PRESENTER'S GUIDE

"MANUAL PALLET JACK SAFETY"

Part of the General Safety Series



OUTLINE OF MAJOR PROGRAM POINTS

The following outline summarizes the major points of information presented in the program. The outline can be used to review the program before conducting a classroom session, as well as in preparing to lead a class discussion about the program.

- 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.
 - But 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!