

Pallet Jack Safety

Introduction to Pallet Jacks

Pallet jacks, also known as pallet or pump trucks, can help you lift and move pallets of material. There are manual pallet jacks you operate by hand, and battery-powered models that can help lift and move heavier and stacked pallets. For maximum safety, use the right pallet jack for the job.

Safe Operation

Using manual and powered pallet jacks can result in many types of accidents. The most common injuries are crushing your own or another worker's feet and pinching your hands between an object or vehicle. Other hazards that can cause injuries and damage include rolling the wheels off the edge of ramps or loading docks, and rolling into walls, stacks, or other vehicles.

Basic Operations

Most pallet jacks are low-lift. As you raise the hydraulic jack, each fork separates from a small front wheel, forcing the load up enough to clear the floor for travel.

- With a manual pallet jack, you use the handle to pump up the load and to steer as you push or pull.
- Powered pallet jacks have a throttle on the handle or the control panel to move forward or, to go in reverse. Powered types include walking pallet jacks for operators on foot, or walkie-riders with a platform where you can stand and ride.

Check It Out

Before you start your shift, visually inspect the pallet jack and use a written checklist to note any issues or concerns.

- Focus on brakes, horn, controls, wheels, forks, and all other moving parts.
- Check for fluid leaks and cracked or broken areas, especially on wheels, tires, and forks.
- Don't use the pallet jack if you find any problems or defects, mark it **Out of Service** and report all problems immediately.



Train and Practice

- Read the operator's guide. Training should be administered by an experienced operator. Training, certification, and authorization requirements are the same for powered (or manual) pallet jack operators and for forklift operators.
- Practice maneuvering in an open area until you are comfortable using the controls and brakes.

Be Prepared

Follow your company's safety procedures. Keep yourself in good physical and mental condition. Wear the right personal protective equipment.

- Wear the right personal protective equipment including heavy gloves to reduce cuts, bruises and blisters on your hands and before you begin.
- Steel toed footwear can prevent injury if you stub your toe, or if your feet are run over by a wheel or hit by material falling off the load.
- Safety eyewear can prevent eye injuries when you work with material strapping, and when you move hazardous materials.
- Wet or greasy hands or footwear should be avoided. They affect your grip on the handles, or cause slip and fall injuries.

Stay Safe on Loading Docks

Loading docks can be especially hazardous as they are full of activity and material and vehicles pulling in and out of the dock. Before you enter a truck, trailer, or railcar:

- Make sure its brakes are set and wheel chocks are in place.
- Secure the bridge plate or dock port and inspect flooring for safety and load capacity.



Loading and Unloading Safely

To avoid damaging the pallet jack, pallet, or load, use caution when you position the forks and lift or lower the load.

- Stack the load so it is centered on the pallet and stable. Do not overload. Reconfigure and secure unstable loads before traveling.
- Position both forks completely under the pallet with the pallet against the backstop.
- Stack and move loads so they will not block your line of vision. Use a spotter to help when you cannot see around a load.

Travel Safely

- Inspect your route before you move the pallet jack so you are aware of any hazards and obstructions.
- Pallet jacks can be unstable so when using a powered jack, maintain a safe speed (A rule of thumb is about as fast as you can walk).
- Keep movements and turns slow and steady to prevent the load from shifting or falling.
- Slow down at aisle intersections, blind corners, and elevators. Sound the horn and give pedestrians the right of way.

- Never operate in blind areas with empty forks. You could run into a pedestrian or cause a trip and fall injury.
- Always come to a complete stop before changing direction, lifting and lowering loads, or stepping off a walkie-rider.
- Always park in areas away from exits, elevators, access to stairs, and emergency equipment such as fire extinguishers or eyewash stations.

Be Aware of Surface Conditions

Use caution on wet or slippery floor surfaces that can cause you or the pallet jack to lose traction. If a load gets out of control, use the hydraulic release to immediately lower the load to the floor.

Watch the Slopes!

- Make sure the load is centered on the pallet, stable and secured.
- On an incline or ramp, always travel with the load downgrade.
- Do not turn or angle the pallet jack on ramps and incline, as it could make the load tip over.
- Enter tight areas and elevators with the load first to avoid being trapped between a wall and the pallet jack handle.
- Keep your hands, feet, and other body parts inside the running lines of powered pallet jack, and keep your feet away from the front skirt and rider platform.

Say "No" to Horseplay

- Never ride on manual or powered pallet jacks.
- Never take a passenger on a pallet jack or a load.
- Never use a powered pallet jack to push, tow, or hoist other pallet jacks.

Ergonomic Considerations & Hazards

When loading, improve load stability by placing the heaviest units on the bottom layer. *Keep in mind if you repeatedly bend forward at the waist, the awkward body posture combined with the unit's weight can put stress on your back.* Bending your knees to lift and properly placed units will help to reduce the stress on your back, but can be hard on your knees when done repeatedly. Generally, using powered equipment can reduce hazards over using manual equipment.

- To reduce risk of back injury, you can try: Using a heavy duty high lift pallet truck to raise loads to a comfortable waist high level.
- Placing a palletizer or stack several empty pallets on the forks to keep the product waist height.

To avoid stress and injuries to your hands, wrists, arms and shoulders, be sure to:

- **Have regular pallet jack maintenance performed so it operates with the minimum amount of hand, arm, and finger force.**
- **Keep floors well maintained to reduce whole body vibration from powered pallet jacks, and the force needed to work manual ones.**
- **Watch for early signs of mechanical breakdown and report difficulties before the problem leads to injury.**



Solid rubber wheels can develop flat spots that make steering and stopping difficult and a load unstable. Also, when manual pallet jacks run on worn floors with ruts, bumps and holes, or over rough debris, the single drive steering wheel can make the pallet jack lurch sideways.

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The Great Debate-Pushing vs. Pulling

Operators often pull rather than push a manual pallet jack because it seems easier to steer. If you think about the body mechanics (biomechanics) involved and spend some time practicing, you may find that pushing takes less effort and is easier on your lower back, arms, shoulders, and legs.

Here's why pushing can be a better choice:

- **The biomechanically preferred way to apply force is to push rather than pull a load. Pushing uses stronger leg muscles instead of back muscles and can reduce the risk of back injuries.**
- **To move a "dead" load, and keep it moving and in control, you must apply enough force to overcome the inertia of the resting load. Most operators tend to bend forward and use one arm to pull, which twists the torso, torques muscles in the lower back, and strains joints in the shoulder and elbow.**

There are also risks associated with pulling:

- **A one arm pull can restrict peripheral vision on your leading arm side because your neck has to strain for you to look straight ahead. You may have a harder time seeing loads, objects, or people coming from that side.**
- **Pulling a pallet jack behind you increases the risk of your foot making contact with the wheels or the load, causing you to trip, fall, or even be rear-ended by your own load.**
- **It may not be possible to always push a manual pallet jack, limit pulling when you are positioning and not actually moving a loaded pallet around.**

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