

Forklift Certification Training Course



Overview

- Operating a forklift is serious business. Each year over 100 deaths involving forklifts occur and OSHA estimates that there are nearly 70 thousand accidents.
- While the principles of operating a forklift may seem as simple as driving a car, proper safety and driver training are necessary to accomplish safe forklift operation.

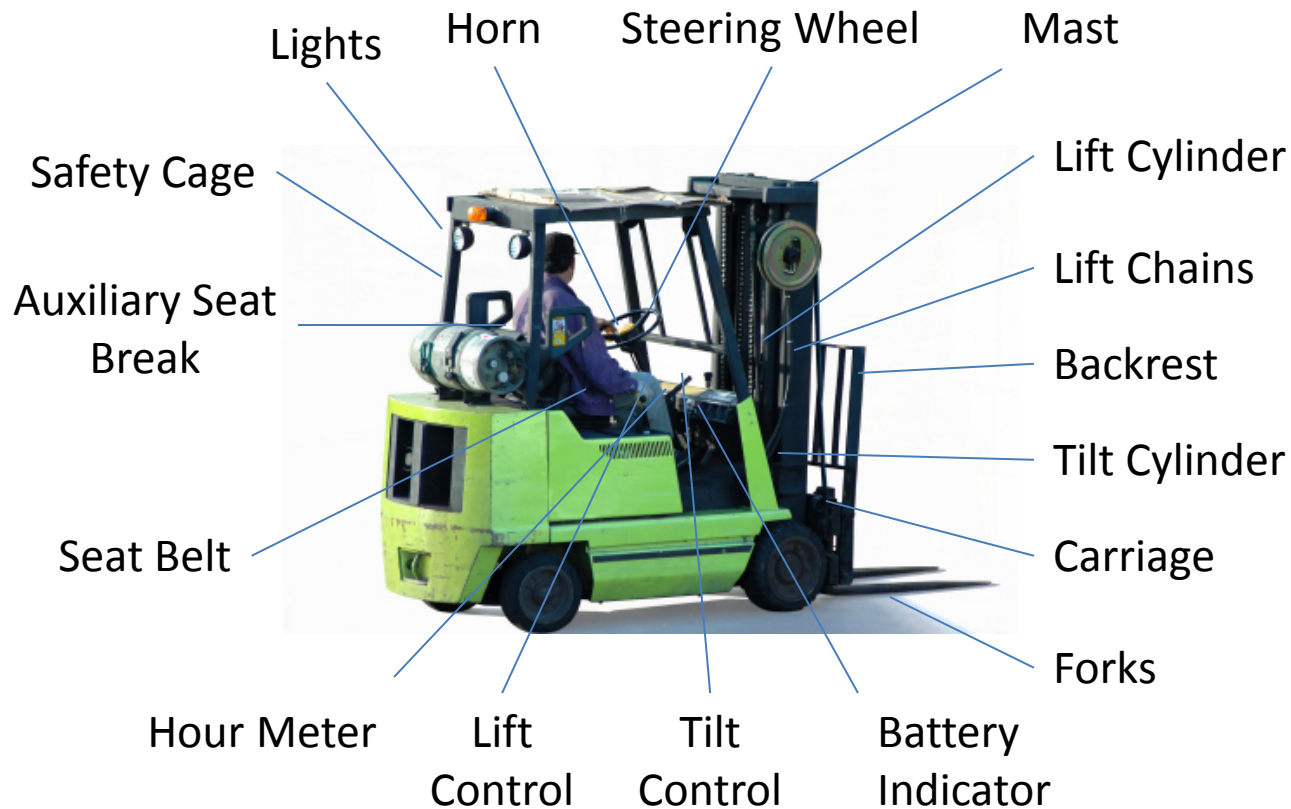
What this Course Is

- This course will review safe forklift operation requirements. Upon completion on this course you will have been provided the information needed to pass a forklift safety test.
- This course complies with OSHA regulations 1910.178 (l), 1915.120 (a), 1917.1 (a)(2)(xiv), 1918.1 (b)(10), 1926.602 (d) and meets requirements for a Forklift Certification Training Course.
- This training must be taken each 3 years or when an accident or near-miss occurs.

What this Course Is Not

- This course will not teach you how to operate a forklift.
- Certification is not complete without a driving evaluation administered by a person who has the required knowledge, training and experience to train powered industrial operators and judge their competency
- This course is not designed to substitute for operator training in the operation of specific forklifts in a specific workplace as required by OSHA regulations.

Forklift Components



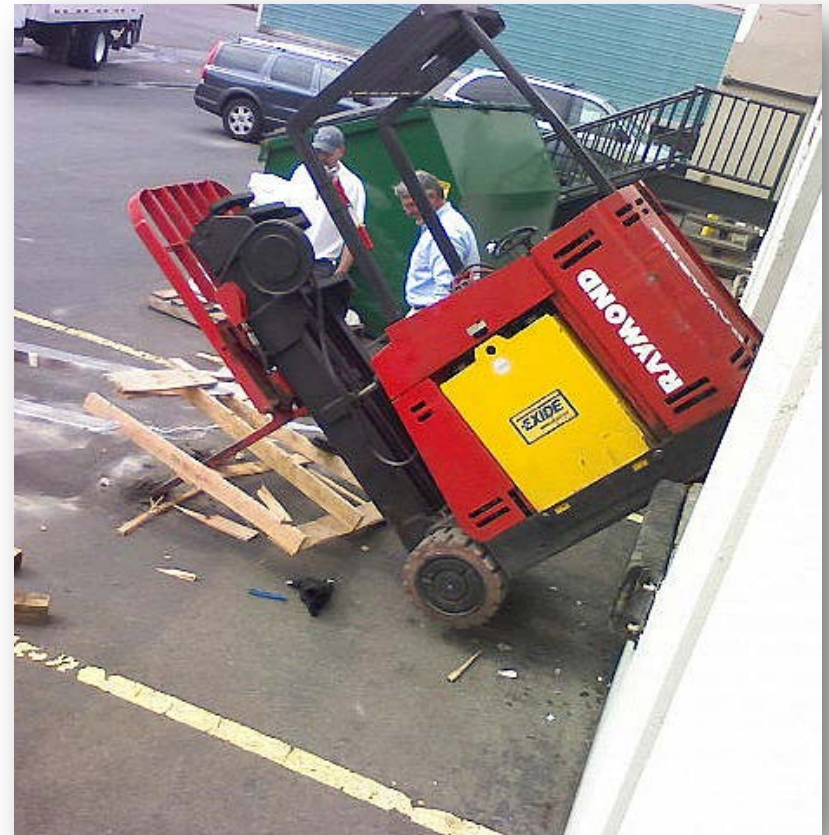
Operation Rules

- Only the operator of the forklift is allowed to ride on the forklift.
- No one may ride on the forks of the forklift unless an approved safety platform with guardrails is provided.



Loading Dock Areas

- You must keep a safe distance from the edge of docks or ramps. Remember forklifts have a wide rear end swing.
- Never drive onto a trailer, truck, dock without verifying that the floor will safely support the load of the vehicle and carried cargo.
- Always check and make sure that all dock boards, bridge plates are secure and that the truck and trailer wheels are chocked.



Traveling

- Always observe speed limit signs at your workplace. A forklift should never travel faster than a quick walking pace.
- If following another forklift a distance of at least three forklift lengths should be maintained between you and the forklift in front of you.
- Forks should be as low to the ground as possible while maintaining safe clearances



Traveling (continued)

- The operator must slow down and sound the horn at cross aisles and other locations where vision is obstructed.
- The operator must always drive slowly enough to make a turn without tipping the forklift and to stop safely for pedestrians.
- Seat belts are required to be worn while operating the forklift.

Surface Condition

- Surface conditions can compromise forklift safety.
- Bumps, depressions or debris can cause a forklift to become unstable or lose control.
- A soft operating surface can cause your wheels to sink which may destabilize the load.
- Icy, oily or wet surfaces should be avoided and cleaned as soon as possible.

Surface Load

- Operating surface must be rated to support the forklift and it's load by a factor of four.
- If a 5,000 pound forklift has a load of 2,000 pound the surface must be able to support 28,000 pounds



$$5,000 + 2,000 = 7,000 \times 4 = 28,000$$

Lifting Loads

- Overloading will increase the risk that a forklift will tip over and reduce the ability to control it. Forklifts must not be overloaded.
- Loaders and/or operators must check the maximum load capacity on the forklift nameplate.
- Lifted loads must be neatly piled and cross-tied, if possible.
- To reduce the risk of tipping, the load must be centered on the lift forks.

Lifting Loads (continued)

- No one can be allowed to stand or pass under the lift portion of any forklift, whether loaded or empty, because injury may result from mechanical failure or falling objects.
- Before moving or stacking materials, the operator must survey the path of travel to avoid machinery, overhead obstructions, sprinkler systems, manufactured goods and other obstructions.

Forklift Attachments



Jib Crane Attachment



Hoist Attachment



Drum Grabber Attachment



Carpet Lifting Attachment



Personnel Platform Attachment

Forklift Attachments

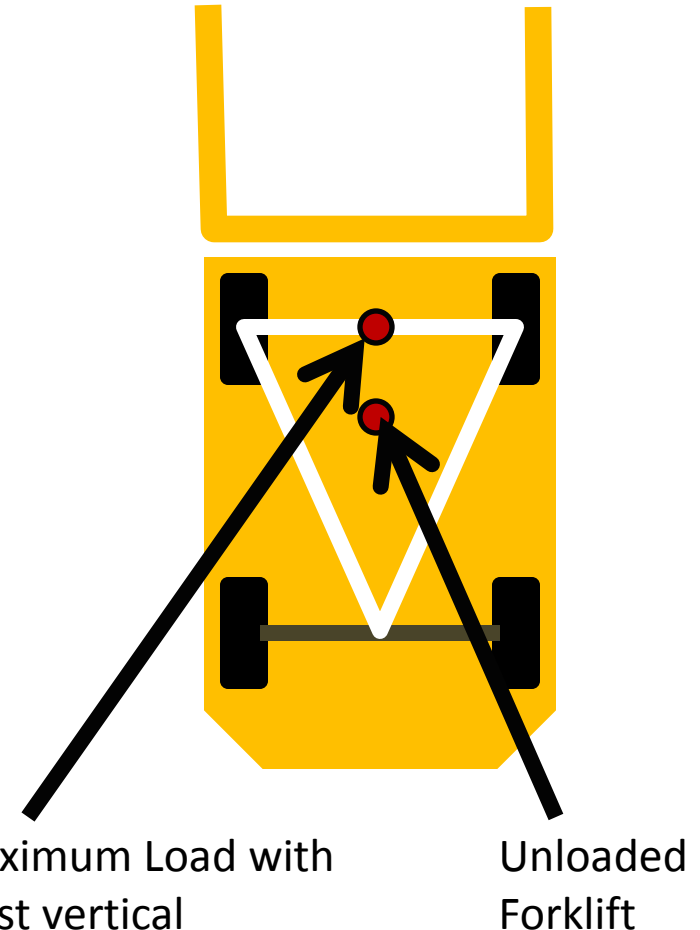
- Using an unapproved attachment could alter the forklift's lifting and balance characteristics and lead to a forklift overturning.
- Whenever an attachment is used that could affect the capacity or safe operation of a forklift, its use must be approved by the forklift manufacturer. The employer must mark the forklift to show the new weight with attachment. The maximum capacity at the highest elevation must also be shown.

Unattended Forklift

- A forklift is considered unattended if the operator is more than 25 feet from the forklift or if not visible by the operator.
- Unattended forklifts must lower the forks to the ground. Controls must be set to neutral, power turned off and the brakes set. Wheels must be chocked if the forklift is unattended on an incline.
- If you are not seated in the forklift but stay within 25 feet, you must, set the brakes, lower the forks to the ground and set all controls to neutral.

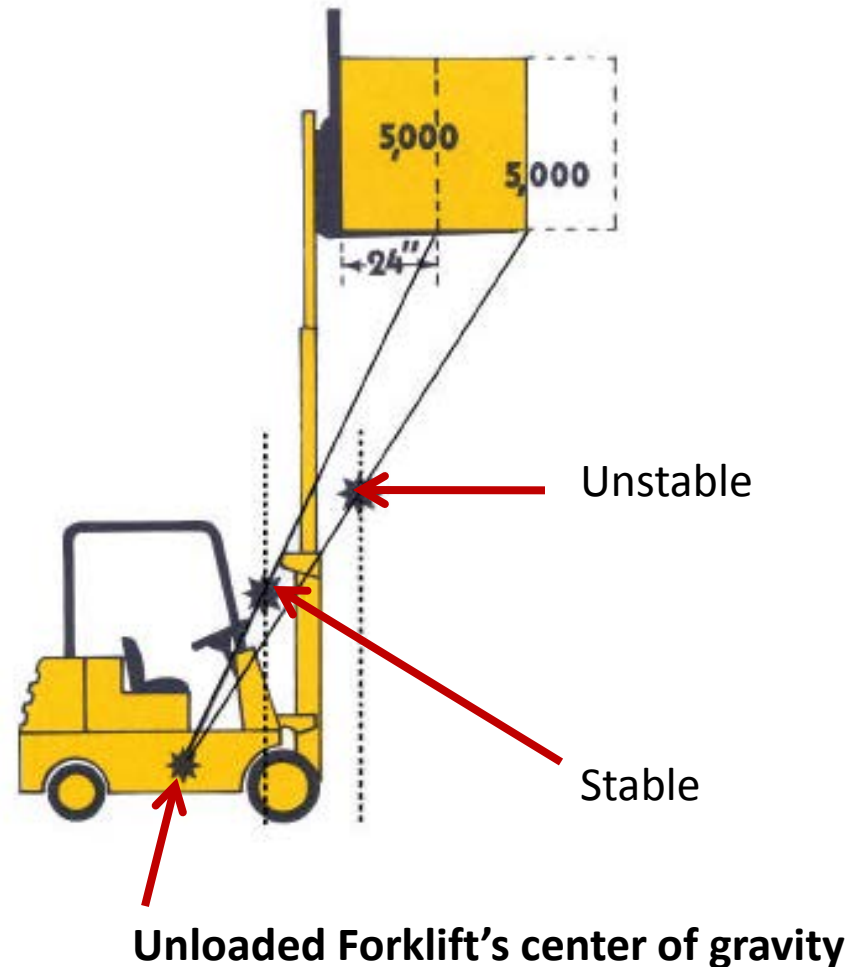
Forklift Stability

- Forklifts have a “stability triangle”. The sides of the triangle as shown in the illustration are formed by the center of each front wheel and the center of the rear wheel or at the center of the axle if there are two rear wheels.
- A vertical line extending from the center of gravity of the vehicle-load combination must be inside of the stability triangle to prevent the forklift from tipping forward, falling sideways or dropping its load.

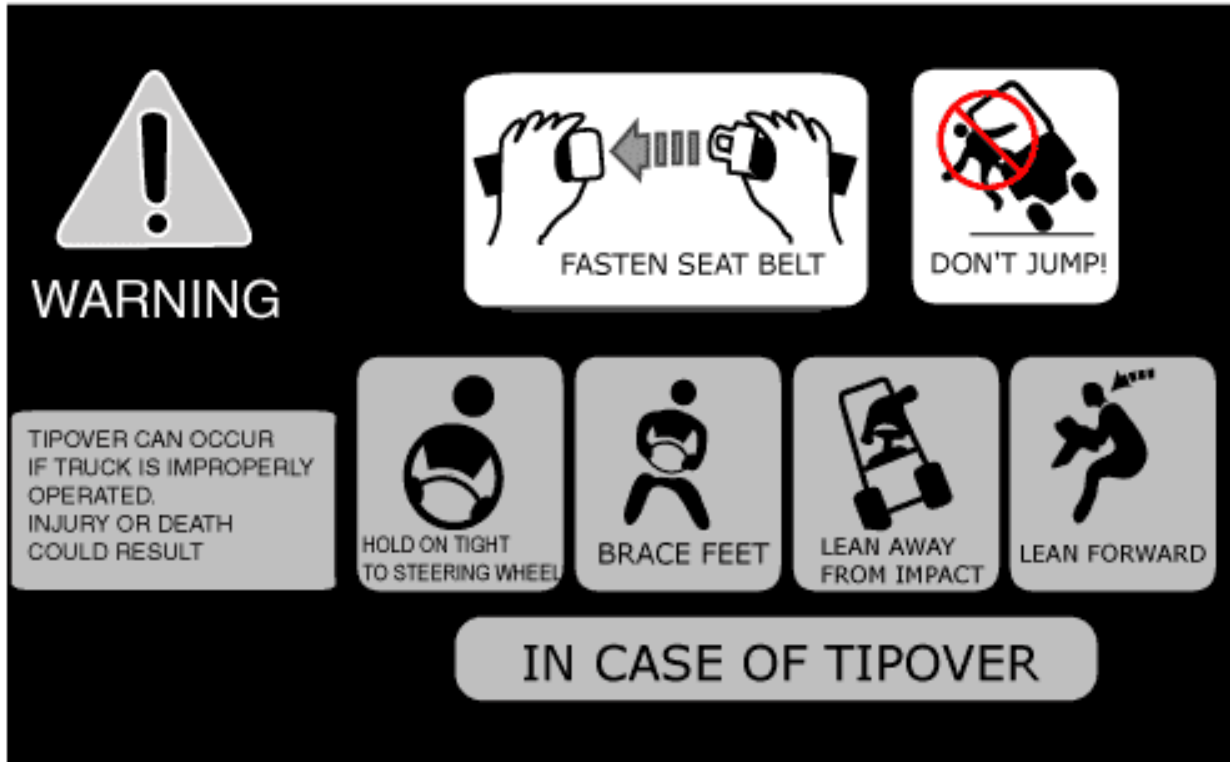


Forklift Stability (continued)

- The center of gravity of the forklift-load combination can move outside the stability triangle if:
 - the load is picked up on the tip of the forks,
 - the load is tilted forward,
 - the load is tilted too far back when raised
 - the load is wide, or
 - forklift movement causes the center of gravity to shift.



Steps to Take in a Tipover of a Sit-Down Counterbalanced Forklift:



- Fasten seat belt, don't jump, hold on tight to steering wheel, brace feet, lean away from impact and lean forward. Note that the seat belt should already be fastened.

Forklift Capacity Plates

- Forklifts have a capacity plate to tell the user what loads are safe to lift. If the plate says the capacity is 30,000 pounds or less then that capacity is rated for a load with a center of gravity 24" from the face of the forks. If the forklift capacity is greater than 30,000 pounds then the label will rate the load at a 36" or 48" center of gravity since larger forklifts usually lift physically larger loads.

Forklift Capacity Plates

Capacity Forklift Type Attachment ID Capacity with Attachment

WARNING
 IMPROPER OPERATION OR MAINTENANCE COULD RESULT IN INJURY OR DEATH. DO NOT OPERATE OR WORK ON THIS TRUCK UNLESS YOU ARE PROPERLY TRAINED. READ AND UNDERSTAND THE OPERATION AND MAINTENANCE MANUAL. ADDITIONAL MANUALS ARE AVAILABLE FROM DAEWOO DEALERS.

MODEL	SERIAL NO.	TYPE
3255-2	D-01593	G/LP

STEEL MACH CAP. 5000LB
 AT LOAD CTR "A" 24IN
 AT FORK HGT "B" 173IN

DAEWOO

ALLOWABLE MACHINE WORKING CAPACITY WITH MAIST VERTICAL

5" BACK TILT	MAIST	FEET	TIRES	5
TIRE PRESS	DRIVE TIRE THREAD		38.4IN	
MACHINE WGT	9819LBS	W/ATTACH		9986LB
ATTACH	HSS	ID	D370173	

MACHINE CAPACITY			
W/O ATCH	LD	IN	IN
	KG	MM	MM
W/ATCH	4500 LB	24 IN	188 IN
	KG	MM	MM

Machine Conforms to X Standards ANB 306.1 ANB 356.2 FEM Sec. IV Other

This LP Gas Forklift can safely lift 5000 lbs. 173" high with a center of gravity 24" from the face of the forks. With an attachment labeled "HSS", the safe load drops to 4500 lbs.

Fueling and Charging

Batteries

- Battery charging areas should be provided with systems for flushing and neutralizing spilled electrolyte, fire protection, protecting charging apparatus from damage by forklifts, and adequate ventilation of fumes from off gassing (hydrogen gas) from the batteries.
- Smoking is prohibited in the battery charging area.
- Open flames shall not be used for checking the electrolyte levels of the storage batteries.

Refueling

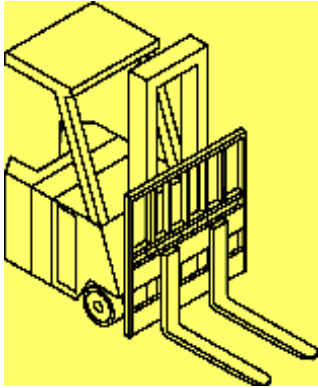
- Fuel tanks should not be filled while the engine is running.
- Spillage of oil or fuel should be carefully cleaned up or allowed to completely evaporate and the fuel cap replaced before restarting the engine.
- Open flames shall not be used for checking gasoline levels in the fuel tanks.
- There shall be no smoking when refueling or changing LP tanks on the forklift.

Inclines

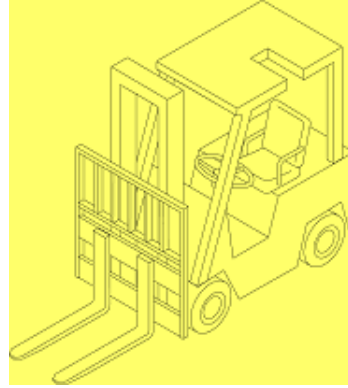
Always keep the load uphill when going up or down an incline



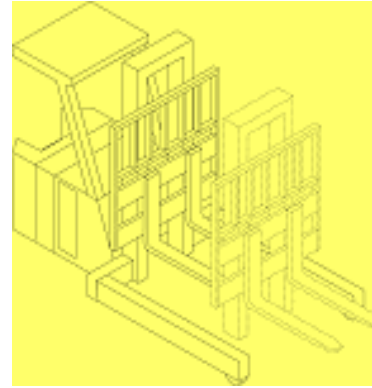
Electric Motor Powered Industrial Trucks



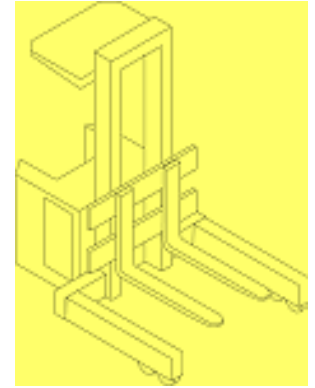
Standup End Control Rider



Sitdown Rider

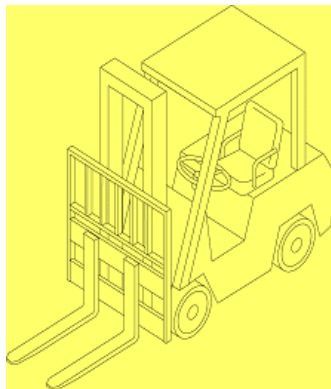


Narrow Aisle Reach

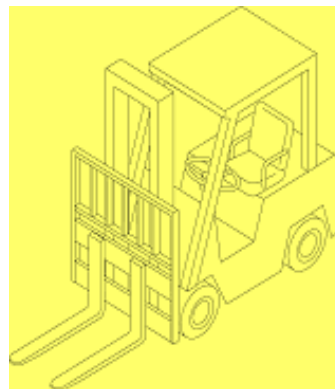


Narrow Aisle High Lift Straddle

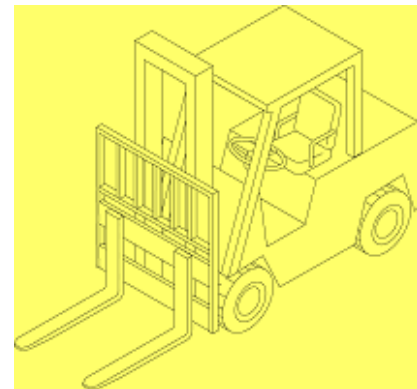
Internal Combustion Engine Powered Industrial Trucks - Gas/LPG/Diesel



Counterbalanced Forklift
Gas/LPG Cushion Tire



Counterbalanced Forklift
Gas/LPG/Diesel Pneumatic Tire



Rough Terrain Forklift
Gas/LPG/Diesel Vertical Mast

- 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.