PURPOSE
To establish procedures and guidelines to ensure that all powered industrial trucks (PITs) are maintained and operated in a safe manner and that only approved PITs are operated by trained and authorized personnel.

REFERENCES
Occupational Safety & Health Act, Section 5(a)(1)
OSHA Title 29 CFR 1910.178, Powered Industrial Trucks
OSHA Title 29 CFR 1926.451, Scaffolds (Applies to Scissor Lifts)
Attachment #1 Drew University Powered Industrial Truck (PIT) Inspection Form
Drew University Fall Protection Program Policy
Drew University Personal Protective Equipment Program/Policy

DEFINITIONS
Load Engaging Means – That part of a PIT e.g., forks, that holds the object being lifted.
PIT – The term “PIT” in this procedure shall apply to the following equipment: fork trucks, tractors, platform lift trucks, motorized hand trucks, and other specialized industrial trucks powered by electric motors, compressed air motors or internal combustion engines.
Unattended – A PIT is considered unattended when the operator is twenty-five feet or more away from the vehicle which remains in view or when the operator leaves the vehicle and it is not in view.

RESPONSIBILITIES
Departmental Management is responsible for coordinating and performing classroom training, for evaluating operators and for requesting operator certification from recognized training source (i.e. vendor etc.)

Supervisors are responsible for ensuring that only trained, authorized and certified personnel operate PITs and for ensuring that subordinates properly inspect and maintain the PITs that they operate in accordance with this procedure.

PIT operators are responsible for attending training and for inspecting and maintaining the PIT(s) that they operate in accordance with this procedure, and for reporting unsafe conditions to supervision.
PROCEDURES

A. GENERAL
1. Ensure that newly acquired PITs meet design specifications established in the most current ANSI standard.
2. Maintain all nameplates and markings on PITs. Do not perform modifications that affect the capacity or safety of PITs without permission from the manufacturer.
3. Ensure PITs are inspected before use on each shift. Maintain records of inspections. Report all incidents involving damage or near misses during any PIT operations.

B. PIT OPERATIONS
1. Do not drive PITs up to anyone standing in front of a bench or other fixed object.
2. Do not stand, pass or allow any other person to stand or pass under the elevated portion of any PIT whether loaded or empty.
3. Do not permit a passenger to ride on a PIT that is not designed and built to accommodate a passenger. See and comply with the Operator’s Manual for that type PIT.
4. When leaving a PIT unattended (see Definitions section), fully lower the load engaging means, neutralize the controls, shut off the power, and set the brakes. If the PIT is parked on an incline, block the wheels.
5. Before dismounting from a PIT that will not be left unattended, fully lower the load engaging means, neutralize the controls, and set the brakes to prevent movement.
6. Maintain a safe distance from the edge of ramps or platforms while on any elevated dock or platform.
7. Do not use PITs to open or close freight doors.
8. Before loading or unloading trucks, trailers, or railroad cars, ensure that the brakes are set and that wheel blocks are in place to prevent movement. Fixed jacks may be necessary to support a semi-trailer during loading or unloading when the trailer is not coupled to a tractor.
9. Check the flooring of trucks and trailers for breaks and weakness before driving PITs into trailers.
10. Determine if there is sufficient headroom before traveling under overhead installations, electrical conduit, sprinkler systems, etc.
11. Use a load backrest extension whenever necessary to minimize the possibility of the
load, or part of the load, falling rearward.

12. Do not use an unapproved or unrated PIT in a hazardous location. If an appropriately rated PIT is unavailable, either use non-motorized equipment, e.g., pallet jack to move the load, or remove the hazard from (declassify) the location.

13. Whenever a PIT is equipped with vertical-only or vertical and horizontal controls elevatable with the lifting carriage or forks for lifting personnel, take the following additional precautions for the protection of the personnel being elevated:

14. Use a safety platform firmly secured to the lifting carriage and/or forks.

15. Ensure that the operator wears personal fall protection (e.g., body harness) while the device is moving horizontally (see Drew University Fall Protection Program Policy).

16. Stand firmly on the floor of the basket and do not sit or climb on the edge of the basket or guardrails on the basket, or use planks, ladders, or other devices for a work position.

17. Keep fire aisles and access to stairways and fire equipment clear.

18. Do not drive PITs on non-paved or non-concrete areas, unless PIT wheels are compatible with the surface intended to be driven on.

C. Traveling

1. Maintain a safe distance (approximately three PIT lengths) from the PIT ahead, and keep the PIT under control at all times.

2. Do not pass other PITs traveling in the same direction; in other dangerous locations, make sure to check blind spots.

3. Slow down and sound the horn at cross aisles and other locations where vision is obstructed. If the load being carried obstructs the forward view, travel with the load trailing.

4. Look in the direction of travel and keep a clear view.

5. Ascend and descend grades slowly. When ascending or descending grades in excess of ten percent, drive loaded PITs with the load upgrade.

6. Tilt back the load and load engaging means if applicable and raise them only as far as is necessary to clear the road surface.

7. Operate the PIT in a manner that shall permit it to be brought to a stop in a safe manner.

8. Stunt driving or horseplay is prohibited.
9. Slow down on wet and slippery floors, and report unsafe conditions to the supervisor.

10. Drive over dock boards and bridge plates carefully and slowly without exceeding their rated capacity.

11. Approach elevators slowly and enter them squarely after they are properly leveled. Once on the elevator, neutralize the controls, shut off the power, and set the brakes. **NOTE:** Motorized hand trucks must enter the elevator or other confined areas with the load end forward.

12. Avoid driving over loose objects on the roadway surface.

13. Reduce speed to a safe level and turn the steering control in a smooth, sweeping motion, while negotiating turns. Except when maneuvering at a very low speed, turn the steering control at a moderate, even rate.

**D. Loading**

1. Handle only stable or safely arranged loads. Exercise caution when handling off-center loads, which cannot be centered.

2. Handle only loads within the rated capacity of the PIT. Adjust long or high (including multi-tiered) loads, which may affect capacity.

3. Operate PITs equipped with attachments as partially loaded PITs when not handling a load.

4. Place a load-engaging means as far as possible under the load and tilt the mast carefully backward to stabilize the load.

5. Use extreme care when tilting the load forward or backward, particularly with high-tiered loads. Do not tilt forward with load-engaging means elevated except to pick up a load. Do not tilt an elevated load forward except for when the load is in a deposit position over a rack or stack. When stacking or tiering, only use enough backward tilt to stabilize the load.

**E. Maintenance**

1. Remove from service any PIT that is not in safe operating condition. Authorized personnel shall make all repairs. All repairs shall be made by authorized personnel. This work can be performed by either a trained forklift mechanic, or a contract forklift maintenance company.

2. Do not make repairs in hazardous locations.

3. Make repairs that involve fuel or ignition systems that involve a fire hazard only.
in the locations designated for such repairs.

4. Disconnect the battery of a PIT before beginning repairs to the electrical system.

5. Replace parts of PITs only with parts equivalent in safety to those used in the original design.

6. Inspect each PIT according to the manufacturer’s standards at least once each shift before placing the PIT into service. Do not place any PIT into service if the inspection reveals any condition that compromises the safety of the vehicle. Record each inspection on an appropriate tag. The inspection record shall be maintained on the PIT.

F. Changing and Charging Storage Batteries

1. Locate battery-charging installations in designated areas. These areas must provide for flushing or neutralizing spilled electrolyte; fire protection (i.e., fire extinguishers); protecting charging apparatus from damage by traffic; and adequate ventilation to disperse fumes from off-gassing batteries.

2. Wear appropriate PPE. At a minimum, eye and face protection is required when working with batteries. See Drew University Personal Protection Program Policy.

3. Properly position and secure reinstalled batteries.

4. When charging batteries, acid shall be poured into water; water should NEVER be poured in acid.

5. Apply brakes and properly position PITs before attempting to change or charge batteries.

6. Ensure that all of the battery’s vent caps are clear (not plugged) before charging it to prevent explosion of battery.

7. During charging, the battery or compartment covers shall be open to dissipate heat. Take precautions to prevent open flames, sparks or electric arcs in battery charging areas.

G. Training

1. All personnel shall be trained in accordance with this procedure, and the requirements of the OSHA standard before operating a PIT. The training shall include, at a minimum:
   a. Characteristics of the PITs that the operator will be certified to use, including
      o Similarities to and differences from an automobile
      o Controls and instrumentation, including location and how they work
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- Engine and motor operations
- Visibility, steering, and maneuverability
- Fork and/or attachment adaptation, operation, and limitation of their utilization
- Vehicle capacity, stability, inspection maintenance
- Refueling PIT or recharging PIT batteries
- Operating instructions, precautions, and limitations
  - The operating environment, including Floor or ground surface conditions where the vehicle will be operated
- Need to wear fall protection PPE while the device is moving horizontally
- Composition of probable loads and load stability
- Load manipulation, stacking and unstacking
- Pedestrian traffic
- Narrow aisle and restricted operation
- Operating in classified hazardous locations
- Operating the PIT on ramps and other sloped surfaces, which would affect the stability of the vehicle
- Operating in hazardous environment conditions or in closed environments with insufficient ventilation
- Evaluate each PIT operator’s performance at least once every three years. Operators must demonstrate the ability to safely operate the PITs for which they are certified.