

Principles of Materials Handling and Storing

chines are tilted. Spillage of residual oil should be wiped up immediately.

When a jack develops any defect, it should be repaired by qualified workmen and tested under load before being returned to service.

Handtrucks, dollies, and wheelbarrows

Many types of handtrucks and dollies are available, such as two-wheeled, flat, platform, box, special racks or dollies, and lift trucks. Trucks can be purchased or designed for objects of various sizes and kinds. Operators should wear gloves and safety shoes.

Two-wheeled trucks and wheelbarrows should be equipped with knuckle guards to protect against the jamming of hands against door frames or other obstructions.

Two-wheeled trucks should have brakes.

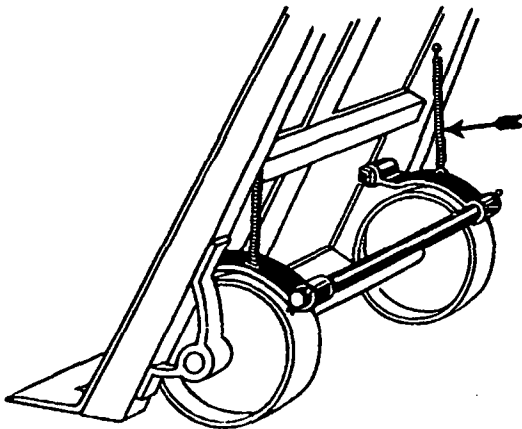


FIG 19-7 — Foot brake keeps wheels from slipping while truck is being loaded. Springs (arrow) hold brake away from wheels when it is not needed.

(Fig 19-7) so that the worker need not hold the truck with a foot on the wheel or axle. The latter practice causes many injuries.

To decrease hazards to toes and feet, wheels should be as far under the truck as possible. Wheel guards can be installed on many types of trucks.

Tongues of flat trucks should be provided with counterweights, springs, or hooks to hold them vertical when not in use. If this is not possible, workers should be trained to leave handles in such a position that they will not be a tripping hazard.

Equipment should be inspected daily and kept in good repair. Repair and maintenance records should be kept to show the condition of each piece of equipment. Axles should be kept well-greased.

The type of truck most suitable for the work at hand should be used. No one truck is right for handling all types of material.

Two-wheeled trucks look as though they should be easy to handle, but there are safe procedures that must be followed.

- 1 Keep the center of gravity of the load as low as possible. Place heavy objects below lighter objects. When loading trucks, truckers and loaders should keep their feet clear of the wheels.
- 2 Place the load well forward so the weight will be carried by the axle, not by the handles.
- 3 Place the load so it will not slip, shift, or fall. Load only to a height that will allow a clear view ahead.
- 4 When a two-wheeled truck or wheelbarrow is loaded in a horizontal position, raise it to traveling position by lifting with the leg muscles and keeping the back straight. Observe the same principle in setting a loaded truck or wheelbarrow down—the leg muscles should do the work.
- 5 Let the truck carry the load. The operator should only balance and push.
- 6 Never walk backwards with a hand truck.
- 7 When going down an incline, keep truck ahead. When going up, keep truck behind. (This advice applies to 4-wheeled as well as 2-wheeled trucks.)
- 8 Move trucks at a safe speed. Do not run. Keep truck constantly under control.

Four-wheeled truck operation follows rules similar to those for two-wheeled trucks. Extra emphasis should be placed on proper loading, however. Four-wheeled trucks should be evenly loaded to prevent their tipping. Four-wheeled trucks should be pushed rather than pulled, except for a truck that has a fifth wheel and a handle for pulling.

Trucks should not be loaded so high that operators cannot see where they are going. If there are high racks on the truck, two men should move the vehicle—one to guide the front end, the other to guide the back end. Handles should be placed at protected places.