

1.0 INTRODUCTION

- 1.1 Safe operating practices for the operation of powered industrial trucks (e.g. forklifts, reach trucks, etc.) are important to prevent incidents which may result in injury and property loss.

2.0 PURPOSE AND SCOPE

- 2.1 The primary objective of this procedure is to outline the safe operating procedures which have been implemented at the Desert Research Institute to minimize or eliminate accidents related to the operation of powered industrial trucks. Powered industrial trucks include forklifts, power lifts, and man lifts.
- 2.2 This procedure also outlines the operator training and certification requirements.
- 2.3 This procedure applies to all operations which utilize powered industrial trucks and to all employees and temporary workers, including off-site DRI employees, who are required to use powered industrial trucks.
- 2.4 Only authorized personnel may operate a powered industrial truck unit. This includes employees hired into the appropriate job classification, as well as employees selected to operate a powered industrial truck in addition to their normal job duties.
- 2.5 Training of employees hired before December 1, 1999 will be completed before December 1, 1999. Training for employees hired after December 1, 1999 will be conducted before the employee is assigned or allowed to operate a powered industrial truck. Refresher training will be required before an employee can operate a powered industrial truck if:
 - 2.5.1 The operator is involved in an accident or near-miss incident;
 - 2.5.2 The operator has been observed operating the vehicle in an unsafe manner;
 - 2.5.3 The operator has been determined during an evaluation to need additional training;
 - 2.5.4 There are changes in the workplace that could affect the safe operation of the truck; or
 - 2.5.5 The operator is assigned to operate a different type of truck.

3.0 RESPONSIBILITY

- 3.1 The affected Department Managers are responsible for:
 - 3.1.1 Verifying that employees/temporary workers in their department(s) who are required to operate powered industrial trucks have received the training and certification as outlined in Section 4.0.
 - 3.1.2 Establishing a regular preventative maintenance schedule for powered industrial trucks for which he/she is directly responsible.
 - 3.1.3 Inspecting their areas at least annually to confirm that safe operating procedures are posted, (Attachment A), and that training and other records (such as inspection checklists) are maintained and up-to-date.

3.2 Affected Supervisors are responsible for:

- 3.2.1 Requiring all employee hired before December 1, 1999 to attend powered industrial truck driver safety training and to obtain a driver license by December 1, 1999.
- 3.2.2 Requiring employees hired or transferred into a job requiring the driving of a powered industrial truck after December 1, 1999 to attend powered industrial truck driver safety training and to obtain a driver license prior to assigning the employee driving duties.
- 3.2.2 Verifying that the licenses are renewed as required in Section 4.2
- 3.2.3 Posting and enforcing the safe operating procedures in their departments (Attachment A).
- 3.2.4 Reporting to the appropriate management deficiencies they observe in other departments using powered industrial trucks.
- 3.2.5 Prohibiting any unauthorized person from operating powered industrial trucks.
- 3.2.6 Maintain daily operational checklists for three (3) years.

3.3 Employees are responsible for:

- 3.3.1 Attending training as required to maintain their Powered Industrial Truck Driver License.
- 3.3.2 Carrying and displaying their driver license badge when operating a powered industrial truck.
- 3.3.3 Following safe operating practices at all times.
- 3.3.4 Completing a daily operation checklist (Attachment B) if he/she is the first driver to use the industrial truck that day and leaving documentation of this inspection on the vehicle for others to refer to.
- 3.3.5 Reporting all hazards, including but not limited to dangerous situations, powered industrial truck maintenance issues, use by unauthorized operators to their management.

4.0 OPERATOR TRAINING

- 4.1 All authorized operators must satisfactorily complete a Powered Industrial Truck Driving Certification Program prior to operating a powered industrial truck.
- 4.2 Evaluation (Attachment C) of each different kind of industrial truck (including rental vehicles) shall be completed by the operator prior to his/her initial operation. Evaluation of all certified drivers is required every three years (or for rental vehicles prior to the next operation if three or more years has transpired since the operator's previous evaluation).
- 4.3 Initial training and subsequent evaluations will be documented.
- 4.4 Certificates of Completion (Attachment D) and Powered Industrial Truck Driver Licenses (Attachments E) will be distributed to employees who successfully complete the certification and evaluation programs.
- 4.5 Refresher training will be provided as required in Section 2.5 as necessary.

5.0 SAFE OPERATING RULES

- 5.1 Only drivers authorized by the employer and trained in the safe operation of industrial trucks or industrial tow tractors are allowed to operate such vehicles.
- 5.2 Stunt driving and horseplay are prohibited.
- 5.3 No riders shall be permitted on vehicles unless provided with adequate riding facilities.
- 5.4 Passengers shall not ride on any lift trucks.
- 5.5 Employees shall not place any part of their bodies outside the running lines of an industrial truck or between mast uprights or other parts of the truck where shear or crushing hazards exist.
- 5.6 Employees shall not be allowed to stand, pass, or work under the elevated portion of any industrial truck, loaded or empty, unless it is effectively blocked to prevent it from falling.
- 5.7 A daily operation checklist (Attachment B) will be completed by the first driver to use the industrial truck that day) and a record of the operation checklist shall remain on the vehicle for others to refer to. If the vehicle is found to be unsafe, the matter shall be reported immediately to the supervisor, and the vehicle shall not be put in service again until it has been made safe. Attention shall be given to the proper functioning of tires, horn, lights, battery, controller, brakes, steering mechanism, cooling system, and the lift system for fork lifts (forks, chains, cable, and limit switches).
 - 5.7.1 The supervisor maintaining direct responsibility for the lift unit will schedule any repairs and determine the necessity for removing the unit from service.
 - 5.7.2 A daily checklist of visual and operational checks will be submitted to the supervisor by a selected operator, as requested, and filed by the supervisor for three (3) years.
- 5.8 No truck shall be operated with a leak in the fuel system.
- 5.9 Vehicles shall not exceed the authorized or safe speed, always maintaining a safe distance from other vehicles, keeping the truck under positive control at all times and all established traffic regulations shall be observed.
 - 5.9.1 For trucks traveling in the same direction, a safe distance may be considered to be approximately 3 truck lengths or preferably a time lapse -- 3 seconds -- passing the same point.
 - 5.9.2 The speed limit of five miles per hour is not to be exceeded at any time.
 - 5.9.3 The five mile per hour speed limit may, under certain conditions, be considered excessive and the operator will adjust his speed to a safe level consistent with prevailing conditions.
- 5.10 Trucks traveling in the same direction shall not be passed at intersections, blind spots, or dangerous locations.
- 5.11 The driver shall 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 shall travel with the load trailing.
- 5.12 Operators shall look in the direction of travel and shall not move a vehicle until certain that all persons are in the clear.
- 5.13 Trucks shall not be driven up to anyone standing in front of a bench or other fixed object of such size that the person could be caught between the truck and object.

- 5.14 Grades shall be ascended or descended slowly.
 - 5.14.1 When ascending or descending grades in excess of 10 percent, loaded trucks shall be driven with the load upgrade.
 - 5.14.2 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.
 - 5.14.3 Motorized hand and hand/rider trucks shall be operated on all grades with the load - engaging means downgrade.
- 5.15 The forks shall always be carried as low as possible, consistent with safe operations.
- 5.16 When leaving a vehicle, the power shall be shut off, brakes set, the mast brought to the vertical position, and forks left in the down position. Never park on an incline.
- 5.17 Forklifts and reach trucks shall not be run onto any elevator. Before moving loads with other equipment onto an elevator, the driver shall determine that the capacity of the elevator will not be exceeded. Once on the elevator, the power shall be shut off, brakes set and the load moved to the ground.
- 5.18 Motorized hand trucks shall enter elevators or other confined areas with the load end forward.
- 5.19 Vehicles shall not be operated on floors, sidewalk doors, or platforms that will not safely support the loaded vehicle.
- 5.20 Prior to driving onto trucks, or trailers , their flooring shall be checked for breaks and other structural weaknesses.
- 5.21 Vehicles shall not be driven in and out of highway trucks and trailers at loading docks until such trucks or trailers are securely blocked or restrained and the brakes set.
- 5.22 The width of one tire on the powered industrial truck shall be the minimum distance maintained from the edge by the truck while it is on any elevated dock, platform, freight car, or truck.
- 5.23 Trucks shall not be loaded in excess of their rated capacity.
- 5.24 A loaded vehicle shall not be moved until the load is safe and secure.
- 5.25 Extreme care shall be taken when tilting loads. Tilting forward, with the forks elevated, shall be prohibited except when picking up a load. Elevated loads shall not be tilted forward except when the load is being deposited onto a storage rack or equivalent. When stacking or tiering, backward tilt shall be limited to that necessary to stabilize the load.
- 5.26 The load engaging device shall be placed in such a manner that the load will be securely held or supported.
- 5.27 All attachments must have a rating plate which lists the weight that may be safely carried.. Special precautions shall be taken in the securing and handling of loads by trucks equipped with attachments and during the operation of these trucks after the loads have been removed.
- 5.28 If loads are lifted by two or more trucks working in unison, the total weight of the load shall not exceed the combined rated lifting capacity of all trucks involved.
- 5.29 The quick rise doors must be activated by pulling the rope before trying to pass, even if the door is already in the up position.
- 5.30 Reach trucks are not to carry a load on any incline.

6.0 MAINTENANCE

6.1 No repairs shall be performed on any powered industrial trucks until arrangements have been made to reduce the probability of injury to repair person or others caused by sudden movement or operation of such equipment or its parts.

6.2 Power source shall be disconnected or positively locked out before repairs can be started.

7.0 REFERENCES

7.1 Title 29 Code of Federal Regulations 1910.178.

ATTACHMENT A**POWERED INDUSTRIAL TRUCK
OPERATION INSTRUCTIONS**

(to be posted in areas frequented by operators)

1. Securely fasten your seat belt, if present.
2. Where possible, avoid operating the industrial truck near ditches, embankments, and holes.
3. Reduce speed when turning, crossing slopes, and on rough, slick, or muddy surfaces.
4. Stay off slopes too steep for safe operation.
5. Watch where you are going, especially at row ends, on roads, around trees, at intersections, and in high traffic areas.
6. Do not permit others to ride.
7. Operate the industrial truck smoothly -- no jerky turns, starts, or stops.
8. Hitch only to the drawbar and hitch points recommended by industrial truck manufacturers.
9. When industrial truck is stopped, set brakes securely and use park lock if available.
10. Never drive faster than 5 Mile per hour.
11. Never exceed the rated capacity of the truck.
12. Use only undamaged pallets.
13. Don't push other vehicles with the forklift.
14. Keep body parts inside the forklift while driving.
15. Make sure the load is stable and secure prior to moving.
16. Spread forks to the widest possible adjustment for stability.

ATTACHMENT B
Daily Operation Checklists

OPERATORS DAILY REPORT
Battery-Powered Lift Trucks

Operator Name:

Truck #:

Make:

Date:

CHECK EACH ITEM	START	END	REMARKS
Hour Meter Reading			
Battery Plug Connector			
Battery Charge			
Battery Load Test			
Gauges and Instruments			
Brakes: Service & Seat			
Lights			
Horn			
Steering			
Tires			
Hydraulic Controls			
Attachments			
Other Conditions			

COMMENTS:

SUPERVISOR APPROVAL:

OPERATORS DAILY REPORT

Engine-Powered Lift Trucks

Operator Name:

Truck #:

Make:

Date:

CHECK EACH ITEM	START	END	REMARKS
Fuel Level			
Oil Pressure & Level			
Radiator - Water Level			
Fan Belt Condition			
Brakes: Service/Emergency			
Gauges and Indicators			
Lights			
Horn			
Steering			
Tires			
Hydraulic Controls			
Attachments			
Other Conditions			

COMMENTS:

**SUPERVISOR APPROVAL: ATTACHMENT C
Powered Industrial Truck Operator Evaluation Form**

Lift Operator Evaluation Form

Truck Type: ___ Sit Down ___ Stand Up

Powered by: ___ Electric ___ Propane ___ Gasoline

Employee Name:

Years Experience:

Facility Location:

Testing Date:

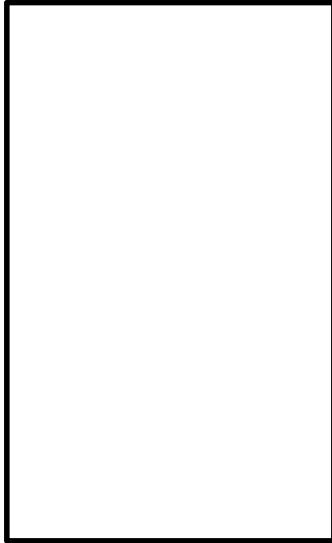
Object: rate each lift truck operator by how they perform basic forklift driving skills. Each operator should be given the same assignment and instructions. Any infraction of these guidelines during the skills session should be counted as a violation and deducted from the total point value.

	Pass	Fail		Pass	Fail
1-8 Physical Examination of the lift truck			18. Did the operator strike the stack when lifting the load?	<input type="checkbox"/>	<input type="checkbox"/>
§ Tilt	<input type="checkbox"/>	<input type="checkbox"/>	19. Did the operator lower the forks properly after depositing the load?	<input type="checkbox"/>	<input type="checkbox"/>
§ Rais/Lower	<input type="checkbox"/>	<input type="checkbox"/>	20. Did the operator look in the direction of travel?	<input type="checkbox"/>	<input type="checkbox"/>
§ Horn	<input type="checkbox"/>	<input type="checkbox"/>	21. Did the operator properly avoid any obstacles on the training course?	<input type="checkbox"/>	<input type="checkbox"/>
§ Tires	<input type="checkbox"/>	<input type="checkbox"/>	22. Did the operator carry the load at the proper height?	<input type="checkbox"/>	<input type="checkbox"/>
§ Oil Leaks	<input type="checkbox"/>	<input type="checkbox"/>	23. Did the operator make any potentially harmful moves?	<input type="checkbox"/>	<input type="checkbox"/>
§ Mast Chains	<input type="checkbox"/>	<input type="checkbox"/>	24. Did the operator properly mount and dismount the equipment?	<input type="checkbox"/>	<input type="checkbox"/>
§ Brakes	<input type="checkbox"/>	<input type="checkbox"/>	25. Did the operator wear the seat belt?	<input type="checkbox"/>	<input type="checkbox"/>
§ Steering	<input type="checkbox"/>	<input type="checkbox"/>			
9. Did the Operator pull forward towards the designated area without striking anything?	<input type="checkbox"/>	<input type="checkbox"/>			
10. Did the operator place the forks under the load properly?	<input type="checkbox"/>	<input type="checkbox"/>			
11. Did the operator raise/tilt the load properly?	<input type="checkbox"/>	<input type="checkbox"/>			
12. Did the backrest strike any materials?	<input type="checkbox"/>	<input type="checkbox"/>			
13. Did the operator lower the load before moving/backing out?	<input type="checkbox"/>	<input type="checkbox"/>	Total Score Possible		25
14. Did the operator drive at a safe speed?	<input type="checkbox"/>	<input type="checkbox"/>	Number of Mistakes		_____
15. Did the operator slowdown/stop at cross aisles?	<input type="checkbox"/>	<input type="checkbox"/>	Total Score		_____
16. Did the operator sound the horn?	<input type="checkbox"/>	<input type="checkbox"/>	Trainer Signature: _____		
17. Did the operator correctly return the load to the designated area?	<input type="checkbox"/>	<input type="checkbox"/>	Date: _____ Time: _____		

Comments: _____

ATTACHMENT D
Powered Industrial Truck Drivers Certificate of Training

ATTACHMENT E
Powered Industrial Truck Drivers License



Desert Research Institute

POWERED INDUSTRIAL
TRUCK
DRIVERS LICENSE

This is to certify that
name of employee

Front side of License

is authorized to operate all powered industrial trucks listed on reverse of this

card _____
Trainer's Signature Date
Expires after 3 years

- Sit Down fork list
- Stand up fork lift
- Reach Track
- Boom Lift
- Scissors (man) Lift
- Snorkel Lift
- Grade-All Lift Truck
- Tractor
- Quad

Reverse side of License