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PURPOSE

The University of Illinois at Urbana-Champaign (U of I), through the Division of Safety and Compliance (S&C), Occupational Safety and Health Department (OSH), has established this Powered Industrial Truck (PIT) Program to assist campus units in providing a safe work environment and to promote compliance with State and Federal occupational safety and health standards, particularly the Powered Industrial Truck Standard of the Occupational Safety and Health Administration (OSHA) located in 29 CFR 1910.178 and enforced by the Illinois Occupational Safety and Health Administration (ILOSHA).

It is expected that campus units will develop written unit-specific standard operating procedures (SOPs) to complement and meet the requirements detailed in this program, including completion and submission of Appendix A to OSH.

POLICY

Campus units that operate PITs must ensure that supervisors and operators comply with all aspects of this PIT Program. All university students, faculty and staff that will operate PITs must successfully complete a training program and receive authorization from their respective campus unit prior to the operation of any PIT on campus.

RESPONSIBILITIES

Occupational Safety and Health (OSH)

OSH is responsible for the administration of this Program. OSH maintains copies of all records for services provided by OSH pertaining to this Program. An OSH program coordinator is designated to provide guidance, regulatory interpretation and oversight for this Program and to review this Program annually.

Deans, Department Heads, and Directors (Campus Units)

Campus units shall designate a Responsible Person that will be charged with implementing this Program and unit-specific SOPs.

Campus Unit Responsible Person

The Campus Unit Responsible Person shall understand the requirements of this PIT Program and applicable OSHA regulations and shall complete the PIT training. The Responsible Person shall work with campus unit supervisors to identify personnel that operate PITs and ensure that all personnel within their unit affected by this Program receive proper training. The Responsible Person shall ensure that unit-specific SOPs are reviewed annually.

Supervisors of PIT Operators (Supervisors)

Supervisors and Principle Investigators (PIs) shall understand the requirements of this PIT Program and applicable OSHA regulations and shall complete the PIT training. Supervisors are responsible for enforcing proper work practices under their responsible charge in accordance with this Program and unit-specific SOPs. They shall assist in the development and annual review of unit-specific SOPs. They shall ensure that all their personnel who operate PITs receive training and authorization to operate the unit's PITs.



PIT Operators

Employees shall follow the requirements of this Program, unit-specific SOPs, and training. They shall not operate any PITs for which they have not been trained and authorized. They shall complete the Daily Pre-Use Inspection Checklist before operating any PIT. They shall observe the operation of PITs in their unit and report unsafe practices to their supervisor.

PROCEDURES

Training and Evaluation

Operator training, evaluation and certification shall be conducted by designated personnel who have the knowledge, training and experience to train prospective PIT operators and evaluate their proficiency.

Initial training is the responsibility of the campus unit. Contact OSH for assistance in identifying options for training providers.

Training shall include all of the following:

- Operating instructions, warnings, and precautions for the type(s) of truck the operator will be authorized to operate;
- Differences between the truck and an automobile;
- Truck controls and instrumentation;
- 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 type(s) of vehicle that the employee is being trained to operate;
- Surface condition where the vehicle will be operated;
- Composition of loads to be carried and load stability;
- Load manipulation, stacking, and restacking;
- Pedestrian traffic in areas where the vehicle will be operated;
- Narrow aisles and other restricted places where the vehicle will be operated;
- Hazardous 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; and
- Other unique or potentially hazardous environmental conditions in the workplace that could affect safe operation.



Where units provide their own training and evaluation, copies of the sign-in sheets, written quizzes, equipment hands-on checklists, and/or evaluation checklists must be made available to OSH upon request.

Operator Evaluation and Re-evaluation

Prospective PIT operators must complete an operator evaluation before being authorized to operate any PIT. Operator evaluations shall be completed by the campus unit's responsible person or employee's supervisor prior to granting authorization to operate a PIT.

If a prospective PIT operator has previously received classroom training, and such training is appropriate to the PIT and working conditions encountered, additional training is not required. The operator must still be evaluated and found competent to operate the PIT safely. Documentation of completed classroom training must be provided to the Campus Unit Responsible Person.

PIT Operators who were trained and authorized on a different type of PIT than the type they are assigned to use are required to complete an operator evaluation on the new equipment.

Appendix B provides an operator evaluation form that must be completed for each operator for each PIT they are assigned to use, at least every three years. Copies of the completed operator evaluations must be provided to OSH upon request.

Refresher Training

Refresher training is required only under the following circumstances:

- 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 truck safely;
- The operator is assigned to drive a different type of truck; or
- A condition in the workplace changes in a manner that could affect safe operation of the truck.

Certification

The trainer shall certify that each operator has been trained as described above. The written certification will include the operator's name, date of training, and identity of person(s) performing the training.

Authorization

The Campus Unit Responsible person or employee's supervisor shall authorize each PIT operator on the PIT(s) they will operate after successful completion of the training certification and evaluation processes, and prior to work assignments requiring PIT operation. See Appendix B of this document for the authorization form.

Pre-Use Inspection

Prior to the operation of any PIT, the Pre-Shift Inspection Checklist found in Appendix C, or a checklist specific to the model of PIT in use must be completed. This applies at the beginning of every work period, and whenever a new equipment operator takes control of the PIT.



Any safety defects (such as hydraulic fluid leaks; defective brakes, steering, lights, or horn; and/or missing fire extinguisher, lights, seat belt, or back-up alarm) must be reported for immediate repair. PITs must be tagged out of service to prevent use until repairs are completed.

Operation

Only authorized personnel may operate a PIT. Trainees may operate a PIT only under the direct supervision of an authorized PIT operator and where such operation does not endanger the trainee or other personnel.

When a PIT is left unattended (more than 25' away or out of sight) the load engaging means must be fully lowered, controls neutralized, power shut off, brakes set and key removed. Wheels must be blocked or chocked if the PIT is parked on an incline. Do not block walkway, roadway, or emergency access area.

Operators must immediately report all accidents, regardless of fault and severity, to their Supervisor.

Loading

Only handle loads within the rated capacity of the PIT. Loads should be safely arranged, stable, and centered. Adjust long or high (including multiple-tiered) loads that may affect capacity. PITs equipped with attachments must be operated as partially loaded trucks even when not handling a load.

Traveling

The operator must slow down and sound the horn at cross aisles and other locations where vision is obstructed. If the load being carried obstructs forward view, the driver must travel with the load trailing. Grades must be ascended and descended slowly. Position the load uphill relative to the operator when ascending or descending grades. While negotiating turns, reduce speed and turn the hand steering wheel in a smooth, sweeping motion.

Fueling

Fuel tanks may not be filled while the engine is running. Avoid spillage. Spillage of oil or fuel must be absorbed using appropriate absorbent material, the affected area washed, and the fuel tank cap replaced before restarting engine. Any spill clean-up debris must be disposed of as hazardous waste by the Division of Research Safety.

Changing and Charging Batteries

Battery charging installations must be located in areas designated for that purpose. Facilities must be provided for: flushing and neutralizing spilled electrolyte, fire protection, protection of charging apparatus from damage by trucks, adequate ventilation for dispersal of fumes from gassing batteries and emergency eyewash stations in accordance with the Emergency Eyewash and Shower program.

Employees charging and changing batteries shall be authorized to do the work, trained in the proper handling, and required to wear personal protective equipment (PPE) in accordance with the written hazard assessment for this work, which may include safety glasses, face shields, long sleeves, rubber boots, aprons, and gloves. Refer to the campus Personal Protective Equipment Program.

Last updated by: G. Head



Maintenance

Any PIT not in safe operating condition must be immediately removed from service. Authorized personnel must make all repairs. Repairs to the fuel and ignition systems of PITs that involve fire hazards must be conducted only in locations designated for such repairs.

PITs in need of repairs to the electrical system must have the battery disconnected before repairs are begun.

Modifications

All modifications must be have prior written approved by the manufacturer, and new rated load capacities determined and posted on the PIT.

PROGRAM EVALUATION

This Program will be reviewed annually by OSH. The written unit-specific SOPs shall be reviewed and updated by the respective Campus Unit Responsible Person, with input from supervisors and operators, at least annually and more frequently as hazards, tasks, procedures and/or equipment change.

References

29 CFR 1910 Subpart N, Occupational Safety and Health Standards – Materials Handling and Storage 29 CFR 1910.178, Occupational Safety and Health Standards – Powered industrial trucks



APPENDIX A – UNIT-SPECIFIC PROCEDURES



Campus Unit:		
	of this document is	omply with the University of Illinois Powered Industrial to complement the University Program with site-
PROGRAM ADMINISTRATIO)N	
The University of Illinois reconstruction. However, as one mediate managers of emplessponsible for maintaining and are responsible for the secons.	ognizes the fact that outlined in the Camp ployees or supervison a healthy and safe en safety of activities, p	supervisors are not necessarily experts in the area of us Administrative Manual policy number RB-13, "The rs of other members of the campus community are nvironment within their areas under their supervision rocedures and operations under their control or II assist supervisors and individuals in fulfilling these
_	ioned unit. It is the re	e administration of the Powered Industrial Truck esponsibility of this person to ensure that operators of by the unit.
(Name)	(Title)	
OPERATOR TRAINING AND Each PIT Operator must buccessful completion of the completion	e deemed compete	ent to operate a PIT safely, as demonstrated by the or evaluation.
Evaluation of each PIT Opera Unit Responsible Person and	•	hall be conducted at least once every three years by the ervisor.
Copies of the training docun personnel file in the followin	·	tor evaluation can be located in the individual's
AUTHORIZED OPERATORS Only the following individua	Is may operate the d	esignated PIT(s):
Name	UIN	PIT Make/Model

PRE-SHIFT INSPECTIONS

PITs shall be examined before being placed in service, and shall not be placed in service if the examination shows any condition adversely affecting the safety of the vehicle. Such examination shall be made at least daily.



Where industrial trucks are used on a round-the-clock basis, they shall be examined after each shift. Defects when found shall be immediately reported and corrected.
Copies of the inspection documentation can be located in the following location: Inspection records shall be kept for
MAINTENANCE AND REPAIR Routine maintenance and repair of the unit's PITs will be performed by



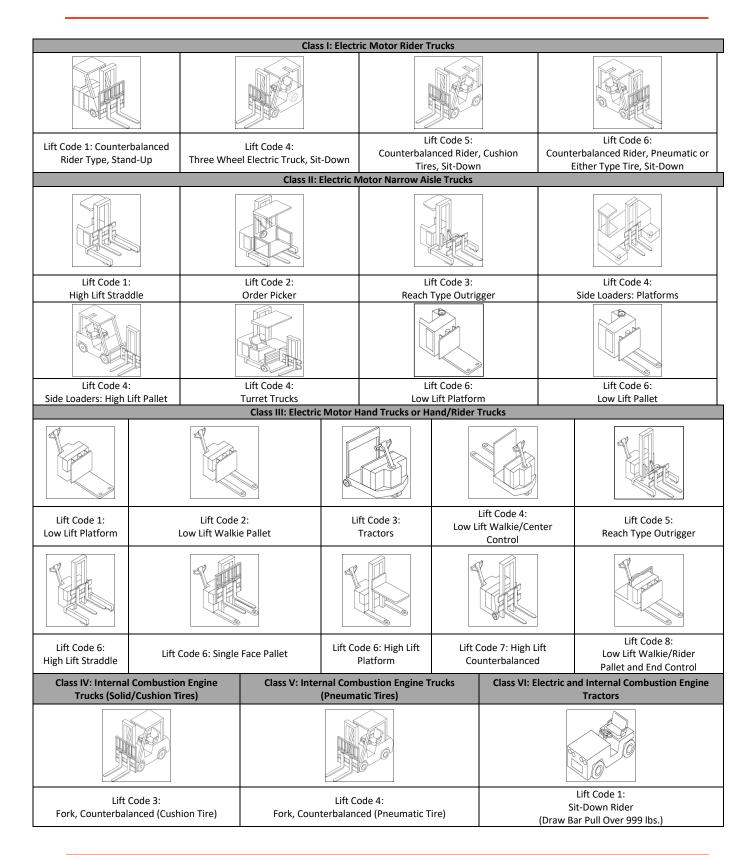
APPENDIX B - OPERATOR EVALUATION



Name:				Department:					
Name: UIN:				Class/Lift Code:					
Lift Make/Model:				Date:					
Location:									
Pre-Start Check	Yes	No	NA	Load Pick-up	Yes	No	NA		
Checks engine and oil				Aligns forklift with load					
Checks hydraulics				Approaches slowly					
Checks ROPS/FOPS				Stops prior to load					
Checks carriage and attachment points				Makes final adjustments					
Checks all I.D plates				Lifts load slowly					
Checks tires				Cradles load					
Checks forks				Backs off slowly					
Checks seat belt				Lowers forks immediately					
Start-up				Checks load stability					
Gets on forklift properly				Transport					
Puts on and adjusts seatbelt				Accelerates slowly					
Sets controls to neutral				Keeps load low					
Sounds and checks horns				Frequently scans area					
Checks for personnel				Decelerates for turns					
Starts engine				Exercises caution on hills					
Performs function checks				Handles ascent properly					
Operation				Handles descent properly					
Accelerates smoothly				Load Deposit					
Limits speed to conditions				Aligns forks with landing					
Turning				Approaches slowly					
Slows before turns				Stops prior to landing					
Considers balance				Makes final adjustments					
Stays within lines				Positions load above landing					
Careful of turning radius				Levels load					
Stopping				Deposits load slowly					
Slows down				Backs off slowly					
Comes to a full stop				Forklift shutdown					
Sets parking brake				Parks on level surface					
				Sets parking brake					
Comments:				Sets controls to neutral					
				Turns off engine					
				Exits machine correctly					
This employee is authorized to operate the Lift Make/Model identified above.					Yes □	No □			
Evaluator:			Signature	<u> </u>					

Last updated by: G. Head Page II OSH-00071
Last Updated: April 8, 2021







APPENDIX C - PRE-USE INSPECTION



Make/Model:	Date:					
Note general vehicle condition. Clear away all collected debris, steam clean if necessary. Check for mechanical damage and loose or leaking components. Report faults to your supervisor.						
Before starting engine, check the following:						
WALK-AROUND ITEMS	ОК	NO NO	NA	REMARKS		
Walk-around inspection (warning decals, capacity plate, etc.)						
Forks/locking pins, carriage, mast						
Wheels, tires & lug nuts (condition/pressure)						
Battery (electrolyte level, connections)						
Engine (fluid levels, leaks, belts, hoses, debris)						
Transmission (fluid level, leaks)						
Air cleaner (clean or change as required)						
Radiator (fluid level, leaks)						
Hydraulic tank (fluid level, leaks)						
Fuel tank (secure, valve open & fuel level)						
Overhead guard (no damage)						
Seatbelt						
After starting engine, check the following:						
START-UP ITEMS		STATUS NO	NA	REMARKS		
Engine (sounds normal, no excessive exhaust smoke)						
Gauges/warning lights (fuel/charge level, oil pressure, etc.)					
Wipers & lights						
Warning devices (horn, back-up alarm, strobe lights, etc.)						
All powered controls						
Direction/speed controls						
All brakes						
Steering						
Fuel/Charge Level						
Note anything abnormal or in need of repair:						
Operator Name:	Operator	· Signatur	e:			



APPENDIX D - PROGRAM AUDIT CHECKLIST



		Yes	No
1.	Has a program administrator, with appropriate training and experience, been designated and identified in the written program?		
2.	Have unit-specific procedures (SOP) been developed?		
3.	Have all Operators been trained, evaluated and authorized for the respective PIT(s) they will operate?		
4.	Records		
	a. Sign-in Sheets for training		
	b. Written quizzes		
	c. Operator Evaluation Checklists		
	d. Pre-Use Inspections		
5.			
	a. Load engaging means fully lowered		
	b. Controls neutralized		
	c. Power shut off		
	d. Brakes set		
	e. Keys removed and secured		
6.	Battery charging installations have facilities for:		
	 a. Flushing and neutralizing spilled electrolyte 		
	b. Fire Protection		
	c. Protection of charging apparatus from damage by PITs		
	d. Adequate ventilation for dispersal of vapors from gassing batteries		
	e. Emergency eyewash stations		
7.	Employees performing charging duties are authorized to do the work?		
8.	Employees wear appropriate PPE (per written JHAs)		
9.	Repairs made by authorized personnel only?	П	П



DOCUMENT REVISIONS

Revision Dates

February 26, 2020 March 29, 2020 April 8, 2021 Initial version
Minor formatting
Review, update format, and minor grammatical edit