualified consultant or contractor. **Register your interest in the evaluation** and ask your supervisor to contact the **Forklift Training Manager** so your supervisor can schedule a date and time.

If an operator has successfully completed the **Learning Center training** in the past three years, and such training is appropriate to a new forklift and/or working conditions, additional online or classroom training is not required for the new equipment if the operator has been evaluated in a "hands-on" field training and found competent to operate the new forklift or perform in the new working conditions safely.

Refresher Training

Refresher training is conducted to ensure the operator has the knowledge and skills needed to operate powered industrial trucks safely. Cal/OSHA requires that refresher training is provided to the operator *every three years*, or when:

- The operator has been observed to operate the equipment in an unsafe manner.
- The operator has been involved in an accident or near-miss incident.
- The operator has received an evaluation that reveals that the operator is not operating the lift truck safely.
- The operator is assigned to drive a different type of truck.
- A condition in the workplace changes in a manner that could affect safe operation of the truck.

Refresher training content is determined by the Forklift Safety Program Manager/Trainer based upon observed hazards, type of equipment, department need, and work requirements.

Operator Procedures

Operator Site Evaluation and Equipment Selection

Prior to conducting work with a Powered Industrial Lift Truck, an operator conducts a <u>Site Evaluation and</u> <u>Truck Selection Assessment</u>. This assessment is conducted as environmental hazards and job requirements dictate, but is formally completed by every operator at the beginning of working in a new or unfamiliar location, or when new or unfamiliar hazards are identified. This assessment ensures that the proper lift equipment is selected for the work, and that all hazards in the work area are identified and mitigated prior to commencing work.

Pre-Operation Inspection and Safe Operating Practices

At the beginning of each work shift, or prior to using an Industrial Lift Truck for a new work assignment, the operator conducts a documented "Pre-Operation Inspection". This inspection is specific to the type of lift equipment, and includes visual and auditory inspection of all safety and operational components of the equipment, reviews/confirms planned use and needed functions, and assesses work conditions. Results of this inspection are documented on inspection checklists. Please refer to the following attachments for Inspection Checklists to be used for daily inspections of various types of Lift Trucks covered by this program:

- Site Assessment and Vehicle Safety Instructions
 - Walkie-Stackers & Walking Pallet Trucks
 - Fuel-Powered Forklifts
 - Electric-Powered Forklifts
 - Pettibone & Rough Terrain Vehicles
 - Narrow Aisle Truck & Order Picker

"Lift Truck Tag Out" for Repair

No lift truck is used until any deficiency(s) discovered during a Pre-Operation Inspection are corrected. If a hazardous deficiency is discovered during a Pre-Operation Inspection, the operator alerts their

Supervisor of the condition, and "Tags Out" the truck from being used by controlling all ignition keys for the vehicle, and placing a "Warning Tag" on the vehicle steering wheel with the following information:

- 1. Person's name that has "Tagged Out" the vehicle and has the keys in their possession as well as their contact information.
- 2. Date vehicle was "Tagged Out".
- 3. Reason(s) for "Tagging Out" the vehicle including all noted deficiencies. (A photocopy of the completed inspection form may be taped to the steering wheel for this purpose.)
- 4. Name and contact information for the Department's responsible person for implementation of this program.

No repairs are made on any industrial trucks until the vehicles and their components are blocked, tagged, locked out or otherwise made safe for repair work to commence according to application of the UC Berkeley **Energy Isolation Lock-Out-Tag-Out Program**.

Training Requirements

All UC Berkeley Staff, Faculty and Students

All UC Berkeley staff, faculty and students are informed of the basic requirements of this program with the primary knowledge that they must be trained to operate an industrial lift truck prior to doing so on UC Berkeley property.

Departments that own/use Industrial Lift Trucks

Departments that own/use Industrial Lift Trucks are familiar with the **<u>administrative</u>** and **<u>personnel training</u> <u>procedures</u>** of this program, and implement/integrate them into their research/work/business practices.

Department Safety Coordinators

Department Safety Coordinators receive detailed training and support from the Forklift Program Manager concerning their roles/responsibilities in implementing/integrating this program into their Department's research/work/business practices.

Industrial Lift Truck Operators

Industrial lift truck operators must enroll in the LMS and successfully complete the <u>written/online training</u>, or classroom training with quiz, as well as an <u>evaluation</u> for each type of Industrial Lift Truck they will be allowed to use.

Truck Drivers employed by UC Berkeley

Truck drivers employed by UC Berkeley must enroll in the LMS and successfully complete the <u>written/online</u> <u>training</u>, or classroom training with quiz, as well as an <u>evaluation</u> for each type of Industrial Lift Truck they will be allowed to use.

Truck Drivers making deliveries to UC Berkeley

Truck Drivers making deliveries to UC Berkeley must be aware that they must have been trained by their employer within the past three years on the type of powered industrial truck(s) that they will use at UC Berkeley, and have UC Berkeley's permission to operate their employer's powered industrial trucks on UC Berkeley premises.

Contractors using Industrial Lift Trucks on UC Berkeley property

Contractors using Industrial Lift Trucks on UC Berkeley property must be aware that they must have been trained by their employer within the past three years, and have UC Berkeley's permission to operate their employer's powered industrial trucks on the UC Berkeley premises.

EH&S Trainer

The EH&S Forklift Safety Program training team are:

- trained on all aspects of this program's management and requirements.
- trained on and familiar with all Cal/OSHA codes relevant to this program.
- trained and certified by a Cal/OSHA "Train-the-Trainer" Program to conduct Industrial Lift Truck training.
- aware of and familiar with all Fed/OSHA training and support materials relevant to this program.

Record Keeping Requirements

Departments that own/use Industrial Lift Trucks

All departments that have trained powered industrial truck operators should keep a current copy of training records on file (up to three years). For copies, please contact EH&S.

Department Safety Coordinators

No record keeping needed, but should verify that all operators have current training

Industrial Lift Truck Operators

Operators that use powered industrial trucks in departments other than their own should at all times have access to their training records

EH&S – Training

EH&S maintains a training database system of all UC Berkeley powered industrial truck operators. These records can be accessed anytime electronically by the department, department safety coordinator, supervisor, Cal/OSHA, or certified operator.

Resources

- §3661. Brakes and Warning Devices
- §3662. Internal Combustion Engines
- §3663. Maintenance of Industrial Trucks
- §3664. Operating Rules
- §3668. Powered Industrial Truck Training
- Fall Protection Equipment fact sheet
- UC Berkeley Fall Protection Equipment Program

ATTACHMENTS

Attachment 1 - Forklift Components Drawing



Attachment 2 - Forklift/Industrial Lift Truck Department Inventory Template

Instructions: An initial inventory of Industrial Lift Equipment owned/operated by each department must be conducted to identify all equipment impacted by this program. This must be done by physical inspection. At UC Berkeley, this survey may be conducted by a responsible person in a department, the department's DSC or their designee and documented on this form. Update this inventory list as equipment is purchased or retired from service, and at least annually.

Lift E	Equipment In	ventory for:			Department:	
MFR	Туре	Power Source	Nameplate Data	Max Lift Capacity	Location	Attachments/Uses
Example: Hyster	High Lift	Propane powered	Model ZH1 S/N 456JV12X798	4500 lbs @ 24" LC	Oxford Track Garage	Forks; Side shift; Hoist Bar General Greenhouse / warehouse use, truck loading / unloading.

Lif	Lift Equipment Inventory for:				Department:	
MFR	Туре	Power Source	Nameplate Data	Max Lift Capacity	Location	Attachments/Uses

Attachment 3 – Operator Roster Template

Instructions: An operator Roster of Industrial Lift Equipment owned/operated by each department is maintained to identify all personnel enrolled in this program. At UC Berkeley this roster may be maintained by a responsible person in a department, the department's DSC or their designee and documented on this form, or through enrollment in the University <u>Learning Management System</u> (LMS). Update this roster as equipment is purchased or retired from service, and personnel are added/deleted from using industrial lift equipment within the Department.

Certified (Operator Roster for Department:		
Operator Name	ID No.	Equipment	Operation Location
Example: Juanita Sanchez	Horticulture OL - 0234 Issued 5/16/09 – 5/15/12	Hyster 3-ton High Lift Crown 2-ton Walkie-Stacker Electric Pallet Jack	Oxford Track Garage Oxford Track Loading Dock VLSB Loading Dock and Parking Area

Certified C	Operator Roster for Department:	nt:					
Operator Name	ID No.	Equipment	Operation Location				

Attachment 4 – Lift Truck Work-Site Hazard Inspection Checklist Template

Instructions: An operator uses this form to conduct a Site Hazard Assessment for Industrial Lift Equipment owned/operated by each department, identify all hazards in the area of intended work, and to select appropriate equipment for the work-task. Update this Hazard Assessment as equipment is purchased or retired from service, Department work activities or hazards change, and when new operators are added to the Department's operator roster for using Industrial Lift Equipment.

Lift Truck Site/Operation Hazard Assessment for Department:			
Site Evaluation	YES	NO	N/A
Is the floor/work surface structurally strong enough to handle the weight/load(s)?			
Are surface conditions where the vehicle will be operated clean, dry and have good traction?	2		
Is there pedestrian traffic in areas where the vehicle will be operated?			
Are there narrow aisles and other restricted places where the vehicle will be operated?			
Will the loads to be carried be stable and of uniform composition?			
Are there ramps and other sloped surfaces that could affect the vehicle's stability?			
Will there be significant load manipulation, stacking and unstacking of materials?			
Are there "Classified Hazardous" locations where the vehicle will be operated?			
Is there an enclosed environment(s) or other areas where insufficient ventilation or poor vehicle maintenance could cause a build-up of carbon monoxide or diesel exhaust buildup for combustion motors, or hydrogen gas buildup at electric vehicle recharging stations?			
List below other potentially hazardous site-conditions that could affect safe operation:			
1.			
2.			
Process / Use of Lift Truck	YES	NO	N//
Should a Lift Truck(s) be used in the type of work being conducted?			
Does the Lift Truck(s) have the proper lift height and capacity for the job?			
Are the proper attachments being used in the type of work in this process?			
Are cables and/or chains being used to lift objects with the Lift Truck?			
Are there designated parking areas for Lift Truck(s)? (Clear of exits, fire extinguishers, hydrants, pedestrian-aisles, doorways, footpaths, or electrical panels.)			
Is the fueling and/or charging area well ventilated?			
Is the fueling and/or charging area well ventilated? Is there proper lighting in the areas the Lift Truck(s) is being used?			
Is there proper lighting in the areas the Lift Truck(s) is being used? In loading dock areas, are there proper dock plates available for use?			
Is there proper lighting in the areas the Lift Truck(s) is being used? In loading dock areas, are there proper dock plates available for use? Are Propane bottles being kept in a secure area, and are they tagged "Full" or "Empty"?			
Is there proper lighting in the areas the Lift Truck(s) is being used?			

Safety Devices/Signs/Postings/Equipment Repair	YES	NO	N/A
Are there signs warning pedestrians that Lift Trucks are operating in the area?			
Are there proper warning signs at blind corners, exits, and high traffic areas?			
Are wheel chocks available if needed during loading or unloading of trucks or trailers?			
Are there proper warning signs in refueling or battery charging areas?			
Are all low overhead obstructions tagged, painted or marked for visibility to operators?			
Are there walking lanes marked with yellow paint for pedestrians to use?			
Are there warning lights or buzzers to warn pedestrians on sidewalks of Lift Truck cross traffic?			
Is an eye wash station with an unobstructed path within 10 seconds walking-distance of the battery charging area?			
Are there a sufficient amount of fire extinguishers on site that have been inspected regularly?			
Is the CAL/OSHA poster (Operating Rules) posted and available to all employees who operate Lift Trucks?			
Are service repair orders for Lift Trucks and/or attachments(s) being kept for record keeping purposes?			
Are Daily Inspections being done, and are records being kept for program documentation?			
Are all other employees in the area aware that Lift Trucks are operating in the area?			
Are all safety devices on the Lift Truck in proper work condition (lights, horn, flashing lights,			
guards, seat belt, back-up alarm, etc.)?			
Are the Lift Trucks being kept in good working condition (maintenance, fuel, battery, oil,			
hoses, etc.)?			
List below other equipment device(s)/operation(s) that could improve safe operation:			
1.			
2.			
LIST SUGGESTED TRAINING and SITE/EQUIPMENT/PROGRAM IMPROVEMENTS			
Operator/Evaluator Date Evaluated			
Supervisor Review Date Reviewed			

Attachment 5 - Walkie-Stackers & Walking Pallet Truck Pre-operation Inspection Checklist

Instructions: Operator must check off each item as having been checked "OK" and safe to use during daily inspection prior to operation. To be used in conjunction with <u>Site Assessment and Vehicle Safety Instructions</u> (Attachment 10).

Walking Pallet Jack

Walkie-Stacker Truck



Attachment 6 - Fuel Powered Forklift Pre-operation Inspection Checklist

Instructions: Operator must check off each item as having been checked "OK" and safe to use during daily inspection prior to operation. To be used in conjunction with <u>Site Assessment and Vehicle Safety Instructions</u> (Attachment 10).



Work Shift Forklift MFR	Model Serial No							
KEY OFF Procedures	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday	
Overhead guard								
Hydraulic cylinders								
Mast assembly								
Lift chains and rollers								
Forks								
Tires (Front psi/Rear psi)								
Fuel System Fittings/Levels/Gages								
Examine the battery & fire extinguisher								
Check the engine/Trans oil level								
Check the hydraulic fluid level								
Check the engine coolant level								
KEY ON Procedures								
Check the gauges								
Hour meter								
Battery discharge indicator								
Test the standard equipment								
Steering								
Brakes								
Front, tail, and brake lights								
Horn								
Safety seat (including seatbelt)								
Operation of attachments								
Starting Hour Meter Reading								
Pre-inspection date								
Operator's Printed Initials								

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Attachment 7 - Electric Powered Forklift Pre-operation Inspection Checklist

Instructions: Operator must check off each item as having been checked "OK" and safe to use during daily inspection prior to operation. To be used in conjunction with <u>Site Assessment and Vehicle Safety Instructions</u> (Attachment 10).

Work Shift				Model			
Forklift MFR				Serial No			
KEY OFF Procedures	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Overhead guard							
Hydraulic cylinders							
Mast assembly							
Lift chains and rollers							
Forks							
Tires (Front psi/Rear psi)							
Examine the battery & fire extinguisher							
Check the hydraulic fluid level							
KEY ON Procedures							
Check the gauges							
Hour meter							
Battery discharge indicator							
Test the standard equipment							
Steering							
Brakes							
Front, tail, and brake lights							
Horn							
Safety seat (including seatbelt)							
Operation of attachments							
Starting Hour Meter Reading							
Pre-inspection date							
Operator's Printed Initials							

Attachment 8 - Pettibone & and Rough Terrain Vehicle Pre-operation Inspection Checklist

Instructions: Operator must check off each item as having been checked "OK" and safe to use during daily inspection prior to operation. To be used in conjunction with **<u>Site Assessment and Vehicle Safety Instructions</u>** (Attachment 10).

Work Shift Forklift MFR				Model Serial No			
KEY OFF Procedures	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Overhead guard							
Hydraulic cylinders							
Mast assembly							
Lift chains and rollers							
Forks							
Tires (Front psi/Rear psi)							
Fuel System Fittings/Levels/Gages							
Examine the battery & fire extinguisher							
Check the engine/Trans oil level							
Check the hydraulic fluid level							
Check the engine coolant level							
KEY ON Procedures							
Check the gauges							
Hour meter							
Battery discharge indicator							
Test the standard equipment							
Steering							
Brakes							
Front, tail, and brake lights							
Horn							
Safety seat (including seatbelt)							
Operation of attachments							
Starting Hour Meter Reading							
Pre-inspection date							
Operator's Printed Initials							

Attachment 9 - Narrow Aisle Truck & Order Picker Pre-operation Inspection Checklist

Instructions: Operator must check off each item as having been checked "OK" and safe to use during daily inspection prior to operation. To be used in conjunction with <u>Site Assessment and Vehicle Safety Instructions</u> (Attachment 10).

Work Shift Forklift MFR				Model Serial No			
KEY OFF Procedures	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
Overhead guard							
Hydraulic cylinders							
Mast assembly							
Lift chains and rollers							
Forks							
Tires/Rollers							
Examine the battery & fire extinguisher							
Check the hydraulic fluid level							
Safety Harness & Lanyard (if Order Picker)							
KEY ON Procedures							
Check the gauges							
Hour meter							
Battery discharge indicator							
Test the standard equipment							
Steering							
Emergency Set Brake							
Test control operation							
Horn							
Test floor safety/power pedal							
Operation of attachments							
Starting Hour Meter Reading							
Pre-inspection date							
Operator's Printed Initials							

Attachment 10 - Site Assessment and Vehicle Safety Instructions

Prior to start of the workday, work-shift, or new material handling task, every industrial truck operator must:

- 1. Conduct, document and keep on file a completed vehicle safety inspection form.
- If the Lift Truck is found to be unsafe during daily inspection, report this immediately to a supervisor or mechanic and do not use the Lift Truck until it has been repaired and made safe. Lock/Tag out the Lift Truck in compliance with <u>UC Berkeley's Energy Isolation Program</u> as need determines.
- 3. Complete any maintenance that the operator is required to perform.
- 4. Review work area for hazards, and remove/control them prior to operation.
- 5. Only use a truck designed to safely work in observed work-area conditions.
- 6. Review operating instructions, limitations, warnings, and precautions for the vehicle.
- 7. Remember the differences between the lift-truck drive-train/steering and an automobile.
- 8. Review controls and instrumentation. Where are they located, what do they do, and how do they work?
- 9. Review engine or motor operation, as well as steering and maneuvering.
- **10.** Become familiar with visibility (including restrictions due to loading and truck components).
- **11.** Review fork and attachment adaptation, operation, and use limitations.
- 12. Review vehicle capacity and vehicle stability.
- **13.** Check fuel or charge of batteries, and refuel/recharge as needed.
- **14.** Review operating instructions, warnings, or precautions listed in the operator's manual, if available.
- **15.** Alert all persons in the work area of intended work activities and hazards.

Safe Operating Instructions

Prior to and during Operation of an Industrial Lift Truck, every operator must:

- 1. Securely fasten their seat belt if the Lift Truck has an ROPS.
- 2. Where possible, avoid operating the Lift Truck near ditches, embankments, and holes.
- 3. Reduce speed when turning or crossing slopes and on rough, slick, or muddy surfaces.
- 4. Stay off slopes too steep for safe operation.
- 5. Never permit others to ride the Lift Truck.
- 6. Operate the Lift Truck smoothly and safely, i.e., no jerky turns, starts, stops, stunt-driving, or horseplay.
- 7. Hitch only to the drawbar and hitch points recommended by the Lift Truck manufacturer.
- 8. Set brakes securely and use park lock if available when the Lift Truck is stopped.
- 9. If a truck must be left unattended for a period of time, shut the vehicle off, and remove the ignition keys.

Securing the Load and Conducting the Lift/Carry

- 1. Always place the load against the backrest to help stabilize the load.
- 2. Always place the larger or heaviest part of the load closest to the backrest.
- 3. When carrying wide loads such as lumber or steel, adjust the forks as wide as possible.
- 4. Use ropes or straps to secure the load, but only attach to the Backrest Extension or Apron Carriage.
- 5. Use clamps or wood blocks to keep round objects such as pipes from rolling during transport.
- 6. Use shrink wrap or tape as needed to secure items stacked on pallets.
- 7. Always evaluate the situation before making an unusual lift.
- 8. If the load is too large to see around, always drive in reverse.
- 9. Never allow a person to walk or stand between the Lift Truck/load and another object.
- **10.** Always carry the load as low as possible and watch for overhead obstructions.
- 11. Always honk the horn at intersections, blind spots, corners, or where pedestrians are nearby.

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