

MANUAL PALLET JACK SAFETY

COURSE OUTLINE

- **A busy workday means materials in motion, including deliveries, shipments, loading and unloading, moving, stacking and storing.**
 - Materials can move much more easily and efficiently when they're packed on pallets.
- **Very often pallets are lifted and carried by forklifts and motorized pallet trucks, but powered equipment is not always available or even suitable for every load.**
 - This is where a manual pallet jack comes in.
- **A pallet jack allows an individual worker to move a palletized load around a workplace easily and efficiently by muscle power alone.**
 - As with all equipment, if it's misused a pallet jack can create serious hazards.
- **While the jack is not a particularly complicated piece of equipment, to use it safely you first need to understand how it works.**
- **A pallet jack's components include:**
 - Forks to hold the pallet.
 - A hydraulic system that lifts and lowers the forks.
 - Wheels for traveling along the floor.
 - A steering system.
- **A pallet jack steers using wheels that are guided by a "tiller".**
 - On the tiller's "loop handle" you'll find an "actuating lever", which controls the hydraulics.
- **The actuating lever has three positions:**
 - "Down" for raising the forks.
 - "Middle" for "neutral".
 - "Up" for lowering the forks.
- **With the actuating lever in the down position, moving the tiller up and down pumps the hydraulic cylinder, forcing the jack's wheels down so that the forks rise.**

- **Switching the lever to neutral holds the forks in the raised position and disconnects the tiller from the lifting mechanism.**
 - This allows it to move freely for easier steering when you're traveling with a load.
- **To lower the forks, you just push the actuating lever to the up position.**
 - This releases the pressure in the hydraulic system that is holding the forks up.
- **Pallet jacks aren't large, but they're heavier than they look, and many of them don't have brakes.**
 - If they hit a part of a building or another piece of equipment, they can do significant damage, especially if they're loaded.
 - They can "damage" people as well.
- **Abrasions, contusions, bone fractures and worse can result when a pallet jack hits its operator or a bystander, runs over their feet, or pins them against something like a wall or bollard.**
- **Whether the equipment is loaded or not, you should always keep your feet away from the forks and never put any part of your body under them.**
 - Before lowering the forks, always make sure that the area around them is clear.
- **Pallet jack forks can also create a mean tripping hazard.**
- **Pallet jacks are designed to be used on surfaces that are smooth, dry and level.**
 - When a jack is used on surfaces that are uneven, covered with debris or slick with oil, water or other substances, it can become unstable.
- **Pallet jacks can also be difficult to control on inclined surfaces, such as ramps and dock levelers.**
 - In these situations a jack can "run away", skid or tip over.
- **Loose, oversize or unbalanced loads can also cause a pallet jack to become unstable.**
- **If all or part of a load falls off the jack, or it "takes off" downhill by itself, its operator, its cargo and any bystanders can all sustain serious damage or injuries.**
 - So it's important to think "safety first" and follow safe work practices at all times when operating a pallet jack.

- **A pallet jack doesn't look dangerous, but don't let that fool you.**
 - When it's fully loaded and rolling, a jack has a lot of weight, a lot of momentum and a lot of potential to cause damage, both to things and people.
- **A pallet jack operator has a serious responsibility to use that equipment in a way that will keep their cargo, their facility, their coworkers and themselves safe.**
 - Fortunately, there are a number of safe work practices and "rules of the road" that you can follow to prevent pallet jack mishaps.
- **To begin with, you should never try to operate any equipment that you haven't received training on.**
 - Your employer will provide you with hands-on training with the type of pallet jacks that you will be using in your job.
 - You should read and follow the manufacturer's safety instructions for the jack as well.
- **Before your shift begins, protect yourself by putting on the appropriate PPE.**
 - At a minimum you should wear steel-toed work boots with slip-resistant soles.
- **Make sure your hands are clean and dry.**
 - Wet or oily hands could cause you to lose your grip on the tiller, and control of the jack.
- **Before you use a pallet jack, you should always inspect it to make sure it's undamaged and fully functional.**
- **When it comes to moving a pallet jack, sometimes you should pull and sometimes you should push.**
 - Each way has advantages and disadvantages.
 - The equipment is easier to steer when you pull it, but heavy pulling can hurt your back.
- **While it's less of a strain to push a loaded pallet jack, it forces you to steer with its wheels behind the load.**
 - That can be tricky, and increases the chances that you'll "oversteer" and run into people or things.
- **If you're pushing a jack with a high load you can also have trouble seeing where you're going.**

- **As a general rule, you should:**
 - Push a pallet jack when you're engaging a pallet with the forks or positioning a load prior to lowering it.
 - Pull the jack when you are traveling with it for longer distances.
- **As you move forward with a pallet jack, you should maintain a moderate, walking pace.**
 - This helps you to keep the load stable and allows you to stop safely when you need to.
 - Remember, many manual pallet jacks do not have brakes!
- **Keep an eye on the surface that is ahead of you.**
 - Avoid uneven areas and accumulations of debris, oil, water or other liquids.
 - Use established traffic lanes and be careful when you go around blind corners.
 - Maintain plenty of clearance around the jack as you walk.
- **Don't carry riders or engage in horseplay, and never ride a pallet jack like a scooter.**
- **Be alert for people and equipment in the areas you move through as well.**
 - Don't assume that people see you.
 - Always give pedestrians the right of way.
- **At the end of your shift, or if you'll be leaving a pallet jack for an extended period of time, you should park it in its assigned storage location.**
- **When you're stopping work for shorter periods, you should:**
 - Position the jack on a level surface, so it won't roll.
 - Lower the forks.
- **Never leave a pallet jack unattended with the forks raised.**
- **Make sure the jack doesn't block:**
 - Exits.
 - Stairways.
 - Emergency equipment such as fire hoses or extinguishers.

- **Avoid parking in areas where there is a lot of foot traffic.**
 - It's too easy for people to trip over
 - a jack's forks.
- **To prevent people from falling over the tiller lever, always leave it in the raised position.**
- **The process of moving a load with a manual pallet jack can be broken down into three basic stages:**
 - Raising the pallet.
 - Travelling with the load.
 - Putting the pallet down.
- **To move the load safely and efficiently, you need to follow a set of safe work procedures for each of these stages, every time you perform them.**
- **To start, determine the maximum carrying capacity of the pallet jack that you will be using.**
 - Trying to lift or move a load that's too heavy for the jack can lead to disaster.
 - You should be able to find the weight capacity information on the "data plate" that is attached to the jack itself.
- **Even without weight problems, loads that are loose, oversize or unbalanced can make the jack unstable, or fall off and hurt someone.**
 - If necessary, repack a load on one or more other pallets before moving it.
- **When you push a jack's forks into a pallet, you'll be controlling their direction with the rear wheels, so be careful not to oversteer.**
- **Make sure the forks are as low as they will go (they can sometimes "stick" in a raised position), then insert them as far as possible into the pallet, with the load up against the forks' backrest.**
 - Center them side to side, to ensure that the load will be balanced and stable.
- **Be sure that the wheels under the forks are resting on the floor, and not on top of the pallet's bottom planks.**
 - Lifting the forks with the wheels on the planks will tear the pallet apart!

- **Next, push the actuating lever to the "down" position and pump the tiller to raise the forks.**
 - You should always use both arms, to prevent muscle strain.
- **Raise the forks only enough to create about an inch of clearance between the pallet and the floor (the lower the load, the more stable it is).**
- **To make the tiller easier to handle while you are transporting the load, move the actuating lever to the middle, "neutral", position.**
 - This disengages the tiller from the hydraulic system
- **Once you've planned the route you're going to take to reach your destination, it's time to move off.**
- **Pushing a pallet jack places less strain on your back, but pushing also makes the equipment harder to steer, so you're more likely to run into things.**
 - If you'll be moving the load any distance, you should pull the jack so you can control it better.
 - Remember to protect your back by keeping it straight as you pull.
- **As you move along:**
 - Face in the direction that you're travelling.
 - Maintain a moderate walking pace.
 - Avoid sudden movements.
 - Start, stop and change direction gradually.
- **When you reach your destination, you will want to change back to pushing the pallet jack so you can position the load precisely.**
 - Make sure that bystanders and your own feet are safely clear of the forks.
 - Then lower the pallet by moving the actuating lever up.
- **Manual pallet jacks are designed to allow individual workers to move palletized loads around a facility conveniently and safely.**
- **On flat surfaces this is usually pretty straightforward, but some environments can still require extra caution and special procedures to operate a jack safely. These include:**
 - Loading docks.
 - Inclined surfaces.
 - "Lift gates".

- **On a loading dock a lot of busy people and equipment can be crowded into a small space, so you always need to stay alert.**
 - Remember to keep yourself and the pallet jack away from the edge of the dock.
 - The potential for "going overboard" at the edge creates a serious hazard.
- **Check that the dock plates and levelers that bridge the gaps between trucks and trailers and the dock itself are secure before you cross them.**
 - Make sure that they are rated to support the weight of the jack you're operating, as well as the load it's carrying.
- **Always cross dock plates and levelers in the center, at right angles to the edge of the dock.**
- **Dock plates and levelers that have a steep slope can be hazardous to traverse with loaded equipment.**
 - Talk to your supervisor if a slope looks too severe.
- **Inclined surfaces can create difficulties for pallet jacks.**
 - When you're working on an incline you need to be especially careful to keep a jack stable and not lose control.
 - Remember, many pallet jacks don't have brakes.
- **You should always stay uphill of a pallet jack on an incline.**
 - If a jack gets out of control when you're on the downhill side, it could run right over you.
 - When you're going up an incline you should pull the jack with the forks trailing behind.
 - When you're going down, you should walk behind it so you can act as a "brake".
- **You should proceed straight on an incline, not at an angle, and stay in the center of the ramp.**
 - Traveling at an angle or trying to turn on an incline could cause a tipover.
 - Staying in the center eliminates the potential for falling over the edges.

- **You need to be especially careful of falling when you're operating a pallet jack on a "lift gate".**
 - Many delivery trucks are equipped with these "elevator platforms" at the rear of the bed.
 - Most lift gates are narrow, and can be elevated several feet above the ground.
 - You need to follow some special procedures to use a jack safely on them.
- **For example, you should never pull a pallet jack out of a truck and onto the lift gate while you're walking backwards.**
 - It's all too easy to walk right off the rear edge of the gate.
- **You could also be pushed off the edge by the momentum of the jack and its load.**
 - Then the jack could fall off the platform as well, and land right on top of you.
- **To position a pallet jack safely on a lift gate:**
 - Push the jack onto the lift gate.
 - Center the jack on the platform.
 - Lower the forks.
 - Rotate the tiller lever as far as it will go, to lock the steering wheels and prevent the jack from moving.
- **The lift gate can now raise or lower the pallet jack and its load safely.**
- **You also need to make sure that you understand how a lift gate's mechanism works, and how to operate it.**
- **Be careful not to overload the platform!**
 - You can usually find the lift gate's maximum weight capacity on a decal affixed to the lift mechanism.

*** * * SUMMARY * * ***

- **A manual pallet jack allows a single employee to handle loaded pallets easily and efficiently, but it can create serious hazards if it's misused.**
- **Pay strict attention to the "rules of the road" when using a pallet jack.**
- **Make sure loads are centered and stable before starting to move them.**
- **Stay alert for pedestrians and other equipment when using a jack.**
- **Keep the area around the forks clear.**
- **Use extra caution when operating a pallet jack on loading docks, inclines and lift gates.**
- **Now that you understand the hazards that can be associated with using a pallet jack, as well what you can do to avoid them, you can help ensure that you and your coworkers go home safe and injury-free at the end of every day!**