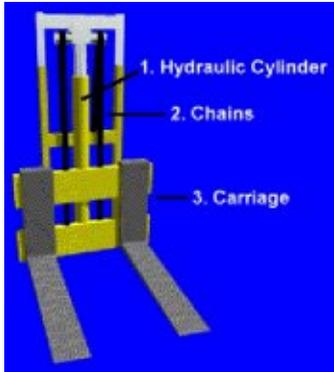


LIFTING SYSTEM

The lifting system on lift trucks includes chains attached to a hydraulic cylinder.



When the cylinder is filled with hydraulic fluid, it forces the piston to move upward.

The upward movement of the piston and the chains lift the forks to the desired level.

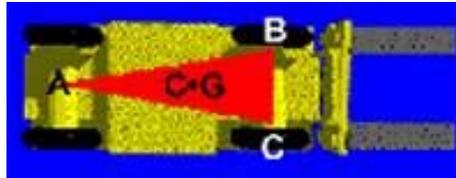
The lifting forks on your lift truck can be moved from side to side to adjust for different types of loads. While most lift trucks require that this be done by hand, some have special controls for adjusting the forks.

LOAD CAPACITY

Your most immediate source of information concerning the safe Load Capacity of a truck can be found on its data plate. The plate will give you information concerning the load capacity of the truck in pounds and the lift capacity in inches.

STABILITY TRIANGLE

If you were to raise a lift truck up and look at its underside, you would see that the support points for the truck are located at points A, B, and C. The triangle formed between points A, B, and C is called the Stability Triangle. The lift truck will not tip over as long as the center of gravity remains inside the triangle. (The center of gravity is the point within a lift truck where there is equal weight all around it.)



However, if the center of gravity shifts outside the stability triangle, the lift truck will tip over. The center of gravity within a lift truck can be moved by:

- Traveling with an elevated load;
- Trying to carry too heavy a load;
- Trying to turn the lift truck while it is moving too fast;
- Operating the lift truck on a hill or incline;
- Starting or stopping too fast;
- The jerky operation of the hydraulic system.



Safe Operation of Powered Industrial Trucks



This brochure is a supplement to the Powered Industrial Truck Training Program. For more information, contact the Manager of Environmental Health and Safety, (330) 672-1950, dbaden@kent.edu, (330) 672-9565 or dehead@kent.edu

**Environmental Health
and Safety**

THE IMPORTANCE OF PROPER TRAINING

Powered Industrial Truck 29 CFR 1910.178 Final Rule. "Roughly 100 workers killed per year related to powered industrial truck operations: 95,000 Injured (lost work days) per year".

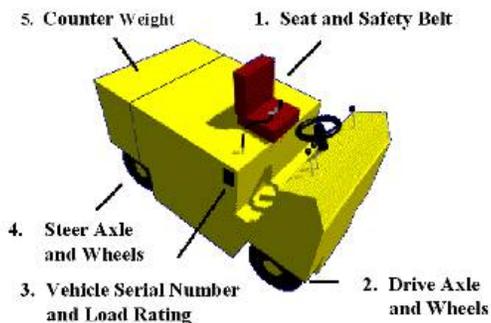
Lack of training is one cause of powered industrial truck accidents. OSHA notes that many of the accidents could have been caused by improper training.

KNOW YOUR LIFT TRUCK

There are three major parts of a lift truck.

1. The Body (Truck)
2. The Overhead Guard
3. The Hydraulic Lift

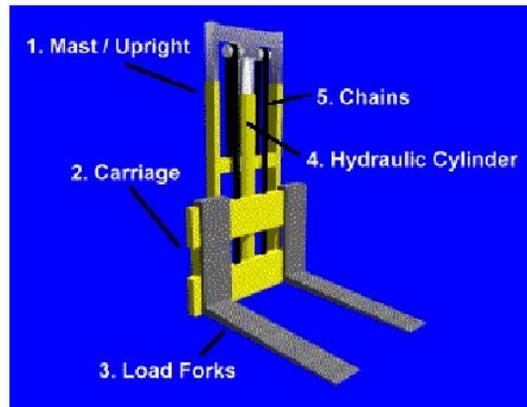
Truck Body



Overhead Guard



Hydraulic Lift



For more information, study the operator's manual for the specific lift truck you will be operating.

TYPES OF LIFT TRUCKS

Because there are many different types of industrial trucks (lift trucks) used today, take time to read the operator's manual for the specific truck(s) you will be operating. Be sure to learn the location and operating procedures for all:

- Gauges
- Controls (levers and pedals)
- Switches

DATA PLATE

All industrial trucks have a Data Plate attached to the truck body. Data plates display important information concerning the trucks:

- Type
- Capacity
- Load Center
- Truck Weight

MODEL NO.	TYPE			
SERIAL NO.				
ATTACHMENTS				
CAPACITY WITH ATTACHED LIFTED AND/OR EXTENDED FORK LIPS - UNLESS OTHERWISE SPECIFIED				
LEGS	A	D	C	
FLOOR				
APPROX. WT. OF ALL TRUCKS APPROX. WT. OF ATTACHMENTS				
LESS BATTERY WT.				
BATTERY WT.				
CAPACITY				
PERM.	PERM.	PERM.	PERM.	PERM.
MIN.	MIN.	MIN.	MIN.	MIN.
LEGS	WHEELS	WHEELS	WHEELS	WHEELS
FOR OTHER CAPACITIES - CONSULT MANUFACTURER'S AS RELEASED FROM FACTORY INSTRUCTIONS OR THE DEGREE OF DEFLECTION ESTABLISHED IN PART 20. INITIALS AND DATE OF INSPECTION BY THE INSPECTOR. PART 1910.178(b)(1) - 1999 PART 1910.21(b)(5)(iv)				

Read and remember the data for the trucks you operate.