

## **OPERATING ORDER SELECTORS SAFELY**

This easy-to-use Leader's Guide is provided to assist in conducting a successful presentation. Featured are:

**INTRODUCTION:** A brief description of the program and the subject that it addresses.

**PROGRAM OUTLINE:** Summarizes the program content. If the program outline is discussed before the video is presented, the entire program will be more meaningful and successful.

**PREPARING FOR AND CONDUCTING THE PRESENTATION:** These sections will help you set up the training environment, help you relate the program to site-specific incidents, and provide program objectives for focusing your presentation.

**REVIEW QUESTIONS AND ANSWERS:** Questions may be copied and given to participants to document how well they understood the information that was presented. Answers to the review questions are provided separately.

### **INTRODUCTION**

Order selectors, sometimes called order pickers, allow us to move materials, supplies and merchandise to and from storage areas more efficiently than ever before. Like all other powered industrial trucks, they can be extremely hazardous if safe work practices are not followed. Operators of order selectors have a responsibility to operate them in a safe manner at all times. This program examines some common hazards posed by the operation of order selectors and how to control these hazards through safe operating practices.

Topics include order selector stability characteristics, pre-operational inspection, lifting and stacking materials properly, fall prevention, safe traveling techniques, preventing injuries to pedestrians and properly parking the vehicle.

### ***PROGRAM OUTLINE***

#### **BACKGROUND**

- Order selectors come in a variety of sizes, makes and models, each having slightly different design characteristics and control functions; however, most share some of the same features.
- The service brake pedal is located on the floor of the operator's platform and must be depressed for the truck to operate.
- This pedal also acts as a "dead man pedal." When released, the vehicle and all moving parts will stop.
- The pallet clamp is another common feature found on order selectors. This clamp secures the pallet or platform to the truck.
- Driving and operating controls will vary depending on manufacturer. Driving controls allow the truck to move forward and back as well as steer the vehicle; the operating controls allow the operator's platform to be raised and lowered.

#### **OPERATOR TRAINING**

- Order selectors may look relatively easy to operate, but like all types of powered industrial trucks, you must receive specific training and authorization from your company before use.
- Part of this training will include learning the functions of the controls of the specific type of order selector you will be operating.
- You will be made familiar with the information contained in the operator's manual. This manual must remain with the vehicle at all times so you may refer to it when needed.
- The data plate of your vehicle contains important information, such as the make and model, the serial number and its rated capacity. Understanding this information is critical to safe operation.

- Your training will include hands-on operation, allowing you to become familiar with the handling characteristics of the vehicle you will be using. These vehicles handle much differently than automobiles and require practice to be able to control them properly.
- You will be required to successfully demonstrate proper operation of the vehicle in the environment in which it will be used before becoming certified as an operator.

### **STABILITY CHARACTERISTICS**

- As an operator of an order selector, some of the most important things for you to understand are the stability characteristics of the vehicle.
- An order selector typically has rear wheel steering, with a set of load-bearing wheels toward the front, closest to the forks.
- If you draw a line between the load-bearing wheels then back to the midpoint of the rear wheel steering, a triangle is created. This area is referred to as the stability triangle.
- When the combined center of gravity of the order selector, the operator and the load fall inside the stability triangle, the vehicle will be stable.
- If the center of gravity shifts outside the boundaries of the stability triangle, the vehicle is unstable and may tip over.
- An unloaded selector, with an operator, will have a center of gravity near the rear of the stability triangle.
- As the operator's platform is raised, the center of gravity shifts toward the center of the stability triangle; as the platform is lowered the center of gravity shifts back again.
- Placing a load on the forks also causes the center of gravity to shift forward and raising the load shifts it toward the front of the stability triangle.
- This is why it is so important to understand the capacity of your vehicle. Exceeding the vehicle's lifting capacity can easily lead to a tip-over.

### **OTHER FACTORS THAT AFFECT STABILITY**

- The load-bearing wheels act as a pivot point, similar to the center of a see-saw. The weight of the order selector must counterbalance the weight of the load to prevent tip-over.
- Because of leverage, as a load is moved farther from the pivot point, more force is needed to counterbalance it; this is why loads should be carried as close to the backstop as possible. When carrying multiple items, the heaviest item should be placed against the back stop.
- For maximum stability, the load and operator's platform should be lowered before traveling with the vehicle and the order selector should come to a complete stop before raising the platform.
- The stability of your vehicle is affected by more than the load. Other factors to consider are surface conditions, grade and vehicle speed. The vehicle should always be driven at a slow, safe speed and all turns should be slow and controlled.
- Horseplay, stunt driving or operating at excessive speeds can quickly lead to serious injury and property damage.

### **TRAVELING ON INCLINES**

- If you must travel on a sloped surface, make sure the operator's platform is fully lowered and the load is positioned uphill.

- Only travel straight up or down an incline. Never turn while on an incline or travel at an angle; this could cause the center of gravity to shift outside the stability triangle and lead to a tip-over.

### **PRE-OPERATIONAL INSPECTION**

- Like all powered industrial trucks, the order selector must undergo a pre-operational inspection before use.
- Based on the manufacturer's recommendations, many companies provide a specific checklist for this purpose. If this is the case, be sure to thoroughly inspect all items listed.
- Your inspection should include checking for signs of a fluid leak or any evidence of loose or broken parts.
- All guards and safety devices should be in place and working properly. This includes making sure all warning labels and vehicle's data plate are in place and legible.
- Test the function and movement of all driving and operating controls to ensure they operate as expected.
- Be sure to test the brakes, pallet clamp and horn also.
- Wearing fall protection equipment is a required part of using the order selector and this equipment must also be inspected before use. Inspect the harness and lanyard for worn areas and torn stitching; snap hooks, D-rings and the anchor point should also be inspected for cracks, wear or other damage.
- If you find anything wrong with the vehicle or fall protection, do not use it. Follow your company's procedure for marking it out of service and reporting the problem.

### **LIFTING LOADS PROPERLY**

- Picking, moving and placing loads is the primary task to be performed with the order selector. As such, you will be required to lift, move and place various items.
- Be sure to wear proper gloves to protect your hands when handling items that may have sharp edges, splinters, burrs or other similar hazards.
- It is also critical to follow safe lifting techniques to avoid injury.
- When pulling items from racks, avoid twisting while you lift. Lift the item first, then pivot your body rather than twisting.
- You will often be lifting or placing items below your feet. This is an awkward lifting situation, requiring you to squat down low to maintain good lifting form; you may find it easier to kneel on one knee to maintain good posture.
- If you have any questions about proper lifting techniques, ask your supervisor.

### **STACKING MATERIALS CORRECTLY**

- To ensure your load arrives safely at its destination, you must make sure the load is stable and secure before it is moved.
- Never stack, move or place loads that are unstable. Unstable loads can shift and fall, causing damage to the materials and serious injury to workers below.
- Single items, loose parts and other unpackaged materials should be stored in a sturdy, stable container able to safely hold them.
- Crates, boxes and similar items should be arranged in the center of the pallet or platform in a stable configuration.

- Don't try to save a trip by stacking material too high or too close to the edge. Instead, deliver the materials and make two trips rather than risk transporting an unstable load.

### **USE OF FALL PROTECTION**

- One of the most common causes of injury and fatality to operators of order selectors is falling from a raised platform.
- To avoid this, you must always wear your fall harness and have it properly secured to the manufacturer's approved tie-off point any time the operator's platform is elevated.
- Make a habit of connecting your fall protection before going anywhere, even if you do not intend to elevate the platform right away.
- Never disconnect your lanyard in an effort to better reach an object.
- Never connect your lanyard to parts of the rack or shelving. They are not designed for this use and may not hold up to the large force generated should you fall.

### **AVOIDING FALLS FROM THE PLATFORM**

- Keep in mind that a fall, even while using proper fall protection, can cause serious injury and creates a tricky rescue situation. The following are some tips to help you avoid falling.
- Before raising the operator's platform, make sure there is plenty of overhead clearance from obstructions such as chemical pipes, sprinklers, conduit or other objects.
- If your order picker is equipped with adjustable guardrails, make sure they are locked in the guarded position before traveling. They should remain in this position anytime the vehicle or operator's platform is in motion.
- The guardrail can be opened once the vehicle comes to a stop, if needed, but should be put back in place before moving the platform again.
- Always remain on the operator's platform or a manufacturer's approved attachment designed for personnel.
- Do not attempt to handle items that are too large or too heavy for you to control safely. This can not only injure your back, but you can lose your balance and fall as well. Instead, use the forks to bring the entire pallet or storage bin to ground level and ask for assistance.

### **SAFE TRAVELING TECHNIQUES**

- Operators should handle their vehicles at a safe speed at all times. They should be able to stop or turn safely at anytime the need should arise.
- Operators must keep their hands and feet inside the running lines of the vehicle at all times. Racks, beams and other obstructions can easily crush any body part that comes between it and a moving vehicle.
- Remember that your vehicle is not the only thing moving about the facility. Follow your company's specific traffic regulations to avoid pedestrians, other vehicles and equipment.
- Intersections and blind corners should always be treated with caution. Come to a complete stop and sound your horn before proceeding cautiously into the intersection; this will alert pedestrians and other vehicles of your presence.
- If your facility has mirrors mounted at intersections, be sure to use them before proceeding.
- When traveling behind other vehicles, maintain a safe following distance. A good rule of thumb is to maintain three truck-lengths distance between your truck and another.

## **PREVENTING INJURIES TO PEDESTRIANS**

- Order selectors pose obvious hazards to pedestrians. Your co-workers may not be familiar with the tight turning radius or sudden movements of your vehicle.
- Pedestrians may stand too close or approach the truck while in operation. As an order selector operator, it is your responsibility to keep the safety of pedestrians in mind at all times.
- Always allow pedestrians the right of way and make sure all personnel are a safe distance away from your truck before moving.
- Never drive your truck directly towards personnel, especially if they are standing next to solid objects such as machines racks or walls. Pedestrians can be easily crushed when operators ignore this important rule.
- It is also your responsibility to keep pedestrians from standing or walking under a raised load or the raised forks.
- Never allow anyone to ride on your vehicle. Pedestrians just don't realize the dangers and often want a ride; it's up to you to say no.
- Not only can they fall off and be seriously hurt, they may also be crushed against passing objects or other vehicles.

## **PARKING THE VEHICLE**

- When parking an order selector, even for a moment, you must lower the forks, place the truck in neutral and set the parking brake.
- Most order selectors shift to neutral and set the parking brake when the controls are released. Check the operator's manual to be sure.
- When leaving the truck unattended, which is defined as being more than 25 feet away from the truck or out of plain view, you must also shut off the truck and remove the key to prevent unauthorized use.
- Never park the truck in areas that are not approved by your company. This includes areas with sloped surfaces, in front of stairways, blocking emergency equipment or blocking exits.

## **PREPARE FOR THE SAFETY MEETING OR TRAINING SESSION**

Review each section of this Leader's Guide as well as the videotape. Here are a few suggestions for using the program:

Make everyone aware of the importance the company places on health and safety and how each person must be an active member of the safety team.

Introduce the videotape program. Play the videotape without interruption. Review the program content by presenting the information in the program outline.

Copy the review questions included in this Leader's Guide and ask each participant to complete them.

Make an attendance record and have each participant sign the form. Maintain the attendance record and each participant's test paper as written documentation of the training performed.

### **Here are some suggestions for preparing your videotape equipment and the room or area you use:**

Check the room or area for quietness, adequate ventilation and temperature, lighting and unobstructed access.

Check the seating arrangement and the audiovisual equipment to ensure that all participants will be able to see and hear the videotape program.

Place or secure extension cords to prevent them from becoming a tripping hazard.

## **CONDUCTING THE PRESENTATION**

Begin the meeting by welcoming the participants. Introduce yourself and give each person the opportunity to become acquainted if there are new people joining the training session.

Explain that the primary purpose of the program is to examine some common hazards posed by the operation of order selectors and how to control these hazards through safe operating practices.

Introduce the videotape program. Play the videotape without interruption. Review the program content by presenting the information in the program outline.

Lead discussions about specific tasks performed by order selector operators at your facility and what precautions must be taken to ensure the tasks are completed safely.

After watching the videotape program, the viewer will be able to explain the following:

- How loads and position of the operator's platform affect order selector stability;
- What to check during a pre-operational inspection;
- How to lift and stack materials safely;
- How to prevent falls from the operator's platform;
- How to safely drive the vehicle;
- What precautions to take to prevent injuries to pedestrians.

**OPERATING ORDER SELECTORS SAFELY**  
**REVIEW QUIZ**

Name \_\_\_\_\_ Date \_\_\_\_\_

*The following questions are provided to check how well you understand the information presented during this program.*

1. An unloaded selector, with an operator, will have a center of gravity near the \_\_\_\_\_ of the stability triangle.
  - a. front
  - b. middle
  - c. rear
  
2. When carrying multiple items on a selector, the heaviest item should be placed against the back stop.
  - a. true
  - b. false
  
3. When traveling up or down a slope, the load should be facing \_\_\_\_\_.
  - a. uphill
  - b. downhill
  
4. When stacking materials, crates and boxes should be arranged in the \_\_\_\_\_ of the pallet or platform.
  - a. front
  - b. center
  - c. rear
  
5. The only time you should disconnect your lanyard when the operator's platform is raised is when you are having difficulty reaching an object.
  - a. true
  - b. false
  
6. Pedestrians should always be given the right of way.
  - a. true
  - b. false
  
7. What should you do if an item is too large or too heavy for you to handle while selecting?
  - a. lower the platform and find a co-worker to help
  - b. use the forks to bring the entire pallet or storage bin down and get assistance
  - c. move the platform close to the rack and pull the item onto it
  
8. When parking your vehicle, you must remove the key if \_\_\_\_\_.
  - a. you are going to be more than 25 feet away from the truck
  - b. the truck will be out of your plain view when you leave
  - c. both a and b
  - d. neither a or b

**OPERATING ORDER SELECTORS SAFELY**  
***ANSWERS TO THE REVIEW QUIZ***

1. c

2. a

3. a

4. b

5. b

6. a

7. b

8. c