



Occupational Safety and Health Branch Labour Department







This booklet is prepared by the Occupational Safety and Health Branch Labour Department

This edition March 2011

This booklet is issued free of charge and can be obtained from offices of the Occupational Safety and Health Branch. It can also be downloaded from website of the Labour Department at http://www.labour.gov.hk/eng/public/content2_8d.htm. For enquiries about the addresses and telephone numbers of these offices, please visit the Labour Department's website at http://www.labour.gov.hk/eng/tele/osh.htm or call 2559 2297.

This booklet may be freely reproduced except for advertising, endorsement or commercial purposes. Please acknowledge the source as "Safe Practices in Operating Fork-lift Trucks" published by the Labour Department.

Safe Practices in Operating Fork-lift Trucks

CONTENT

	Page
Section A - General Safety Precautions	3
Section B - Driving the Truck	4
Section C - Load Handling	6
Section D - Stacking and Unstacking	7
Section E - Truck Maintenance	7
Section F - Other Relevant Publications	8
Enquiries	9
Complaints	9
Figures 1 to 10	

Section A GENERAL SAFETY PRECAUTIONS

- Inspect surfaces or floors for travelling fork-lift truck (hereinafter refered to be "truck") and transporting vehicle before loading or unloading. Reinforce small weak spots with steel plate.
- 2. Chock the wheels of the transporting vehicle to prevent them from accidental or unintentional movement during loading or unloading and causing tipping of the fork-lift truck.
- 3. Allow no riders on your truck. Protect your fellow workers from injury.
- 4. Remove pieces of material from gangways. Report large obstructions to foreman.
- 5. Do not park truck or leave loads in gangways or in front of fire fighting equipment. Apart from causing obstructions, it is a temptation to unauthorised persons to operate the truck.
- 6. Some incorrect ways of using powered truck are: pushing or pulling another truck to start it; moving heavy objects with makeshift connexions; lifting objects that are not supposed to be lifted with a truck; using truck as battering ram.
- 7. Keep your body inside running lines of truck.
- 8. Keep foot off clutch unless changing gears or stopping. Riding or slipping clutch to regulate speed is hard on clutch plate and discs.
- 9. Shut off motor when refueling. No smoking in refuelling areas.
- 10. Keep your hands dry. Wear safety and appropriate shoes. Wet hands can slip on steering wheel or control. Worn shoes slip easily off clutch or brake.
- 11. When stopping the truck, first release the accelerator pedal and allow the truck to come to rest under the control of the drive brakes. Then move both transmission levers to the neutral position and apply the parking brake.
- 12. Apply the parking brake and set the transmission gear levers

to "neutral". Stop the engine by pulling the stop control, then turn the start switch key to the "OFF" position when the engine has stopped running.

- 13. Turn switches off when leaving machines.
- 14. Don't use naked lights to inspect.
- 15. Know floor and bridge weight limits know your truck weight — loaded and unloaded. Know the floor load limits. (Fig. 1)
- 16. Observe traffic rules.
- 17. Know overhead clearances and watch out for them. (Fig. 2)
- 18. Allow no one to stand on or pass under elevated forks.
- 19. Do not push or tow another vehicle unless proper attachments are fitted.
- 20. When refuelling petrol truck: (a) take care to prevent spillage or overfilling of the tank (b) carry out in the open or well ventilated area; never in a confined area and (c) well away from stowed goods, inflammable material or naked flame.
- 21. When refuelling liquefied petroleum gas truck: (a) container of LPG should be changed by fully trained person (b) carry out the change in the open air and (c) no smoking.

Section B DRIVING THE TRUCK

- 1. Before driving, check your truck. Report any defects to your foreman or safety representative.
- 2. Face direction of travel even on short back-ups. Maybe a pedestrian or another truck has come up behind you. (Fig. 3)
- On ramps, carry load on upgrade side, load will rest more securely — won't spill or "move ever" if you make a quick stop. Also gives better traction on large wheels for braking.
- 4. Before travelling, the mast should be tilted back and the forks should be maintained between 10 centimetres and 15 centimetres above the driving surface.

- 5. Never brake suddenly the load may fall due to the sudden jerk. (Fig. 4)
- Don't drive forward down inclines if the fork is loaded. (Fig. 5)
- Inspect bridge plates before running the trucks onto them. Just because van loaders are experienced is no guarantee of the bridge plates are secure.
- 8. When parked, rest forks on floor. Pedestrians will not strike sharp edges or trip over them. This includes you when you return to your truck.
- 9. If load is too high to see over, drive in reverse. Then you will have no blind corners. (Fig. 6)
- 10. Allow at least a three-truck-length interval between trucks travelling in the same direction. Allow more if necessary, depending on driving conditions.
- 11. Regulate speed to road conditions and type of load. Quick starting, jerky turns, other "show off" tactics, are bad practices.
- 12. Drive at sensible speeds. Avoid: driving too fast, cutting corners, ramming loads, ramming doors and picking up empty pallets without stopping. (Fig. 7)
- 13. Give pedestrians the right of way give them warning. Use your horn sensibly not unnecessarily.
- 14. Sound horn at crossings. A few short blasts are better than a long one.
- 15. Watch out for holes, pits and rough spots in floor. The steering wheel snap caused by hitting one can break your hand or wrist.
- 16. Stay away from edges of platforms and bridge plates (loading plates).
- 17. Do not drive too close to edge of gangways. Allow safe clearance between truck and equipment or workers along gangways.

- The safe way to enter a lift (if lifts are used in your factory) is

 (a) approach lift at right angles (head on);
 (b) halt at least 1.5m from gate;
 (c) wait for lift operator's signal then drive on;
 (d) set brakes and shut off motor;
 (e) get off truck.
- 19. Be careful where it is wet or greasy. Report these conditions to your foreman or safety representative for correction.
- 20. When turning, watch rear end swing of truck. (Fig. 8)
- 21. Never drive up to anyone who is standing in front of a bench, wall or any fixed object. If truck fails to stop in time, he would be pinned.
- 22. Never turn on a ramp.
- 23. Concentrate when driving. (Fig. 9)
- 24. Do not jump onto or off moving truck.
- 25. Take special care when driving by/through doorways and around corners where vision is restricted.

Section C LOAD HANDLING

- 1. Tilt load back slightly when carrying. It will then rest against backrest or uprights and be more secure in the event of a sudden stop.
- 2. Position the truck square to the load with the forks lowered and forward tilt applied. Using the inching control, move the truck slowly forward, passing the forks clearly under the load.
- 3. Adjust spread between forks for well-balanced load. Forks should be towards outer battens and equal distance from centre batten so that load won't become unstable.
- 4. Don't try to pick up loads that are too heavy. When lifting the load with the forks, if the rear wheels leave ground, do not move load. Use heavier truck for the job.
- 5. Stop the truck at the required position and lower the load smoothly to the ground. Apply forward tilt and move the truck

away from the load and when the forks are clear, raise them slightly prior to moving off.

- 6. Never let another person stand on rear of truck to increase lifting capacity. People have been injured as a result of this.
- 7. No counterweight should be added to increase the lifting capacity.
- 8. Do secure and safely bond your load.
- 9. Do not overfill the pallet.

Section D STACKING AND UNSTACKING

- 1. Never butt loads with forks or uprights. This is common cause of damage to materials and pallets. (Fig.10)
- 2. Be sure loads are secure before moving them. If the load is too heavy, loose or sloppy, have it corrected before moving it.
- 3. Do not stop a descending load suddenly. This disrupts the load and is hard on the entire truck.

Section E TRUCK MAINTENANCE

- 1. When maintenance is required, report immediately.
- 2. Clean your truck daily.
- 3. Trucks should be maintained carefully to ensure that they are in a safe operating condition at all times. Whenever any dangerous defect is discovered, it should be immediately taken out of service. As a simple daily routine, check (1) tyres and pressures; (2) lubricant and water levels; (3) brakes; (4) batteries; (5) warning devices horns or bells; (6) controllers on electric trucks; (7) forks; (8) chains, cables and limit switches where fitted; (9) transmission and steering

mechanisms.

- 4. Trucks should always be kept clean and free of mud, oil, dust accumulations and electrolyte spillages in order to reduce fire hazards.
- 5. Most manufacturers arrange for their trucks to be finished in an easily identifiable colour in order to give visual warning to people when the truck is in motion, so keep your truck clean.
- 6. Check that all gauges and warning lamps are indicating correctly.
- 7. When not in use, trucks should be kept in storage places and protected from weather.

Section F Other Relevant Publications

The practices in this booklet are not exhausting those matters which need to be covered by the relevant safety legislation and should be read in conjunction with other publications, such as "A Guide to the Factories and Industrial Undertakings (Loadshifting Machinery) Regulation", "A Guide to the Factories and Industrial Undertakings Ordinance (Section 6A & 6B) – Know Your General Duties", "Guidance Notes for Safe Use of Fork-lift Trucks".

Enquiries

If you wish to enquire about this booklet or require advice on occupational safety and health, you can contact the Occupational Safety and Health Branch of the Labour Department through:

Telephone	:	2559 2297 (auto-recording after office hours)
Fax	:	2915 1410
E-mail	:	enquiry@labour.gov.hk

Information on the services offered by the Labour Department and on major labour legislation can also be found by visiting our Home Page on the Internet. Address of our Home Page is http://www.labour.gov.hk.

Information on the services offered by the Occupational Safety and Health Council can be obtained through hotline 2739 9000.

Complaints

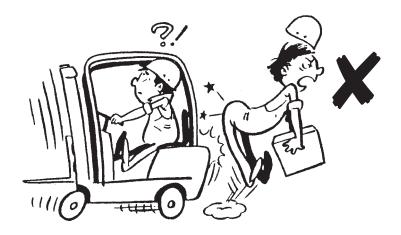
If you have any complaint about unsafe workplaces and practices, please call the Labour Department's occupational safety and health complaint hotline on 2542 2172. All complaints will be treated in the strictest confidence.



Fig. 1 Know Floor and Bridge Weight Limits, Weight of Fork-lift Truck and its Loading Capacity.



Fig. 2 Watch Overhead Clearance



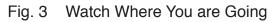




Fig.4 Never Brake Suddenly

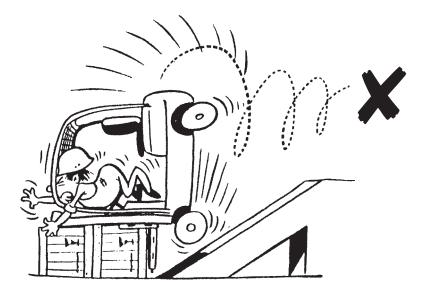


Fig. 5 Don't Drive Forward Down Inclines if The Fork is Loaded

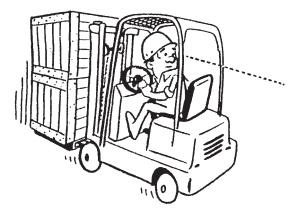


Fig. 6 For Better Visibility with Bulky Loads - Drive Backwards



Fig. 7 Drive Slowly and Carefully. Don't Race



Fig. 8 Watch Rear-end Swing



Fig. 9 Keep your Eyes on Your Work

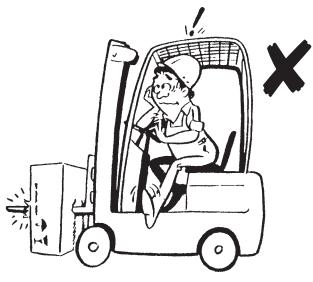


Fig. 10 Never Butt Loads with Forks

Published by the Labour Department

3/2011-4-B28a