



San Bernardino County Probation

Industrial Truck Program

San Bernardino County Probation

Industrial Truck Program

I. Purpose

The American Society of Mechanical Engineers (ASME) defines a powered industrial truck as a mobile, power-propelled truck used to carry, push, pull, lift, stack, or tier materials. Powered industrial trucks are also commonly known as forklifts, pallet trucks, tractors, rider trucks, fork trucks, motorized hand trucks, or platform lift trucks, and can include other specialized industrial trucks powered by electric motors or internal combustion engines. For simplification purposes, powered industrial trucks will be referred to in this program as "Forklifts."

II. Scope

All employees are responsible for implementing and following this program. It is meant to provide a safe and healthful work place environment, while performing duties designated and appropriate to job standards as per classification.

III. Responsibility

Employees will be responsible for:

- Following this Forklift Program.
- Reporting injuries and hazards to a supervisor.
- Following policies and procedures associated with the use of the forklift.
- Maintaining personal protective equipment per manufacture recommendations.
- Following other safe practices taught during trainings.
- Documenting accidents, injuries, incidents, and communicating near misses to supervisors and management.

Supervisors or Lead personnel will be responsible for:

- Implementing and educating employees on the requirements of this Forklift Program.
- Monitoring employees under their supervision.
- Providing training and follow-up to employees whose safety performance is deficient.
- Recognizing employees on their performance of safe and healthful practices.
- Ensuring essential safety equipment, protective devices, and personal protective equipment (PPE) are provided for each job and used as designed for the forklift.
- Attending required training.
- Addressing issues and concerns per county and department policy/procedure when employees do not adhere to established safety and health rules, standards, and regulations.
- Ensuring periodic inspections of the forklifts are conducted.

Management staff will be responsible for:

- Assuring equipment meets the code requirements for the type of work and environment in which the work is being performed.
- Ensuring safety is designed into each operation where forklifts are required for use.

- Ensuring a maintenance schedule that allows for the equipment to be ready for use at all times.
- Ensuring operators are trained and instructed to properly operate the forklift.
- Ensuring the applicable safety rules and regulations are strictly enforced.
- Ensuring department communication system allows for anonymous reporting about work place safety and health concerns without fear of reprisal.
- Addressing issues and concerns when employees do not adhere to established safety and health rules, standards, and regulations.
- Attending required training.
- Overseeing prompt corrective measures initiated for identified hazards of the workplace.
- Budgeting for safety and health equipment as needed for employees.
- Integrating safety personnel into operations.

The respective Division Director or designee will be responsible for:

- Reviewing this Forklift Program in conjunction with the Risk Control Specialist periodically.
- Updating this Forklift Program with regulatory changes when applicable.
- Providing initial training on the Forklift Program and as well as the forklift assigned to the department.

IV. Operator Training

Government regulations have made training mandatory. Training must be specific to the equipment being used and specific to the conditions under which they are operated. No two facilities are alike, therefore, site-specific training is required. Anyone required to operate forklifts must be trained and evaluated by knowledgeable and experienced trainers and supervisors. Forklift-related topics include but are not limited to the following:

- Operating instructions, warnings, and precautions for the type of forklift the operator will be authorized to operate
- Differences between the forklift and the automobile
- Forklift controls and instrumentation: where they are located, what they do, and how they work
- Engine or motor operation
- Steering and maneuvering
- Visibility (including restrictions due to loading)
- Fork and attachment adaptation, operation, and use limitations
- Vehicle capacity
- Vehicle stability
- Any vehicle inspection and maintenance that the operator will be required to perform
- Refueling and/or charging and recharging of batteries
- Operating limitations
- Any other operating instructions, warnings, or precautions listed in the operator's manual for the types of vehicle that the employee is being trained to operate.

Workplace-related topics:

- Surface conditions where the vehicle will be operated
- Composition of loads to be carried and load stability
- Load manipulation, stacking, and unstacking
- Pedestrian traffic in areas where the vehicle will be operated
- Narrow aisles and other restricted places where the vehicle will be operated
- Hazardous (classified) locations where the vehicle will be operated
- Ramps and other sloped surfaces that could affect the vehicle's stability
- Closed environments and other areas where insufficient ventilation or poor vehicle maintenance could cause a build-up of carbon monoxide or diesel exhaust
- Other unique or potentially hazardous conditions in the workplace that could affect safe operation
- Safety and health trainings provided by supervisors or management
- Periodic review of the Code of Safe Practices.

V. Refresher Training and Evaluation

Refresher training and evaluation, including an evaluation of the effectiveness of the training shall be conducted to ensure that the operator has the knowledge and skills needed to operator the forklift safely. Refresher training shall be provided when:

- The operator has been observed to operate the vehicle 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 forklift safely
- The operator is assigned to drive a different type of forklift
- A condition in the workplace changes in a manner that could affect safe operation of the forklift.

An evaluation of each operator's performance shall be conducted at least once every three years.

Avoidance of duplicative training: If an operator has previously received training in a topic specified in this section, and such training is appropriate to the forklift and working conditions encountered, additional training on that topic is not required if the operator has been evaluated and found competent to operate the forklift safely.

VI. Daily Operator Checklist:

The completion of a pre-shift "Forklift Operator Checklist" is essential to having a good maintenance program. The forklift must be inspected, and the Forklift Operator Checklist completed at the beginning of each work shift, and prior to operating the forklift.

- The operator is responsible to complete the forklift operator checklist.

- The supervisor must be notified if any deficiencies are noted. It is the supervisor's responsibility to determine if the deficiencies warrant removal of the forklift from service.
- When a forklift is removed from service, it should be locked and/or tagged out of service until it is repaired. It is the supervisor's responsibility to notify maintenance for service of the equipment.
- The supervisor is also responsible for maintaining a file of completed forklift safety inspection checklists for reference, and for forwarding copies to appropriate departments as directed.

VII. Maintenance:

Maintenance of forklifts and associated equipment is of the utmost importance for the safety of employees and the preservation of the equipment. Communication between the operators, supervisors, and maintenance personnel is crucial. A routine maintenance schedule shall be provided for each forklift and a maintenance log must be kept in accordance with manufacturer's instructions.

- Each department is responsible for maintaining individual up-to-date forklift/equipment maintenance files. The files should contain a forklift maintenance log (which has an entry for each repair), receipts for all parts, and copies of the Operator's checklist. The Risk Management Department will audit these files periodically for completeness.
- Each department is responsible for maintaining all forklifts and associated equipment. This may be done via the Fleet Service Department or a County approved Vendor.

VIII. Recordkeeping:

Pursuant to OSHA recordkeeping requirements, the department should maintain a paper copy and scan a copy into the system of the following documents:

- Daily operation checklist: 1 year from date of completion
- Maintenance records: 3 years
- Operator certifications: 3 years or until next certification received
- All classroom training should be documented including, presenter, training topic, attendance sheets, or briefing item and kept on file as per department retention schedule.

IX. Reference:

California OSHA Subchapter 7, General Industry Safety Orders, Group 4, General Mobile Equipment and Auxiliaries, Article 25 Industrial Trucks, Tractors, Haulage Vehicles, and Earthmoving Equipment, Sections 3649 – 3669

American National Standards Institute – ANSI B56.1 – 56.10

National Fire Protection Agency – NFPA 505

Underwriters Laboratory – UL583 Electric-Battery-Powered Trucks

Underwriters Laboratory – UL588 Internal Combustion Engine-Powered Trucks

X. Attachments:

Standards and Codes

Daily Operator Checklists (Electric/Combustion)

Maintenance Log

Standards and Codes for Powered Industrial Trucks (Forklifts) (Department of Energy [DOE] OSH Technical Reference)

Organization	Standard	Title
CAL / OSHA	3650	Powered Industrial Trucks
OSHA	29 CFR 1910.178	Powered Industrial Trucks
OSHA	29 CFR 1910.1000	Air Contaminants
ANSI	B56.1-2005	American National Standard for Powered Industrial Trucks
NFPA	NO. 30-2012	NFPA Flammable and Combustible Liquids Code
NFPA	NO. 58-2014	NFPA Storage and Handling of Liquefied Petroleum Gases
NFPA	NO. 505-2006	Powered Industrial Trucks
UL	583	Standard for Safety for Electric or Battery-Powered Industrial Trucks
UL	558	Standard for Safety for Internal Combustion or Engine-Powered Industrial Trucks

GENERAL TYPES OF EQUIPMENT

There is a wide range of equipment, each designed for specific industries and uses. Manufacturers classify forklifts according to each forklift's individual characteristics. There are seven basic classes of forklifts.

- Class One:** Electric motor, sit-down rider, and counter-balanced forklifts using either pneumatic or solid tires.
- Class Two:** Electric motor narrow aisle forklifts that use only solid tires.
- Class Three:** Electric motor hand or hand/rider forklifts that use solid tires. These are commonly referred to as electric pallet jacks.
- Class Four:** Internal combustion engine forklifts, using solid tires. These are the most common types of forklifts. They can be gas, diesel, or propane powered.
- Class Five:** Internal combustion engine forklifts, using pneumatic tires.
- Class Six:** Electric and internal combustion engine tractors, with pneumatic tires.
- Class Seven:** Rough terrain forklift, which use pneumatic tires. These are more commonly used in construction.

CAL/OSHA = California / OSHA¹

OSHA = Occupational Safety and Health Administration

ANSI = American National Standards Institute

NFPA = National Fire Protection Association

UL = Underwriters Laboratory

PNEUMATIC OR SOLID TIRES

Pneumatic tires are tires filled with air, just like an automobile tire. These are designed so the forklift can maneuver in uneven, ungraded terrain surfaces. The tires are more flexible and can adjust to the changing surfaces on which they drive.

Solid tires are exactly what their name implies. They are made of solid rubber or other materials. These tires must be used on smooth, fairly even surfaces. Solid tires are not flexible, but provide excellent wear; however, they can be cut or damaged. When solid tires must be replaced, it requires the use of a high-pressure press, which presses the tire onto the forklift wheel. Technicians with proper equipment perform the demounting and mounting of solid tires.

ATTACHMENTS

Attachments to forklifts can dramatically change the equipment's safe lifting capacity. Attachments come in a wide variety of uses and sizes. There are side shifters, which allow the load to be moved from side to side. There are pipe attachments that contain or hold the pipes being lifted. In this case, it can significantly affect the lateral stability of the forklift. There are other specialty attachments designed for specific loads.

Next, there are a variety of booms, which extend the ability of the forklift to lift long loads. When using boom attachments, the longitudinal stability of the forklift is affected and greatly decreases the safe lifting capacity of the forklifts. There are other attachments, such as floor sweepers, tippers or trash hauling attachments, and rams for specific service, such as lifting large wire coils and other uses.

There are platforms used as attachments to protect people when being lifted on the forklift. Other attachments could include barrel attachments, which are designed primarily for lifting drums and barrels. Regardless of the attachment used, the equipment manufacturer must approve it. It is important to understand fully how each particular attachment changes the safe lifting capacity of the forklift, the stability of the forklift and other potentially hazardous changes to the equipment on which the attachment is being used.

Fork extensions, which are inserted over the forklift's existing forks, should not be longer than 150 percent of the supporting fork's length. By using forklift extensions, the safe lifting capacity is decreased. Fork extensions and all attachments must be attached to the forklift to prevent unintentional disengagement from the forks.



Forklift Operator Daily Checklist



Operator:		Make/Model:	
Department:		Lift Capacity:	
Location:		Date:	
POWER OFF CHECKS		POWER ON CHECKS	
Item	Status (✓ or comment)	Item	Status(✓ or comment)
Wheel/Tires		Seat belt	
Mirrors/visibility aids		Unit Starts/runs properly	
Engine/Batter:		Lights/Strobes	
Cover Panel		Horn/Audible Warning	
Debris		Fuel/Charge level	
Belts/hoses		Instrument gages	
Air Filter		Controls:	
Wires/Cables/Terminals		Mast/Carriage	
Battery/clean/dry/secure		Drive	
Fluids:		Reverse	
Engine Oil		Deadman	
Engine Coolant		Auxiliary Controls	
Hydraulic Oil		General:	
Transmission Oil		Housekeeping	
Fuel/Battery level		Operating Manual	
Visual Observance		Decals/Warnings/Placards	
Cylinder/Rods/Pin Locks		Control Markings	
Hoses/Lines/Fittings		Name Plate	
Mast		Overhead Guard	
Carriage/Lifting/attachments		Mast	
Forks		Counterweight	
		Fire Extinguisher	
<p>Note: If upon inspection an item above requires repair place a "Do Not Use" sign on the equipment and ensure that the key is given to a supervisor and the equipment is locked out from use.</p>			
COMMENTS:			

San Bernardino County Forklift Daily Checklist

The items below must be inspected/observed daily prior to operating the forklift. **“OK”** – no repairs are required. **“X”** – repairs required. Items Highlight in **“Red”** are critical and if an **“X”** is place in any of these boxes then tag out the forklift for repair.

Power Off Inspection					Power On Inspection		
Date/Initials/ type of vehicle inspected:	Gages: Hr. Meter Reading	Fluids checked: Hydraulic fluids for visible leaks Transmission fluids for visible leaks Charge level	Wheels/tires: Good tread Inflation	Visual Observation: Cylinders/rods/Pin locks/Hoses/Lines/Fi ttings/Mast/Carriage /Forks All in acceptable working condition	Stationary Items: Unit starts runs properly Lights/Strobes Horn/Audible warning	Controls: Drive Reverse Mast: Raise/Lower Side to side Tilt Fork spreader	General: Housekeeping Manual on equipment Decals/Warnin gs legible Name Plate legible Overhead guard good condition
Example: 10/29/20 mb Narrow Isle forklift	6,000	OK	OK	Ok	Horn not working	OK	OK
Additional Comments: Example: have maintenance fix horn.							

FORKLIFT MAINTENANCE LOG

Forklift I.D. #	Model	Description of Repairs	Repairs		Mechanic's Initials	Vendor (if applicable)	Cost
			Date	Hour Meter			