

P-26

Powered Industrial Trucks

I. Policy

The purpose of the Pennsylvania Department of General Services (DGS) Powered Industrial Truck (PIT) Program is to ensure the safe operation of powered industrial trucks (PIT). A PIT is any mobile power-propelled (i.e. electric or fuel) truck used to carry, push, pull, lift, stack or tier materials. Examples of PITs include forklift trucks, narrow aisle trucks and electric power jacks. This program includes inspection procedures, safe operating procedures and training requirements.

II. References

OSHA [29 CFR 1910.178](#)

III. Responsibilities

The PIT Program is administered by the responsible Supervisor who controls the operation of PITs.

The Safety Coordinator is responsible for maintaining the program and ensuring training is available for employees.

Supervisors are responsible for ensuring employees receive training/retraining, enforcing workplace rules associated with safe PIT operations and maintaining training records for employees within their area of responsibility.

Employees are responsible for complying with this program.

IV. Procedures

A. PIT Inventory

Supervisors will maintain an inventory of any PITs used at their location.

B. Inspections

PITs are required to be inspected at the beginning of each shift that they are used.

- The employee operating the PIT at any time is responsible for ensuring an inspection has been conducted on that shift. If one has not been conducted, the employee will conduct the inspection before operating the PIT. Appendix A shall be utilized to document the inspection.
- Operators shall check the:
 - Engine oil level,

- Radiator water level,
- Fuel or battery connection and level,
- Tire condition,
- Head and tail light condition,
- The hour meter, and other gauges or instruments,
- The function of the horn,
- Back-up alarms,
- Steering,
- Service brakes, parking brake,
- Lift and tilt controls,
- Forward and reverse controls, and
- Gauges.

If any mechanical or performance issues are discovered, the operator must report the issue to their supervisor immediately and remove the PIT from service until repairs are made by trained and authorized individuals or a qualified contractor.

C. Maintenance

Maintenance will only be conducted by trained, authorized persons or outside contractors.

Any repairs to fuel and ignition systems are not authorized to be performed by DGS and are contracted to qualified contractors.

D. Modifications/Fabrication/Installation

The modification, fabrication or installation of PIT mechanisms/equipment is prohibited. Examples:

- Addition of lights or mirrors.
- Adding or removing items to the PIT.
- Any activity that would modify the PIT from the original intended design of the manufacturer.

V. Training

Training will be provided to all PIT operators in accordance with the OSHA standard [29 CFR 1910.178](#). Training must be provided under the direct supervision of an individual who has the knowledge, training and experience to train operators and evaluate their competence.

All new operators are required to participate in both classroom and practical training. They must pass both a written exam and hands-on evaluation (Appendix B). Only those whom pass both the written exam and hands-on evaluation are to be certified to operate a PIT.

Training will be conducted at the time of their initial assignment and at least **every 3 years** thereafter. Retraining will also be conducted when warranted after an incident or other evidence of the operator's lack of understanding or compliance with the program.

Training documentation and a written certification of demonstrated competency to operate the specified PIT will be maintained by the Supervisor.

Training will consist of:

PIT Related Topics

- All operating instructions, warnings, and precautions for the types of PIT the operator will be authorized to operate.
- Similarities to and differences from automobiles.
- Controls and instrument location; what they do and how they work.
- Power types of PITs and how their systems differ in operation and maintenance.
- Steering and visibility.
- Fork and attachment adaptation, operation, and the limitations of their utilization.
- PIT capacity.
- PIT stability.
- PIT inspection and maintenance.
- Refueling or recharging of batteries.
- Operating limitations.
- Any other operating instructions, warning, or precautions listed in the operator's manual for the type of PIT which the employee is being trained to operate.

Workplace Related Topics

- Surface conditions where the PIT will be operated.
- Composition of probable loads and load stability.
- Load manipulation, stacking and un-stacking.

- Pedestrian traffic.
- Narrow aisles and other restricted places of operation
- Operating the PIT on ramps and other sloped surfaces that could impact the stability of the load.
- Other unique or potentially hazardous environmental conditions that exist or may exist in the workplace.
- Operating the PIT in closed environments and other areas where insufficient ventilation could cause a buildup of carbon monoxide or diesel exhaust.

VI. Safe Operating Procedures

A. General

1. Only trained employees are permitted to operate a PIT.
2. Fire aisles, exits, access to stairways, and fire equipment shall be kept clear.
3. All incidents involving a PIT shall be reported immediately to the Supervisor and Safety Coordinator.
4. Eating and drinking are prohibited while driving a PIT.
5. A safe distance shall be maintained between PITs when traveling in the same direction – approximately three PIT lengths from the PIT ahead.
6. The PIT shall be always kept under control.
7. Other PITs traveling in the same direction at intersections, blind spots and other dangerous locations shall not be passed.
8. The driver shall slow down and sound the horn at cross aisles and other locations where vision is obstructed.
9. The driver shall look in the direction of travel and keep a clear view of the path of travel.
10. The PIT shall be operated with the forks low to the floor.
11. The driver shall insure that there is sufficient clearance under overhead installations, lights, pipes, sprinkler systems, etc.

12. Drivers shall use caution when traveling from bright daylight areas to dimly lit areas, and vice versa.
13. Under all travel conditions, the PIT shall be operated at a speed that will permit it to be brought to a stop in a safe manner.
14. Stunt driving and horseplay are not permitted.
15. The driver shall slow down for wet and slippery floors.
16. Running over loose objects on the road surface shall be avoided.
17. While negotiating turns, speed shall be reduced to a safe level.
18. Grades shall be ascended or descended slowly.
19. When ascending or descending grades in excess of 10%, loaded PITs shall be driven with the load upgrade.
20. On all grades, the load and load engaging means shall be tilted back if applicable, and raised only as far as necessary to clear the road surface.
21. PITs shall be driven straight up or down ramps to prevent tipping.
22. The mast shall not be raised or lowered while the PIT is traveling.
23. If the load being carried obstructs the forward view, the driver shall be required to travel with the load trailing. However, the driver shall only travel in reverse when the load obstructs his view.
24. Only a manufacturer's approved safety platform will be used to lift employees who need to perform work overhead. The platform must be securely fastened to the mast and/or forks. A means shall be provided whereby the personnel must stay at the controls at all times when someone is on the platform.
25. When a driver dismounts a PIT that remains in their view within 25 feet, they shall fully lower the load engaging means, neutralize the controls, and set the parking brake to prevent movement.
26. When a driver dismounts the PIT that does not remain within their view or within 25 feet, the PIT is unattended and the driver shall fully lower the load engaging means, neutralize the controls, set the parking brake, and turn off the power.
27. Operators are not permitted to carry passengers.

28. Arms and legs are prohibited from being placed between the uprights of the mast or outside the running lines of the PIT.
29. Operators shall keep the operator's compartment free from foreign objects, oil, grease, mud and snow to minimize the danger of slipping or stumbling.
30. If the PIT has a seatbelt, the operator shall wear it. Removing seat belts is prohibited.
31. Operators shall sound their horn whenever an object blocks their vision or when approaching blind spots such as corners.
32. Operators shall give pedestrians the right of way.
33. The operator shall not be permitted to drive up to another person standing in front of a bench or other hard surface.
34. No person shall be permitted to stand or pass under the elevated portion of any PIT whether loaded or empty.
35. Batteries shall be changed by trained, authorized employees only.
36. LP tanks shall be changed by the operator.
37. Operators shall know or approximate the weight of the load and check the PITs rated capacity before raising the load.
38. Operators shall conduct an inspection of their PIT at the beginning of each shift and shall document the inspection utilizing Appendix A.
39. Operators shall inspect the load for stability, projections, poor stacking and damaged skids or pallets before lifting it.
40. The PITs controls shall only be operated from the driver's compartment.
41. The mast shall be tilted back slightly when traveling with a load.
42. Unstable or leaning stacks shall be restacked.
43. The forks shall not be used to push or ram loads.
44. Loads shall be stacked no closer than 18 inches below the sprinkler heads.
45. Smoking shall not be permitted on PITs, in the battery charging area or in the LP tank storage area.
46. Batteries will be changed by trained, authorized employees.

47. Whenever removing a LP tank, practice safe storage of depleted or full fuel tanks. These tanks will be stored on the ground.
48. Wear the appropriate personal protective equipment when changing batteries.

B. Loading/Unloading Trailers

1. Operators shall check that the dock plate is secured before driving on it.
2. Operators shall check the condition of the trailer before entering.
3. Operators shall not exceed the rated capacity of the dock plate.
4. PITs shall not be used to open or close freight doors.
5. A safe distance shall be maintained from the edge of ramps or platforms while on any elevated dock, platform, or freight car.
6. Before entering a trailer, the brakes on the trailer shall be set and both back wheels chocked.
7. If the trailer is not coupled to a tractor, it shall have a fixed jack for support.

The operator is responsible for insuring that the trailer is properly chocked and supported.

VII. Program Effectiveness

The effectiveness of this program will be reviewed annually by the DGS Safety Coordinator with appropriate actions taken to address any program deficiencies found. The review will be documented and maintained on file for the current fiscal year and previous two.

VIII. Appendices

Appendix A Operators Daily Checklist

Appendix B Operator Evaluation Form

Appendix A

Operators Daily Checklist

Check Before the Start of Each Shift

Circle One: Gas, LPG, Diesel, Electric		
PIT Number	Operator	Supervisor
Hour Meter Reading	Start of Day	End of Day
Check Boxes Accordingly: <input type="checkbox"/> Okay <input type="radio"/> Needs attention or Repair		
VISUAL CHECKS	OPERATIONAL CHECKS	
Tire Condition <input type="checkbox"/> <input type="radio"/>	Horn <input type="checkbox"/> <input type="radio"/>	
Head and Tail Lights <input type="checkbox"/> <input type="radio"/>	Steering <input type="checkbox"/> <input type="radio"/>	
Warning Lights <input type="checkbox"/> <input type="radio"/>	Service Brakes <input type="checkbox"/> <input type="radio"/>	
Hour Meter <input type="checkbox"/> <input type="radio"/>	Parking Brakes <input type="checkbox"/> <input type="radio"/>	
Other Gauges <input type="checkbox"/> <input type="radio"/>	Hydraulic Controls <input type="checkbox"/> <input type="radio"/>	
Obvious Damage/Leaks <input type="checkbox"/> <input type="radio"/>	Seatbelt <input type="checkbox"/> <input type="radio"/>	
Engine Oil Level <input type="checkbox"/> <input type="radio"/>	Battery Load Test <input type="checkbox"/> <input type="radio"/> <small>Note: Watch battery indicator while holding tilt lever on full back tilt. If needle falls to red area, battery doesn't have sufficient charge to operate PIT properly.</small>	
Radiator Water Level <input type="checkbox"/> <input type="radio"/>		
Fuel Level <input type="checkbox"/> <input type="radio"/>		
Battery Plug Connection <input type="checkbox"/> <input type="radio"/> <small>Note: Be sure connection is tight.</small>	Battery Discharge Indicator <input type="checkbox"/> <input type="radio"/> <small>Note: Key on needle should indicate green area.</small>	

Remarks: Explain all items needing attention or repair and notify your supervisor.

Appendix B

Operator Evaluation Form

Employee Name	Personnel Number		
Department	Type(s) of PIT		
<p>Instructions for the Observer: Observe the operator performing the below tasks, and rate the operator. Competency in all aspects of operation is expected.</p>			
Operations	Good	Poor	N/A
Completes PIT inspection adequately	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wears seatbelt (if applicable)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Approaches load squarely and places forks completely into load before lifting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Does not exceed load capacity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lifts load 4-6 inches off surface	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ensures load is secured before moving load	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stops at intersections and sounds horn before proceeding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stops for pedestrians	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fully lowers forks when parking PIT	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Inspects trailers before entry	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Secures dock plate on trailer bed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Enters trailer slowly	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Parks PIT at designated area	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Displays safe refueling procedures	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Notes:			
Instructor Name	Signature		Date