

# CLARK<sup>®</sup>



## Operator's Manual

ELECTRIC RIDER LIFT TRUCKS

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Oct.2005

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# Operator's Manual

**You must be trained and authorized to operate a lift truck.**

## **YOU can prevent accidents**

First: Learn safe operating rules and your company rules.

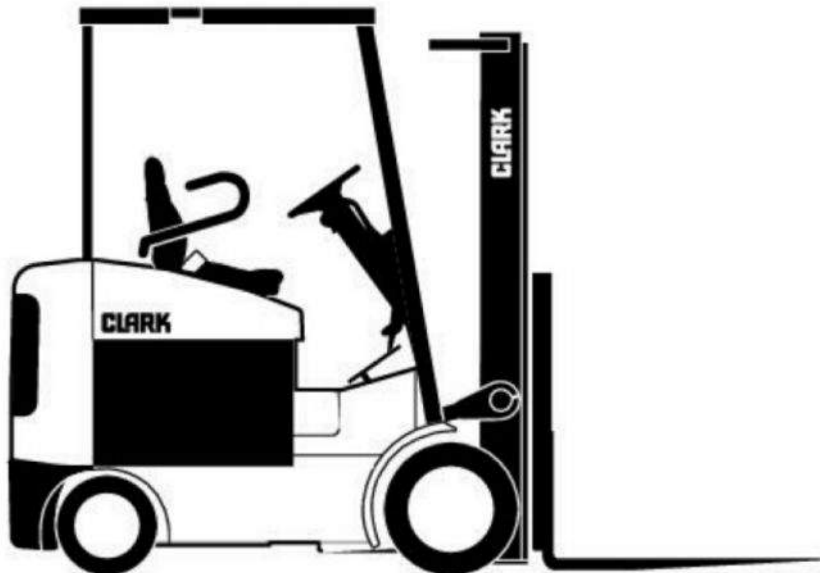
Next: Read your Operator's Manual. If you do not understand it, ask your supervisor for help.

Learn about the unit you operate.

## **KNOW YOUR TRUCK**

Then: Practice operating your truck safely.

And: Keep your truck in safe operating condition with correct and timely maintenance.



**Breaking these rules will cause serious or fatal injury to yourself and others.**



## A Message to CLARK Lift Truck Operators

Lift trucks are specialized machines with unique operating characteristics, designed to perform a specific job. Their function and operation is not like a car or ordinary truck. They require specific instructions and rules for safe operation and maintenance.

Safe operation of lift trucks is of primary importance to CLARK. Our experience with lift truck accidents has shown that when accidents happen and people are killed or injured, the causes are:

- **Operator not properly trained**
- **Operator not experienced with lift truck operation**
- **Basic safety rules not followed**
- **Lift truck not maintained in safe operating condition**

For these reasons, CLARK wants you to know about the safe operation and correct maintenance of your lift truck.

This manual is designed to help you operate your lift truck safely. This manual shows and tells you about safety inspections and the important general safety rules and hazards of lift truck operation. It describes the special components and features of the truck and explains their functions. The correct operating procedures are shown and explained. Illustrations and important safety messages are included for clear understanding. A section on maintenance and lubrication is included for the lift truck mechanic.



The operator's manual is not a training manual. It is a guide to help trained and authorized operators safely operate their lift truck by emphasizing and illustrating the correct procedures. However, it cannot cover every possible situation that may result in an accident. You must watch for hazards in your work areas and avoid or correct them. It is important that you know and understand the information in this manual and that you know and follow your company safety rules! Be sure that your equipment is maintained in a safe condition. Do not operate a damaged or malfunctioning truck. Practice safe operation every time you use your lift truck. Let's join together to set high standards in safety.

Remember, before you start operating this lift truck, be sure you understand all driving procedures. It is your responsibility, and it is important to you and your family, to operate your lift truck safely and efficiently. Be aware that the Federal Occupational Safety and Health Act (OSHA) and state laws require that operators be completely trained in the safe operation of lift trucks; it is also an OSHA requirement that a machine inspection be performed before every shift. If you think you need training in operating or inspecting your lift truck, ask your supervisor.

CLARK lift trucks are built to take hard work, but not abuse. They are built to be dependable, but they are only as safe and efficient as the operator and the persons responsible for maintaining them. Do not make any repairs to this truck unless you have been trained in safe lift truck repair procedures and are authorized by your employer.





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## Introduction

CLARK welcomes you to the growing group of professionals who own, operate, and maintain CLARK lift trucks. We take pride in the long tradition of quality products and superior value the CLARK name represents. This manual familiarizes you with safety, operating, and maintenance information about your new lift truck. It has been specially prepared to help you use and maintain your CLARK lift truck in a safe and correct manner.

Your CLARK lift truck has been designed and built to be as safe and efficient as today's technology can make it. As manufactured, it meets all the applicable mandatory requirements of ASME B56.1 Safety Standard for Powered Industrial Trucks. Each truck is also furnished with equipment to help you operate safely; for example, load back rest, parking brake, safety restraint system, seat belts and horn are standard equipment.

Safe, productive operation of a lift truck requires both skill and knowledge on the part of the operator. The operator must know, understand, and practice the safety rules and safe driving and load handling techniques described in this manual. To develop the skill required, the operator must become familiar with the construction and features of the lift truck and how they function. The operator must understand its capabilities and limitations, and see that it is kept in a safe condition.

### **Routine Servicing and Maintenance**

Regular maintenance and care of your lift truck are not only important for economy and utilization reasons; it is essential for your safety. A faulty lift truck is a potential source of danger to the operator, and to other personnel working near it. As with all quality equipment, keep your lift truck in good operating condition by following the recommended schedule of maintenance.





## **Operator Daily Inspection — Safety and Operating Checks**

A lift truck should always be examined by the operator, before driving, to be sure it is safe to operate. The importance of this procedure is emphasized in this manual with a brief illustrated review and later with more detailed instructions. CLARK dealers can supply copies of a helpful “Drivers Daily Checklist.”

## **Planned Maintenance**

In addition to the daily operator inspection, CLARK recommends that a planned maintenance and safety inspection program (PM) be performed by a trained and authorized mechanic on a regular basis. The PM will provide an opportunity to make a thorough inspection of the safety and operating condition of your lift truck. Necessary adjustments and repairs can be done during the PM, which will increase the life of components and reduce unscheduled downtime and increase safety. The PM can be scheduled to meet your particular application and lift truck usage.

The procedures for a periodic planned maintenance program that covers inspections, operational checks, cleaning, lubrication, and minor adjustments are outlined in this manual. Your CLARK dealer is prepared to help you with a Planned Maintenance Program by trained service personnel who know your lift truck and can keep it operating safely and efficiently.



## How to Use this Manual

This manual is a digest of essential information about the safe operation, the features and functions and explains how to maintain your lift truck. This manual is organized into nine major parts:

**Section 1, General Safety Rules**, reviews and illustrates accepted practices for safe operation of a lift truck.

**Section 2, Operating Hazards**, warns of conditions that could cause damage to the truck or injury to the operator or other personnel.

**Section 3, Common Truck**, describes the most common operating components, systems, controls, and other features of your truck and tells how they function.

**Section 4, Operator Compartment and Controls**, describes the operating components, system, controls, and other features of your truck and tells how they function.

**Section 5, Operating Procedures**, discusses specific instructions on the safe, efficient operation of your lift truck.

**Section 6, Operator Maintenance and Care**, presents details on how to perform the operator's daily safety inspection and refuel the lift truck.

**Section 7, Emergency Towing**, gives instructions for towing your truck in an emergency.

**Section 8, Planned Maintenance**, describes the PM program.

**Section 9, Specifications**, provides reference information and data on features, components, and maintenance items.

Also, the **Index** helps you locate information about various topics.

**NOTICE:** The descriptions and specifications included in this manual were in effect at the time of printing. CLARK Material Handling Company reserves the right to make improvements and changes in specifications or design. Please check with your authorized CLARK dealer for information on possible updates or revisions.

The examples, illustrations, and explanations in this manual should help you improve your skill and knowledge as a professional lift truck operator and take full advantage of the capabilities and safety features of your new lift truck.



The first Section of the manual is devoted to a review, with illustrations and brief messages, of general safety rules and the major operating hazards you can encounter while operating a lift truck. Next, you will find descriptions of the components of your specific lift truck model and how the instruments, gauges, and controls operate. Then, you will find a discussion of safe and efficient operating procedures, followed by instructions on how to tow a disabled lift truck. The later sections of the manual are devoted to maintenance and truck specifications.

Take time to carefully read the "Know Your Truck" section. By acquiring a good basic understanding of your truck's features, and how they function, you are better prepared to operate it both efficiently and safely.

In "Planned Maintenance," you will find essential information for correct servicing and periodic maintenance of your truck, including charts with recommended maintenance intervals and component capacities. Carefully follow these instructions and procedures.

Each major Section has its own table of contents, so that you can find the various topics more easily. If you cannot find a topic in the table of contents, check the index at the back of the manual.

We urge you to first carefully read the manual from cover to cover. Take time to read and understand the information on general safety rules and operating hazards. Acquaint yourself with the various procedures in this manual. Understand how all gauges, indicator lights, and controls function. Please contact your authorized CLARK dealer for the answers to any questions you may have about your lift truck's features, operation, or manuals.

Operate your lift truck safely; careful driving is your responsibility. Drive defensively and think about the safety of people who are working nearby. Know your truck's capabilities and limitations. Follow all instructions in this manual, including all IMPORTANT, CAUTION, WARNING, and DANGER messages to avoid damage to your lift truck or the possibility of any harm to yourself or others.

This manual is intended to be a permanently attached part of your lift truck. Keep it on the truck as a ready reference for anyone who may drive or service it. If the truck you operate is not equipped with a manual, ask your supervisor to obtain one and have it attached to the truck. And, remember, your CLARK dealer is pleased to answer any questions about the operation and maintenance of your lift truck and will provide you with additional information should you require it.



## Safety Signs and Safety Messages

Improper operation can cause accidents. Don't take chances with incorrect or damaged equipment. **Read** and **understand** the procedures for safe driving and maintenance outlined in this manual. Don't hesitate to ask for help. **Stay alert!** Follow safety rules, regulations, and procedures. Avoid accidents by recognizing dangerous procedures or situations before they occur. **Drive and work safely** and follow the safety signs and their messages on the truck and in this manual.

**Safety signs and messages** are placed in this manual and on the truck to provide instructions and identify specific areas where potential hazards exist and special precautions should be taken. Know and understand the meaning of these instructions, signs, and messages. Damage to the truck, death, or serious injury to you or other persons may result if these messages are not followed. If warning decals are damaged, they must be replaced. Contact your CLARK dealer for replacements.

### NOTICE

**This message is used when special information, instructions or identification are required relating to procedures, equipment, tools, pressures, capacities and other special data.**

### IMPORTANT

**This message is used when special precautions should be taken to ensure a correct action or to avoid damage to or malfunction of the truck or a component.**

### CAUTION

**Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.**

### WARNING

**Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.**

### DANGER

**Indicates an imminently hazardous situation which, if not avoided, will result in death or injury.**



# General Safety Rules

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# Daily Inspection

**CLARK** Material Handling Company  
**OPERATORS' DAILY CHECKLIST**  
 Check Each Item Before Start Of Each Shift

Date: \_\_\_\_\_

Check one:  Gas/LPG/Diesel Truck     Electric Sit-down     Electric Stand-up     Electric Pallet

Truck Serial Number: \_\_\_\_\_ Operator: \_\_\_\_\_ Supervisor's OK: \_\_\_\_\_

Hour meter reading: \_\_\_\_\_

Check each of the following items before the start of each shift. Let your supervisor and/or maintenance department know of any problem.  
**DO NOT OPERATE A FAULTY TRUCK.** Your safety is at risk.  
 After checking, mark each item accordingly. Explain below as necessary.

Check boxes as follows:  OK     NG, needs attention, or repair. Circle problem and explain below

OK	NG	VISUAL CHECKS	OK	NG	OPERATIONAL CHECKS
		Tires/Wheels: wear, damage, nuts tight			Engine: runs rough, noisy, leaks
		Head/Tail/Working Lights: damage, mounting, operation			Steering: loose/binding, leaks, operation
		Gauges/Instruments: damage, operation			Service Brake: linkage loose/binding, stops OK, grab
		Operator Restraint: damage, mounting, operation, oily, dirty			Parking Brake: loose/binding, operational, adjustment
		Warning Decals/Operators' Manual: missing, not readable			Seat Brake (if equipped): loose/binding, operational, adjustment
		Data Plates: not readable, missing			Horn: operation
		Overhead Guard: bent, cracked, loose, missing			Backup Alarm (if equipped): mounting, operation
		Load Back Rest: bent, cracked, loose, missing			Warning Lights (if equipped): mounting, operation
		Forks: bent, worn, stops OK			Lift/Lower: loose/binding, excessive drift, leaks
		Engine Oil: level, dirty, leaks			Tilt: loose/binding, excessive drift, "chatters," leaks
		Hydraulic Oil: level, dirty, leaks			Attachments: mounting, damaged, operation, leaks
		Radiator: fluid level, dirty, leaks			Battery Test (electric trucks only): indicator in green while holding full forward tilt
		Fuel: level, leaks			Control Levers: loose/binding, freely return to neutral
		Battery: connections loose, charge, electrolyte low			Directional Control: loose/binding, find neutral OK
		Covers/Sheetmetal: damaged, missing			
		Brakes: linkage, reservoir fluid level, leaks, debris on floor			

Explanation of problems marked above:

\_\_\_\_\_

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At the beginning of each shift, inspect your truck and fill out a daily inspection sheet.

Check for damage and maintenance problems.

Have repairs made before you operate the truck.



**DO NOT MAKE REPAIRS YOURSELF.** Lift truck mechanics are trained professionals. They know how to make repairs safely. (See Section 4)



## Do's and Don'ts



**Don't mix drugs or alcohol with your job.**

**Do watch for pedestrians.**



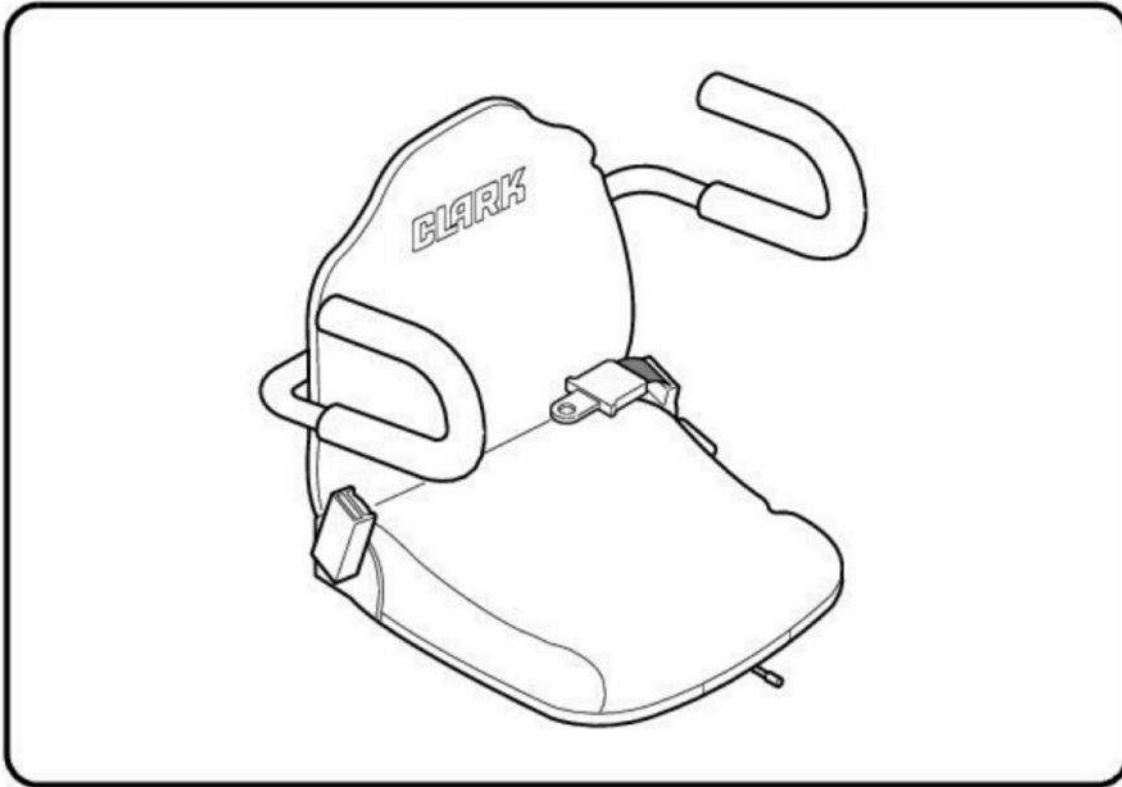
**Don't block safety or emergency equipment.**

**Do wear safety equipment when required.**

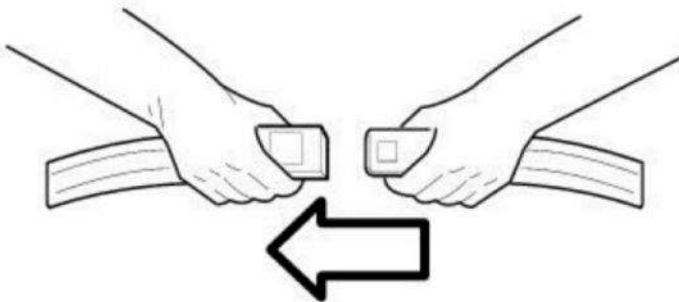


**Don't smoke in "NO SMOKING" areas or when refueling.**

## Seat Belts



**ALWAYS BUCKLE UP**



**Seat belts can reduce injuries.**



## No Riders



The operator is the only one who should be on a truck.



Never transport personnel on the forks of a lift truck.

## Pedestrians



Watch where you are going. Look in the direction of travel. Pedestrians may use the same roadway you do. Sound your horn at all intersections or blind spots. Watch for people in your work area even if your truck has warning lights or alarms. People may not watch for you.



Make people stand back, even when you are parked.

## Operator Protection



**Keep under the overhead guard.  
Always keep your body within the confines of the truck.**

# Fork Safety

Never allow anyone to walk under raised forks.

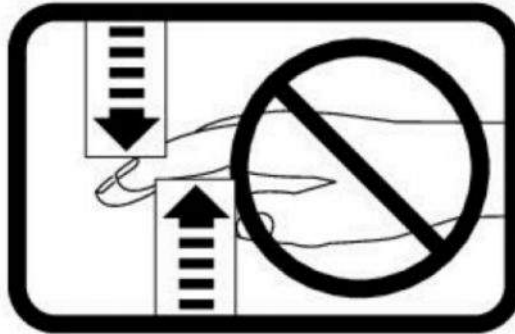


**DANGER**

There is special equipment to raise people for overhead work. **DO NOT USE LIFT TRUCKS.**

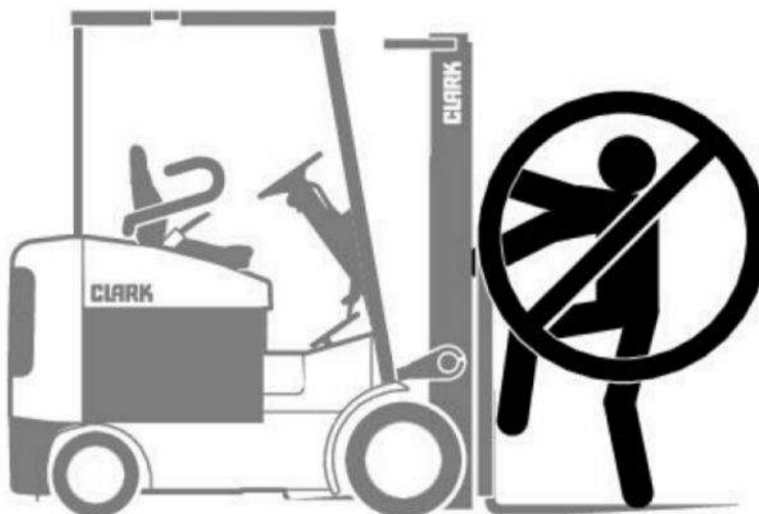


## Pinch Points



**⚠ WARNING**

Keep hands, feet and legs out of the upright.



**⚠ WARNING**

Don't use the upright as a ladder.

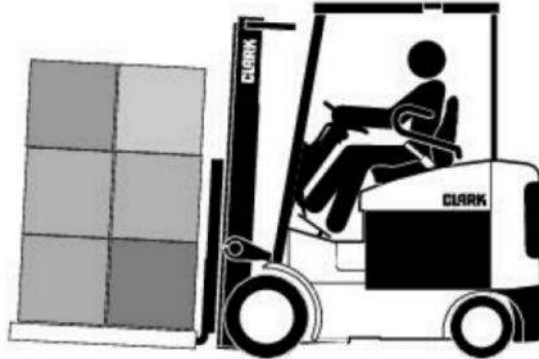
**⚠ CAUTION**

Never try to repair the upright, carriage, chain, or attachment yourself! Always get a trained mechanic.

## Travel

Travel with the load near the floor/ground with upright tilted back to cradle the load whenever possible.

Never lift or lower the load when the truck is in motion.



When handling bulky loads that restrict your vision, operate your truck in reverse to improve visibility.

Be sure to pivot in the seat to give maximum visibility.



Unstable loads are a hazard to you and to your fellow workers.

Always make certain that the load is well stacked and evenly positioned across both forks.

Never attempt to lift a load with only one fork.

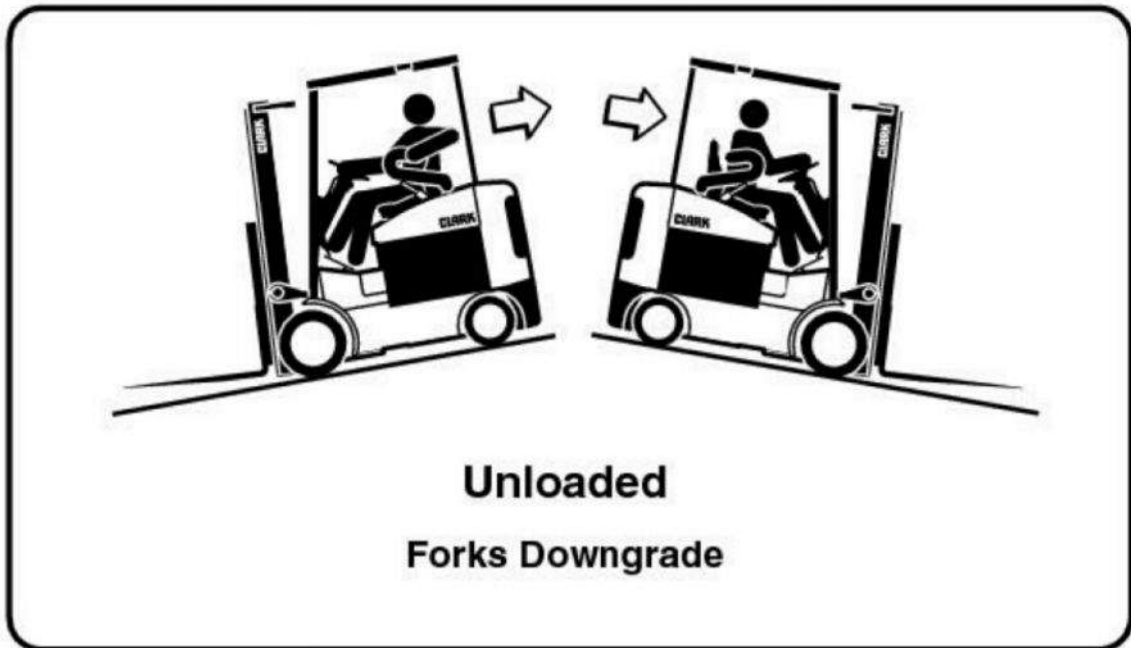


Right



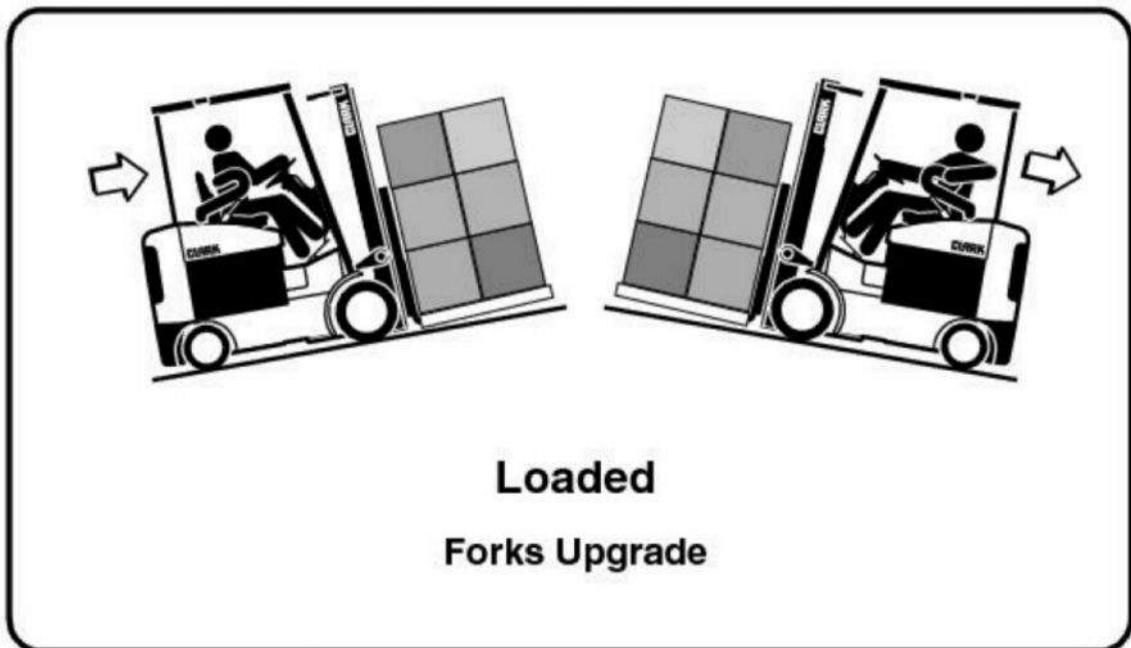
Wrong

## Grades, Ramps, Slopes, and Inclines

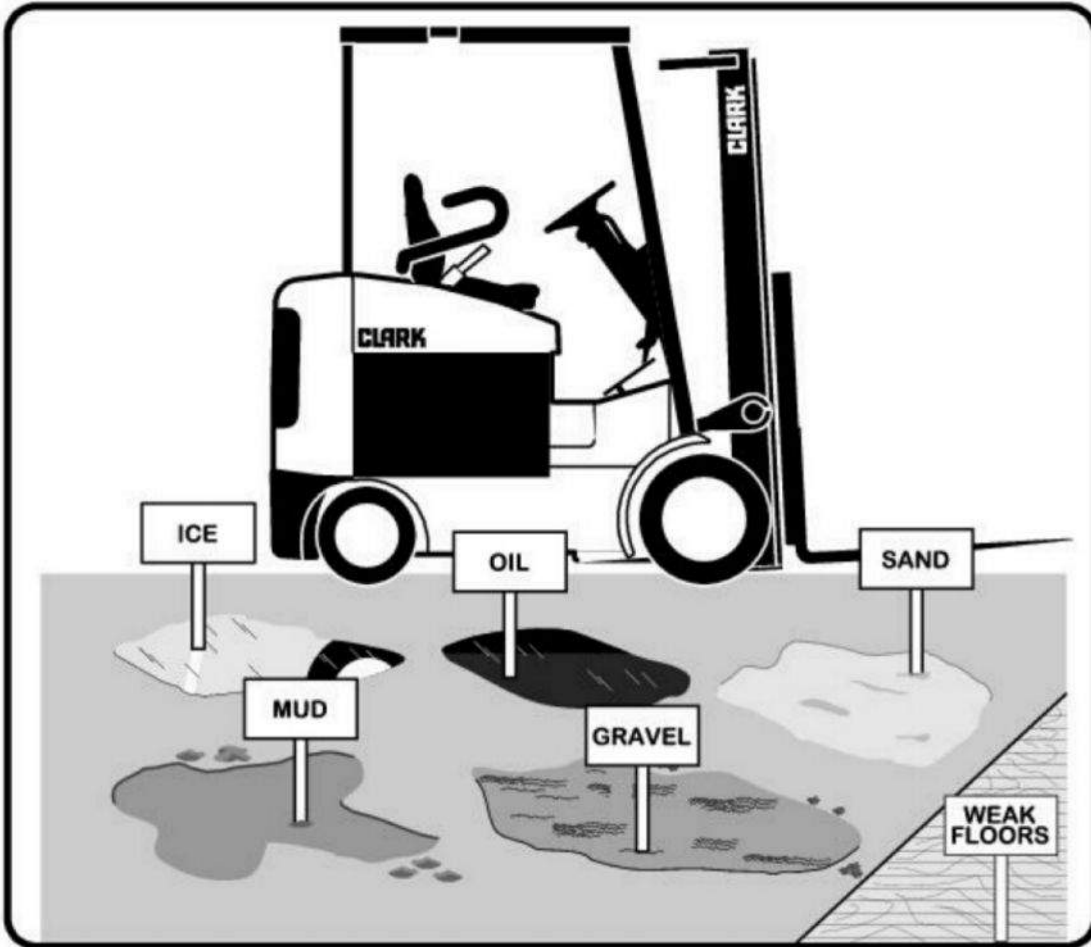


### WARNING

Never turn on a grade, either loaded or unloaded.



## Surface and Capacity



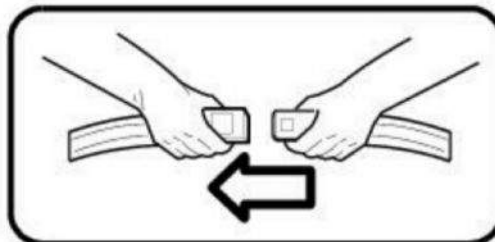
Avoid these conditions. They can cause a truck to tip over or lose traction for braking or driving.

### WARNING

Know the weight of your truck and load. Especially when using elevators. Know the capacity of the elevator you intend to use. Do not overload.

### IMPORTANT

Seat belts can reduce injuries.  
**ALWAYS BUCKLE UP**

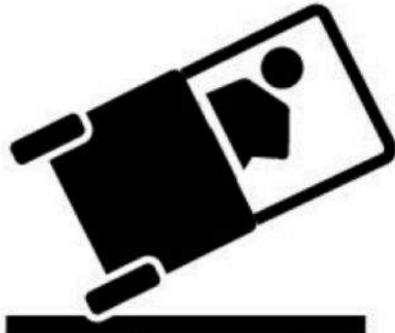




## Tip-Over

### Lateral Tip-over

- Lateral tip-over can occur with a combination of speed and sharpness of turn. This combination will exceed the stability of the truck. This condition is even more likely with an unloaded truck.
- With the load or upright raised, lateral tip-over can occur while turning and/or braking when traveling in reverse or accelerating and turning while traveling forward.
- Lateral tip-over can occur loaded or unloaded by turning on an incline or ramp.



### Longitudinal Tip-over

- Longitudinal tip-over can occur with a combination of overloading and load elevated also with capacity load and elevated. This combination will exceed the stability of the truck. This condition is even more likely with excessive forward tilt, braking in forward travel or accelerating rearward.
- Longitudinal tip-over can occur by driving with the load down slope on a steep grade.



Lateral and longitudinal tip-over can occur if the truck is driven over objects on the floor or ground, off the edge of improved surfaces, or into potholes in the road surface, or by running into overhead objects or collisions.

An off dock type of tip-over can occur if the truck is steered too close to the dock edge, driven off the edge of the dock or ramp, or if the highway truck or trailer rolls away from the dock or is driven away during loading.



#### WARNING

The conditions listed above can be further aggravated by overloading, excessive tilt, or off center loads.

#### IMPORTANT

Lift truck tip-over can cause serious injury or death if the operator is trapped between the truck and the ground.

## What to do in Case of a Tip-over

If your truck starts to tip over,

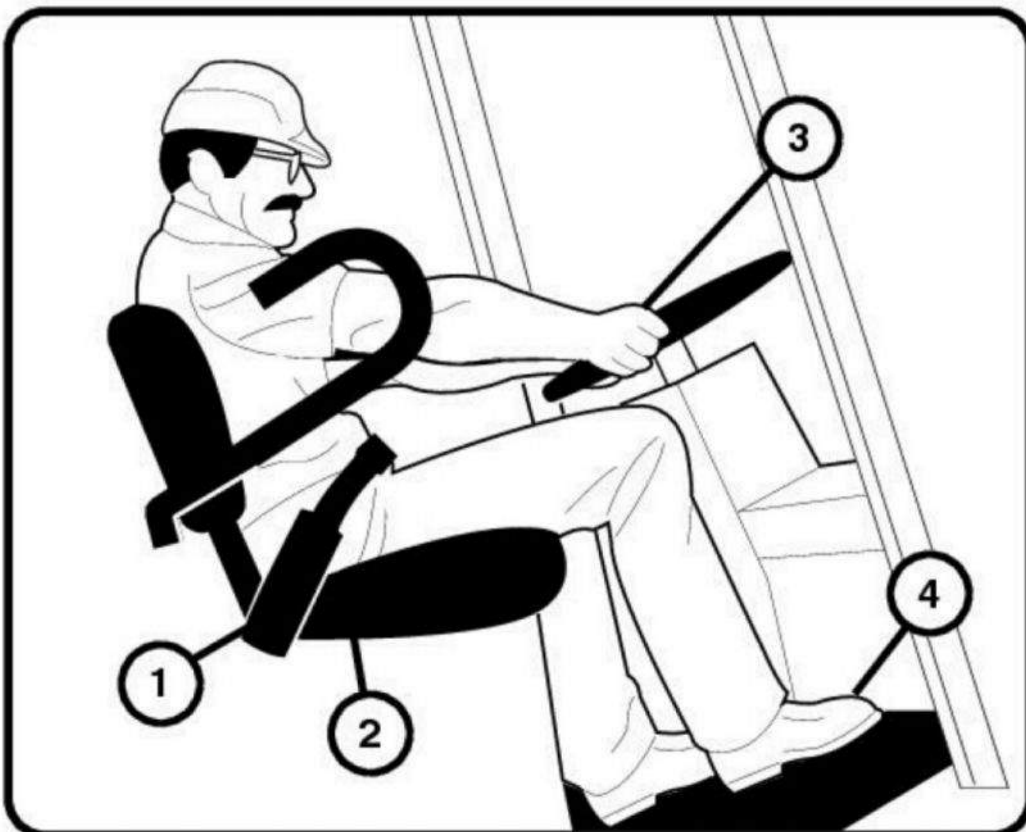
**⚠ WARNING**  
**DO NOT JUMP!!!**

### IMPORTANT

Your chances for survival in a tip-over are better if you stay with the truck, in your seat.

**Brace yourself as illustrated below!**

1. Make sure your seat belt is fastened securely.
2. Stay in your seat.
3. Grip the wheel.
4. Brace your feet.



## Parking

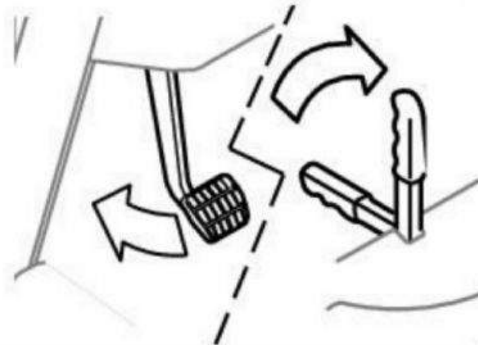
- Never park on a grade.
- Always come to a complete stop before leaving truck.



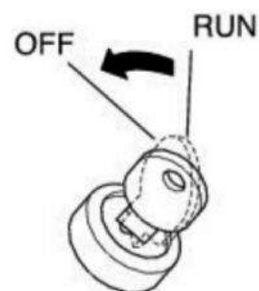
- Be sure travel control is in NEUTRAL.
- Lower forks fully to floor and tilt forward.



- Set parking brake.



- Turn key to OFF position.

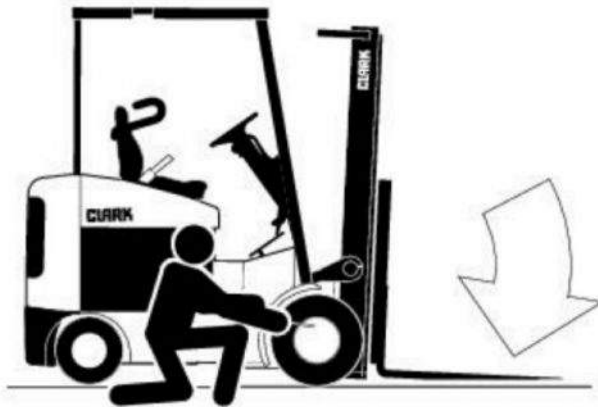


## General Tire Maintenance, Inspection, and Repair

1. Park the truck as described on page 1-15 and check for correct tire inflation air pressure. See specifications in this OM for correct tire pressure for your truck.

### CAUTION

Check tire pressure from a position facing the tread of the tire, not the side. Use a long-handled gauge to keep your body away from the side.



- If tires are low, do not add air. Have the tire and wheel inspected by a person trained and authorized to do tire and wheel maintenance. The tire may require removal and repair.
- Incorrect (low) tire pressure can reduce the stability of a lift truck and cause it to tip over.

### IMPORTANT

Check wheels and tires for damage every time you check tire pressure. Make repairs when needed. Dirt can get into cuts and cause damage to the tire cord and tread. Remove debris from all cuts.

### CAUTION

Multiple wheel assemblies. Do not loosen or remove wheel assembly nuts before fully deflating tire. Have only a trained and authorized mechanic make repairs.  
*See Service Manual for more detailed information.*

# Operating Hazards

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This Section shows some of the hazards that may cause you, or someone around you, to be killed or badly hurt. As the operator, you must look for other hazards. Get your supervisor to help you identify and avoid those hazards.



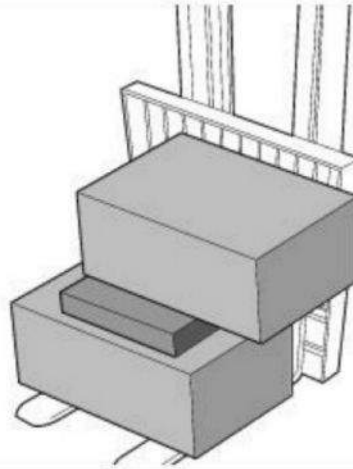
## Loose Loads



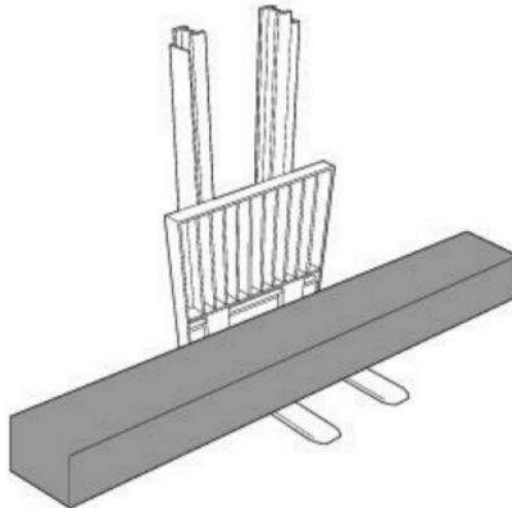
### WARNING

Loose or unbalanced loads are dangerous. Observe these precautions.

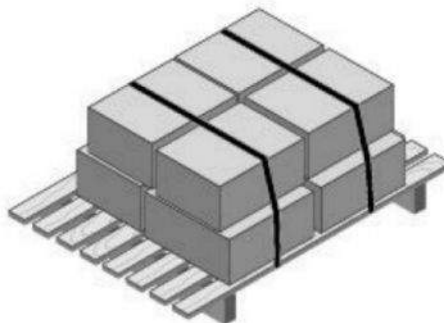
Never carry loose or uneven material.



Center wide loads.



Stack and band loose material.



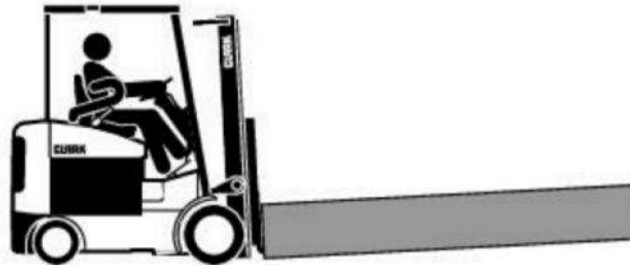
## Long or Wide Loads / Rear Swing

### WARNING

With long or wide loads, you need more room. So slow down and watch your clearance.

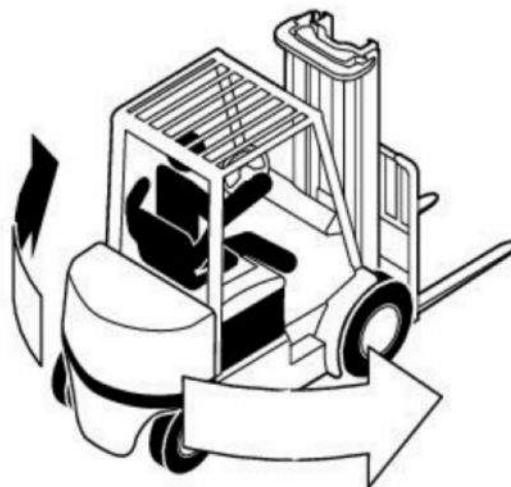
A long load reduces the capacity of the truck. Know and understand your truck load rating.

When extra-long material makes it necessary to travel with the load elevated, do so with extreme care and be alert to load end-swing when turning.



### WARNING

When turning, be sure the rear end of the truck does not swing into racks, posts, etc. Watch for pedestrians beside the truck.



## Low Overhead Clearance Fast Turns and High Loads



### WARNING

Know the height of your truck,  
with and without a load.

Check your clearances.

Keep the load low and tilted  
back.



### WARNING

Watch overhead clearance:

Moving into overhead structures  
can tip a truck over, or spill a  
load.



### WARNING

Slow down before turning. The  
truck can tip over.

Turn too sharp with a raised load  
and your truck can tip even at  
slow speeds.

Travel with a load raised only  
when removing or depositing a  
load.





## Docks/Drop Offs



**⚠ WARNING**

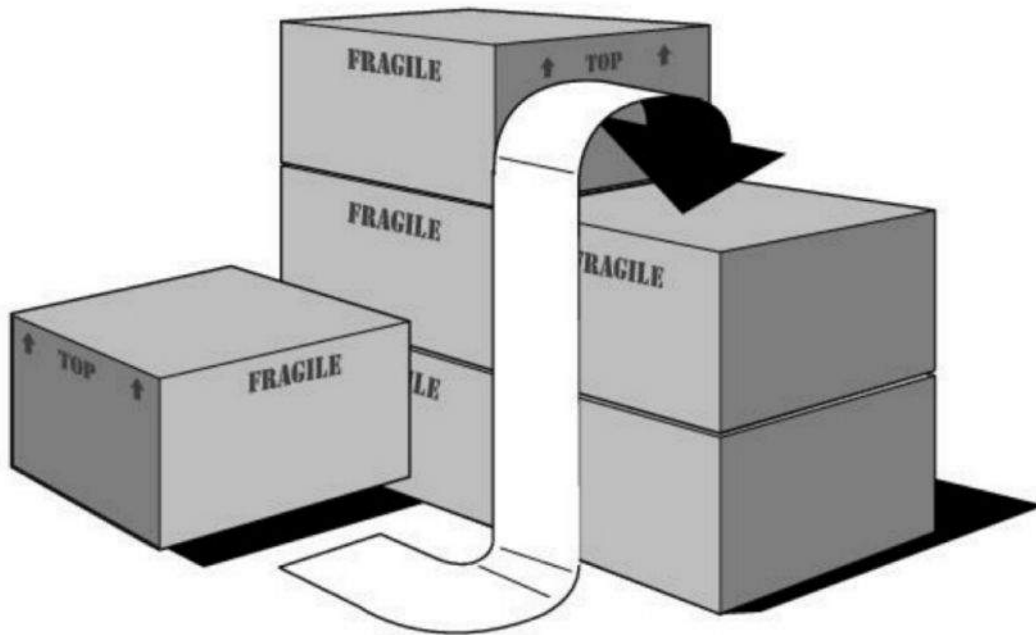
To avoid these hazards, you must:

- Talk to the truck driver yourself; make sure the driver does not move the trailer until you are done!
- Apply trailer brakes.
- Use wheel chocks.
- Use trailer-to-dock locking system if available.

The impact of moving in and out of a trailer may cause the trailer to creep or move.



## Right-Angle Stacking



**SLOWLY**

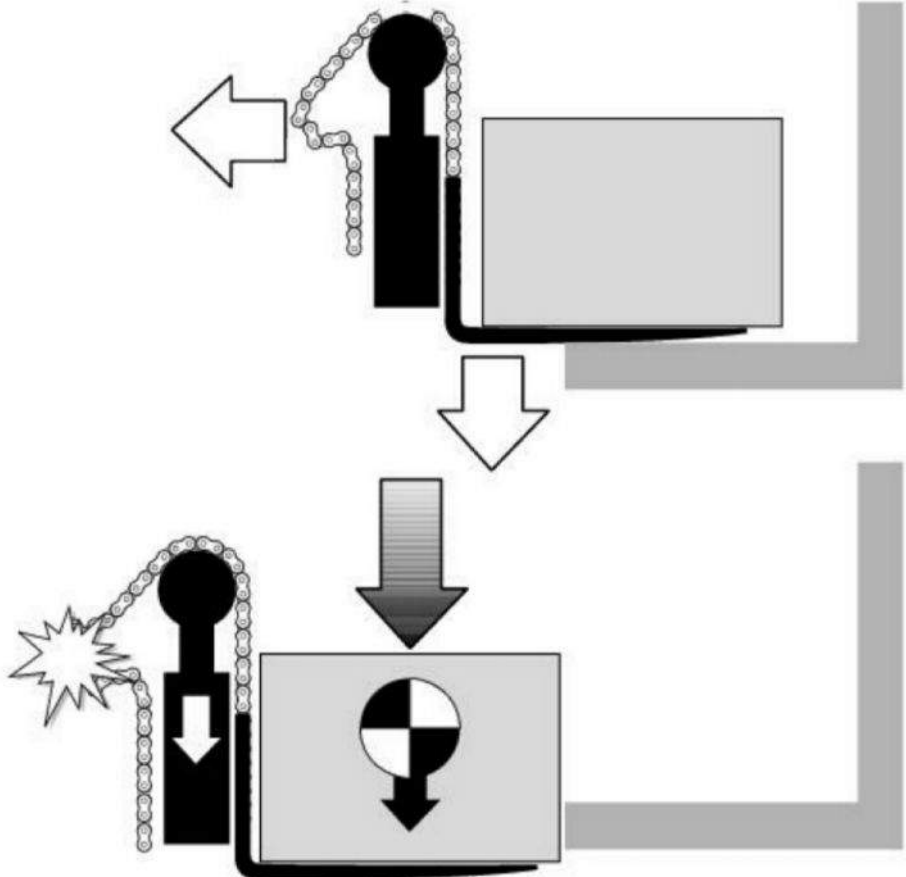


### WARNING

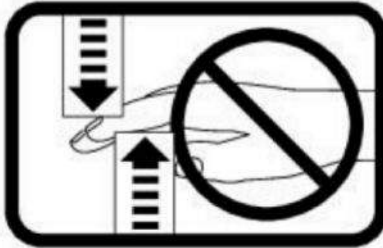
When right-angle stacking or moving with a raised load to clear low objects, avoid sharp turns and move slowly.



## Chain Slack



**⚠ WARNING**  
Slack chains mean rail or carriage hang-up. Raise the forks before you move, or broken chains can result.

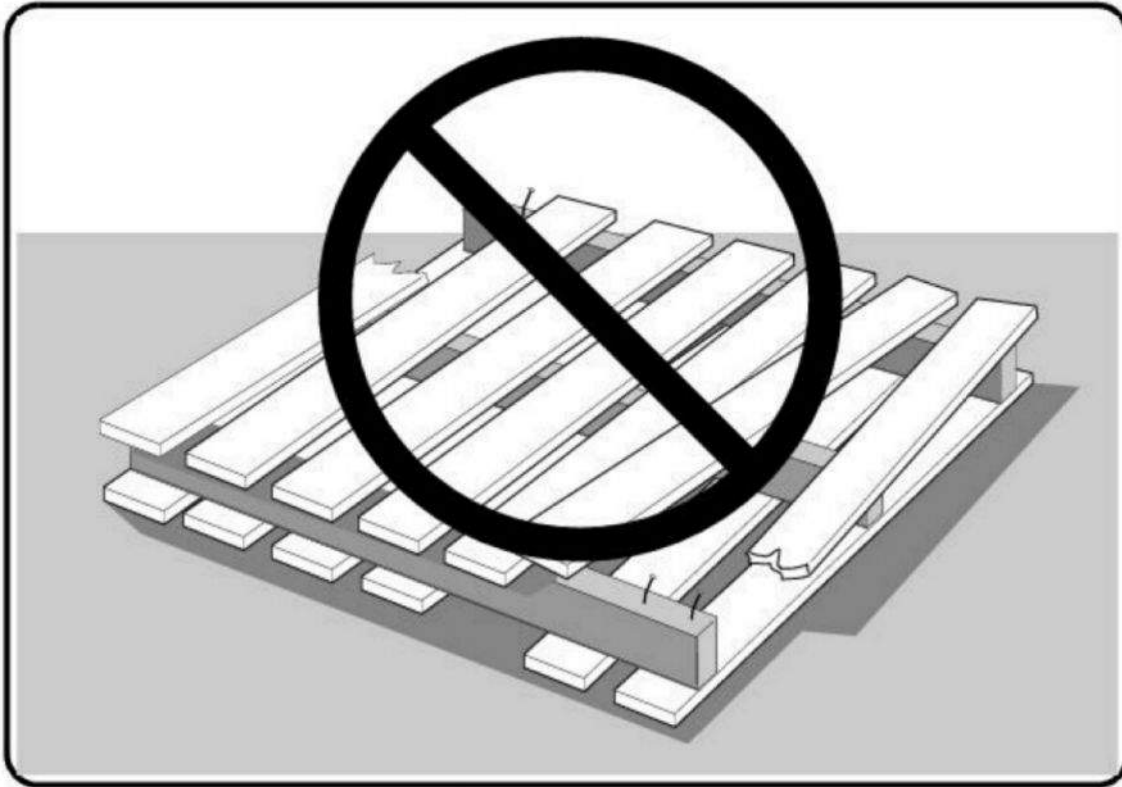


**⚠ WARNING**  
Keep hands, feet and legs out of the upright.

**⚠ WARNING**  
Don't use the upright as a ladder.

**⚠ CAUTION**  
Never try to repair the upright, carriage, chain, or attachment yourself!

## Pallets and Skids



### WARNING

Do not move or store materials on damaged pallets or skids. Items can fall through them causing severe injury or death!

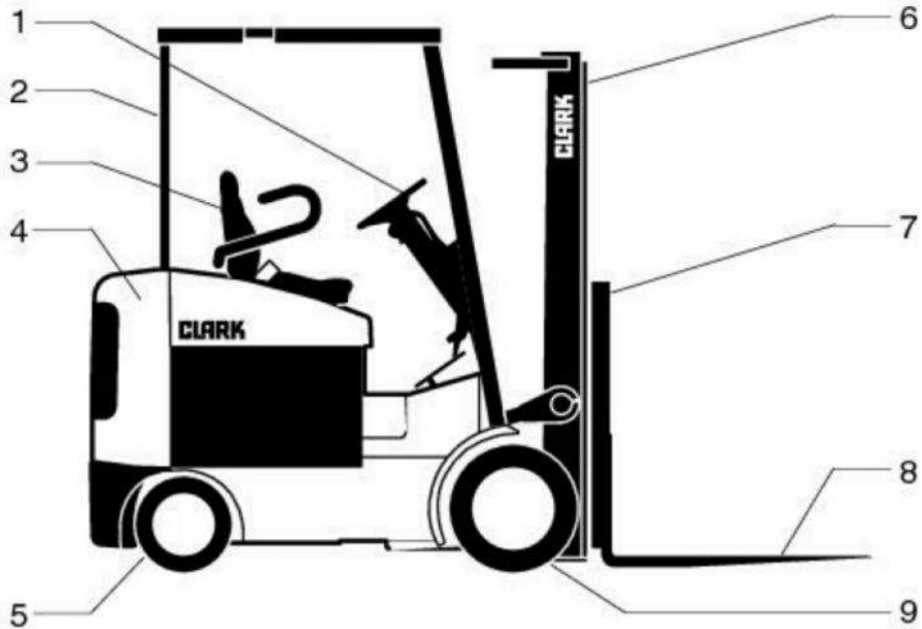
Be sure the pallet or skid you are using is in good condition and does not have defective or missing components and fasteners.

# Common Truck

## Contents

Truck Description ..... 3-2  
Operator Controls ..... 3-3

## Truck Description



1. Steering Handwheel
2. Overhead Guard
3. Seat and Seat Belt
4. Counterweight
5. Steer Axle, Wheels/Tires
6. Upright and Carriage
7. Load Backrest
8. Forks
9. Drive Axle, Wheels/Tires

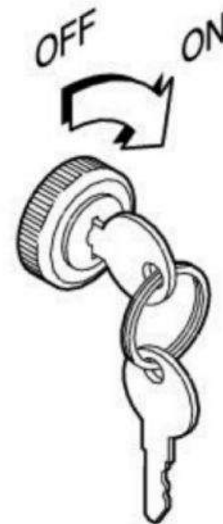
The truck shown above is a typical representation of a Clark electric sit down rider lift truck. Your model may vary slightly.

## Operator Controls

### Key/Start Switch

- Connects the battery with all truck operating systems (drive, lift, and steer electrical circuits) except the horn.
- Connects battery to the diagnostic display hourmeter and battery charge status.

The key switch must always be turned to the ON position to operate the truck. When the key is in the vertical OFF position, instruments, drive and pump motor electrical circuits are disconnected (shut-off), and the key can be removed. The horn should operate at all times if an adequately charged battery is connected at the truck receptacle.



### Seat Adjustment

The fore and aft adjustment lever is located on the front under the seat. To unlock, pull the lever to the left and adjust the seat, release the lever. Be sure that the seat locking mechanism is engaged. The back declining adjustment lever is located on the right side of seat cushion. Pull the lever up and adjust the back, release the lever. Be sure that the back locking mechanism is engaged.



### CAUTION

**Never adjust driver's seat while truck is moving, to avoid the possibility of loss of control and of personal injury.**

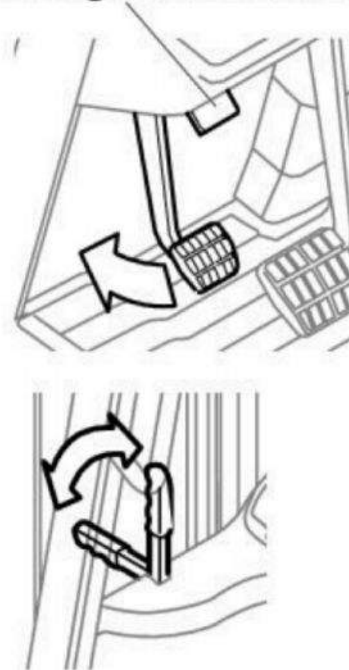
## Parking Brake

The parking brake pedal or lever (*depending on your model*) mechanically operates the parking brake.

### Parking Brake Pedal

To apply the parking brake, push the pedal down with your left foot until pedal stops. The parking brake release is located just above the brake pedal as shown. To release the parking brake pull toward you.

### Parking Brake Release



### Parking Brake Lever

Pull the lever toward the the operator to apply the parking brake. The lever should snap-lock easily into applied position, when correctly adjusted.

Push the lever forward (away from the operator) to release the parking brake.



#### WARNING

Always apply parking brake before leaving truck.



#### WARNING

Never operate your lift truck with a defective parking brake.

## Hour Meter

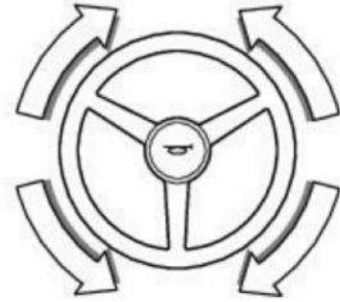
With the key switch on, putting the directinal control lever into forward or reverse positions also starts the operating hour meter. Use the hour meter reading to perform prescribed maintenance.





## Steering System

The steering handwheel operates a steering control valve that directs the oil flow to the steering cylinder connected to the steer axle. The steering control valve can also act as a pump to provide manual steering if the hydraulic pump stops.



## Horn Button

The horn button is located in the center hub of the steering handwheel.

## Service Brake

Your truck has a manual service brake system with a single pedal that actuates the master cylinder.

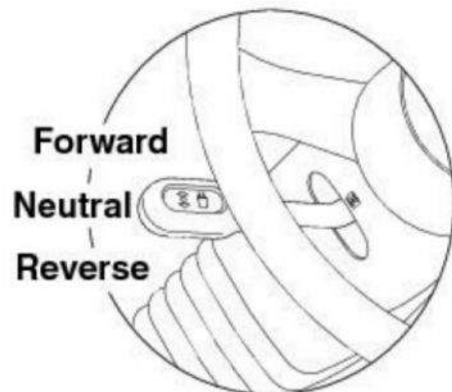
## Direction Control Lever

This lever is typically on the left side of the steering column.



### WARNING

Never operate your lift truck with the service or parking brakes not working correctly.

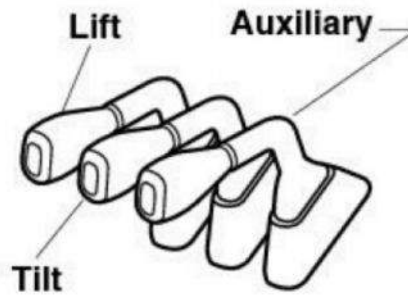


## Hydraulic Control Levers

The levers of the control valve activate the lift and tilt cylinders as well as any other hydraulic devices which are installed on the truck.

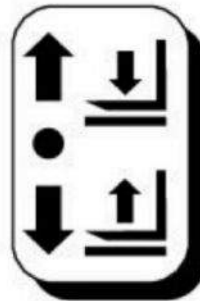
### IMPORTANT

The hydraulic levers shown are typical representations of a CLARK lift truck. Your model may vary slightly.



## Lift Control Function

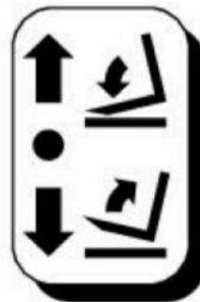
With the lift control lever, you are able to raise and lower the fork carriage on the upright. The lifting and lowering speeds are controlled through the main hydraulic valve by varying the lever position (from the center or neutral positions).



When the lift control lever is pushed forward, the fork carriage is lowered. When the lift control lever is pulled back, the fork carriage is raised. You can also lower the fork carriage even if the key switch is OFF.

## Tilt Control Lever

With the tilt control lever, you are able to control the tilting or vertical positioning of the upright and the angle of the forks. When the lever is pulled back, the upright and forks tilt backward. Push the lever forward to tilt the upright and forks forwards.



## Auxiliary Control Lever (Optional)

An auxiliary control lever is mounted to the right of the tilt control lever. If your lift truck is equipped with an optional attachment, this lever lets you control the flow and direction of the hydraulic oil to the attachment.



## Truck Data and Capacity Plate

- Truck model number or registered name.
- Truck serial number—An identification number assigned to this particular truck and should be used when requesting information or ordering service parts for this truck from your authorized CLARK dealer. The serial number is also stamped on the frame.
- Attachment description (if any installed)—The user must see that the truck is marked to identify the attachment(s), including the weight of the truck/attachment combination and truck capacity with the attachment.
- Capacity rating, load center, and lifting height data—Shows the maximum load capacity of this truck with relation to load centers and fork heights (see diagram on plate). Personal injury and damage to the truck can occur if these capacities are exceeded. **Do not exceed the maximum capacity specified.**
- Truck weight—The approximate weight of the truck without a load on the forks. This weight plus the weight of the load must be considered when operating on elevators, elevated floors, etc. to be sure they are safe.

**CLARK** From the factory this truck meets ANSI B56.1

Model	1	Type	
Serial No.	2		
Attachments	3		

A			in
B			mm
			lb
		4	kg
			lb
			kg
			lb
			kg
			in
			mm

Capacities are for centered loads only. Capacities are with attachment or forks with upright in vertical position.

Truck Weight	lb or	kg
w / Max Battery	lb or	kg
Max Battery	lb or	kg
Min Battery	lb or	kg
Max Amp Hrs.	Volts	No.

5

Made in Korea 8023577

For other capacities consult Clark Material Handling Co., Lexington, KY

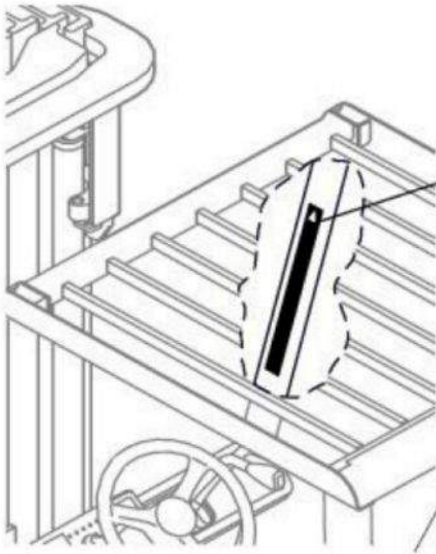
### CAUTION

When attachments are added or if the truck is modified, the capacity of the truck may be affected. Contact your authorized CLARK dealer for a new nameplate showing the revised capacity.

### IMPORTANT

OSHA requires prior written approval from the manufacturer before any modifications affecting capacity or safety may be made.

## Operator Safety Warning Decal



### IMPORTANT

Safety and warning decals are placed in conspicuous locations on the truck to remind you of essential procedures or to prevent you from making an error that could damage the truck or possibly cause personal injury. You should know, understand, and follow these instructions. Safety and warning decals should be replaced immediately if missing or defaced (damage or illegible). Refer to your Service Manual for location of all decals.

### Operator/Tip-Over

This decal is located on the front right hand leg of the driver's overhead guard. It is to remind the operator that staying in the seat provides the best chance of avoiding injury in the event of a tip-over or off the dock mishap.

Lift trucks can be tipped over if operated improperly. Analysis of lift truck accidents has shown that the driver cannot react quickly enough to jump clear of the truck and overhead guard as the truck tips. To protect operators from severe injury or death in the event of a tip-over, it is best to be held securely in the seat. So, please, always buckle up when driving your lift truck. (see page 1-13)



**WARNING**

Read the manual



Buckle up!



**(P)**

Apply brake when leaving truck

Watch Out For Other People



Most lift truck INJURIES are to other people near the lift truck.

Prevent Overturns!



AVOID :

- slippery, sloping, or uneven surfaces
- loads over capacity on nameplate
- unstable or high loads
- low tire pressure
- poorly maintained lift truck
- fast or sharp turns

In Case of Tip-Over:

Don't jump



Hold on tight



Brace feet

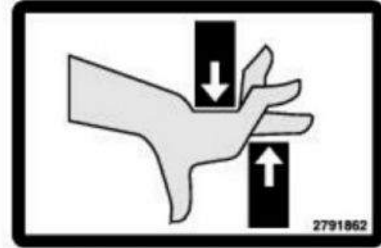
Lean away





### Upright Warning Decal

This safety decal is on the upright to warn of the danger of injury from movement between rails, chains, sheaves, fork carriage, and other parts of the upright assembly. Do not climb on or reach into the upright. Personal injury will result if any part of your body is put between moving parts of the upright.



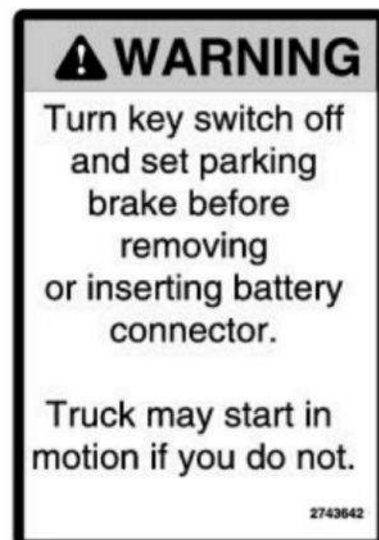
### Keep Away from Forks Decal

This safety decal is placed on the upright to warn of the danger of injury from forks when they are in the raised position. Do not ride on or stand under forks or attachments. The forks can fall and cause injury or death. Always make sure that the forks are in the fully lowered position when they are not being used to handle a load.



### Battery Connector Warning Decal

This decal is placed next to the battery connector to warn of the danger of the truck starting in motion.





# Operator Compartment and Controls

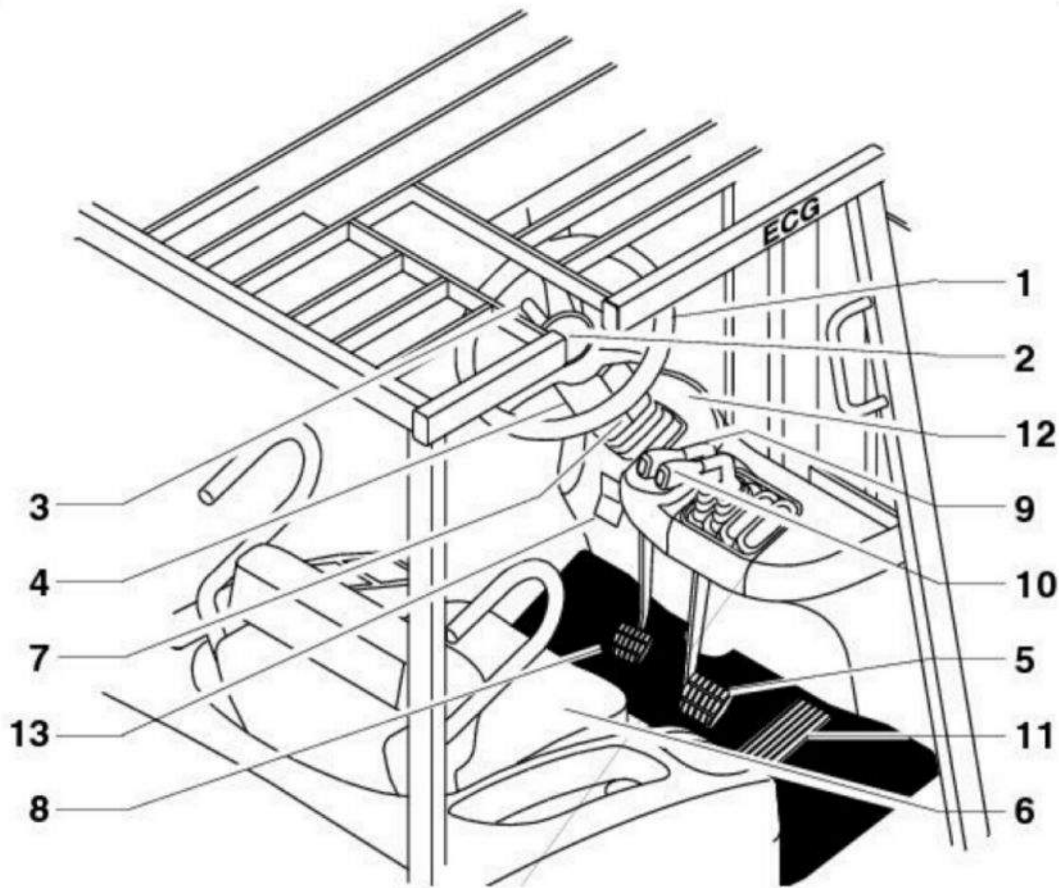
## Contents

EPG 20-30, ECG 20-32, ECX20-32  
Operator Compartment ..... 4-2

TMG12-25, TMX12-25 Operator Compartment ..... 4-3



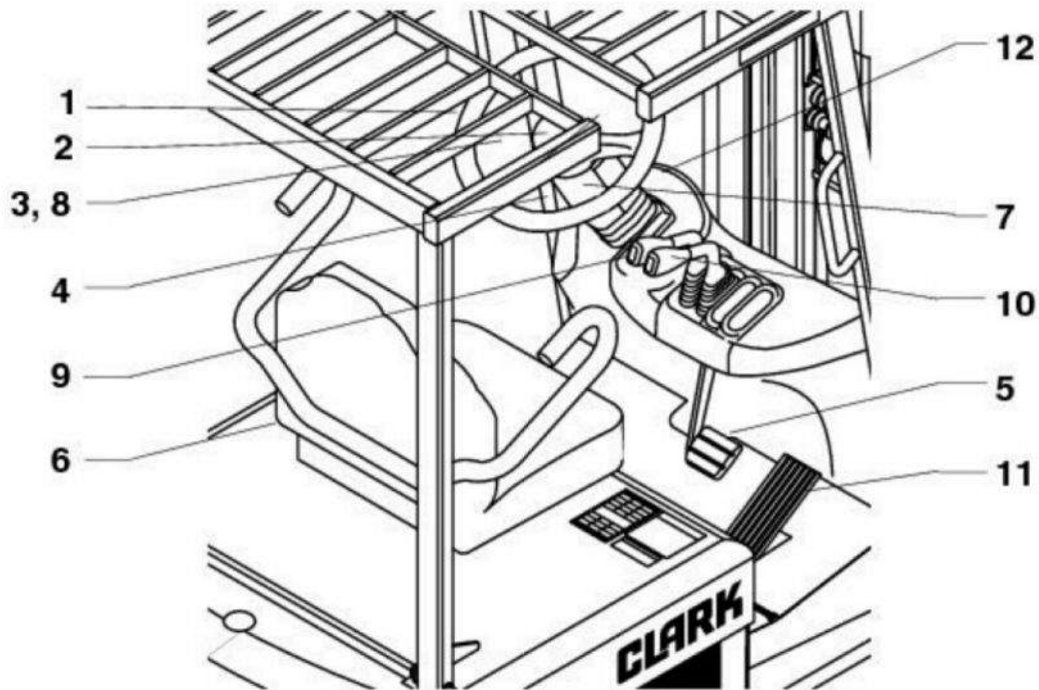
## EPG 20-30, ECG 20-32, ECX 20-32 Operator Compartment



1. Steering Handwheel
2. Horn Button
3. Directional Control Lever
4. Pylon Release Lever
5. Brake Pedal
6. Seat
7. Key Switch
8. Parking Brake Pedal
9. Lift Control Lever
10. Tilt Control Lever
11. Accelerator
12. Standard Display/Command System
13. Parking Brake Release



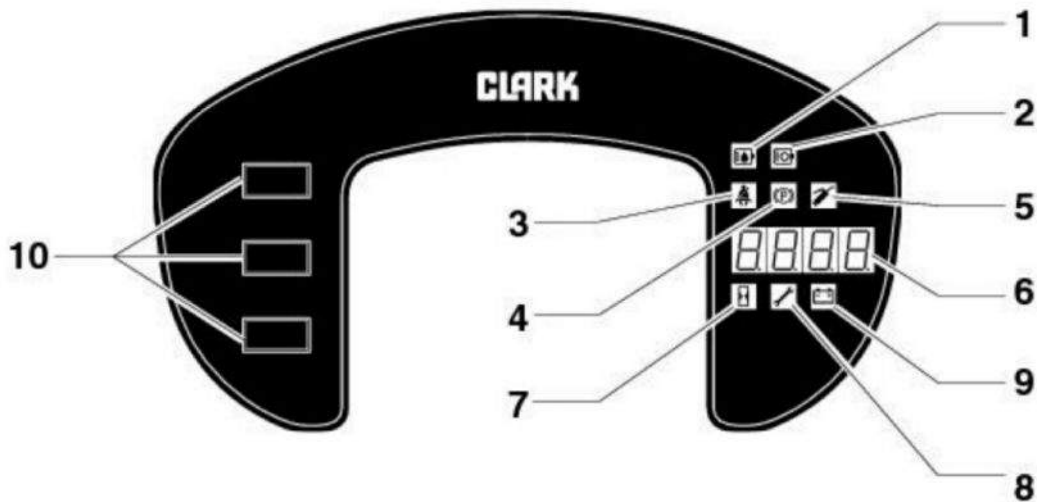
## TMG12-25, TMX12-25 Operator Compartment



1. Steering Handwheel
2. Horn Button
3. Directional Control Lever
4. Pylon Release Lever
5. Brake Pedal
6. Seat
7. Key Switch
8. Parking Brake Pedal
9. Lift Control Lever
10. Tilt Control Lever
11. Accelerator
12. Standard Display/Command System

## EPG, ECG and TMG Dash Display

The primary design of the Dash Display is to provide the operator with an easily understandable, visual feedback of the status of the truck and its system components.

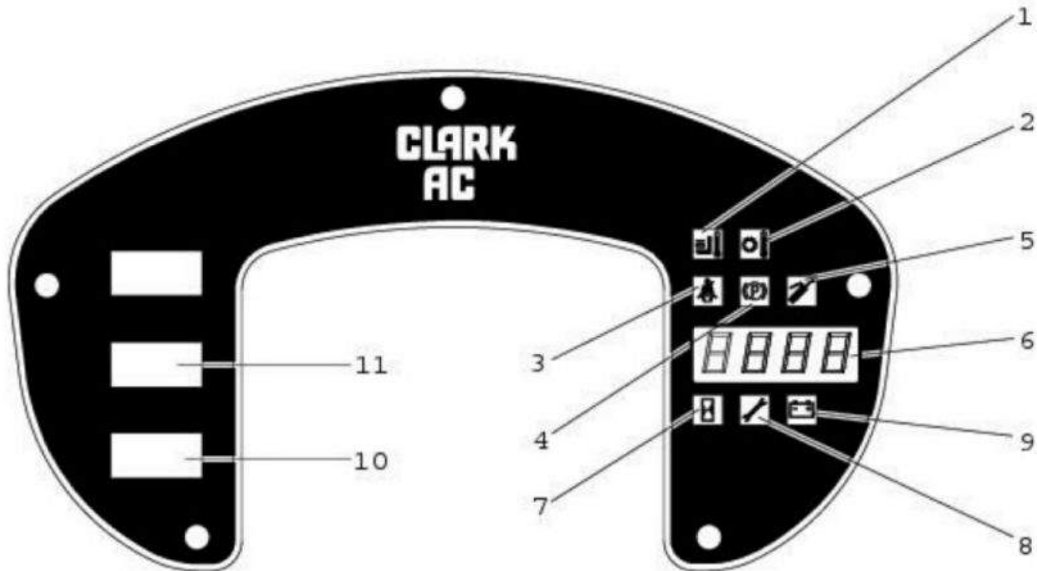


### Standard Display

- |  |                                       |
|--|---------------------------------------|
| 1. Pump Motor Brush Wear Indicator (optional)  | 6. Numeric Display                    |
| 2. Drive Motor Brush Wear Indicator (optional) | 7. Hour Meter                         |
| 3. Seat Belt Alert                             | 8. Service Status                     |
| 4. Park Brake                                  | 9. Battery Status                     |
| 5. Planned Maintenance                         | 10. Accessory Switches (lights, etc.) |

## TMX Dash Display

The primary design of the Dash Display is to provide the operator with an easily understandable, visual feedback of the status of the truck and it's system components.

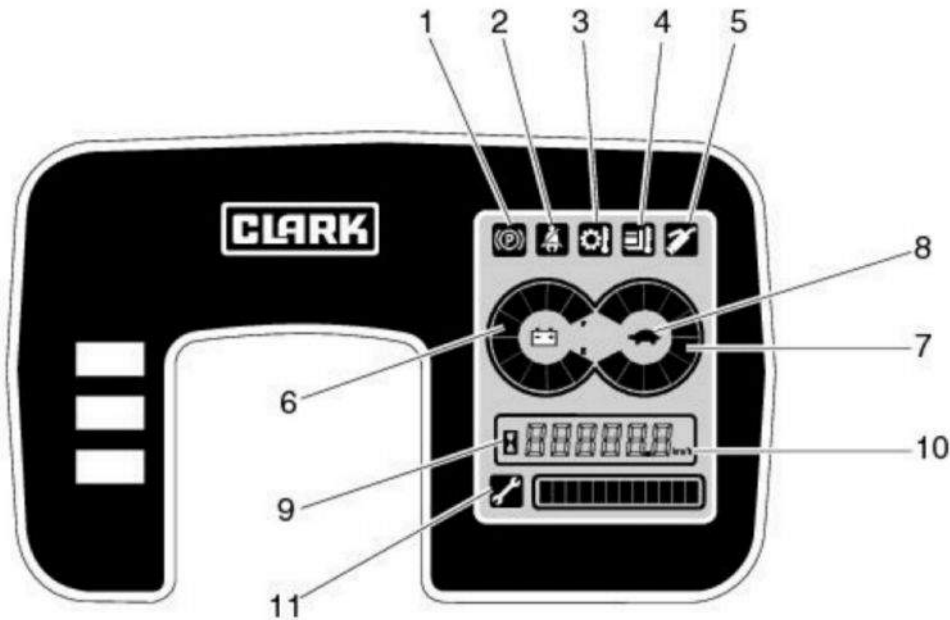


### Standard Display

- |   |                                    |
|---|------------------------------------|
| 1. Pump controller & Motor overheat warning indicator lamp  | 5. Planned Maintenance             |
| 2. Drive controller & Motor overheat warning indicator lamp | 6. Numeric Display                 |
| 3. Seat Belt Alert  | 7. Hour Meter                      |
| 4. Park Brake   | 8. Service Status                  |
|   | 9. Battery Status                  |
|   | 10. Head light Switches            |
|   | 11. Speed change switch (Optional) |

## ECX Dash Display

The primary design of the Dash Display is to provide the operator with an easily understandable, visual feedback of the status of the truck and its system components.

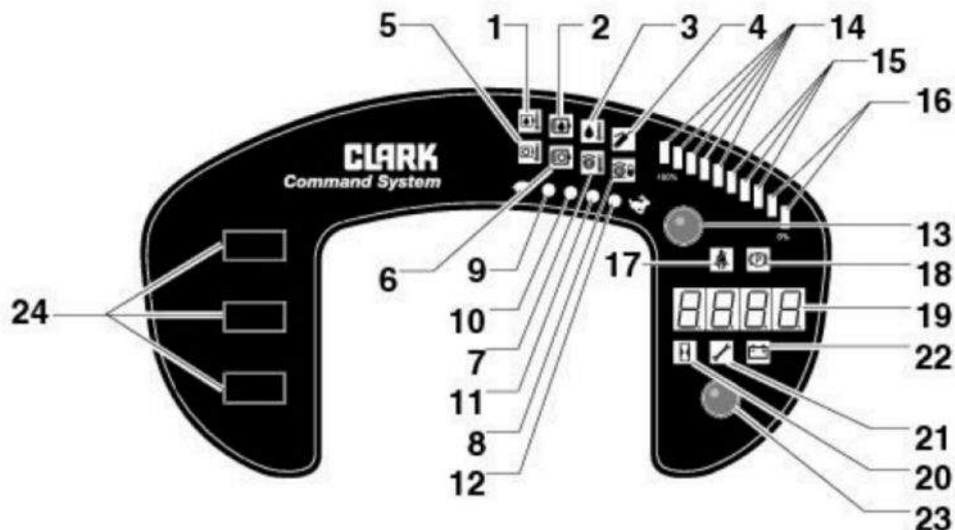


### Standard Display

- |   |                                    |
|---|------------------------------------|
| 1. Park Brake   | 6. Battery Discharging Indicator   |
| 2. Seat Belt Alert  | 7. Display Setted Speed limit      |
| 3. Drive controller & Motor overheat warning indicator lamp | 8. Activating Speed limit function |
| 4. Pump controller & Motor overheat warning indicator lamp  | 9. Hour Meter                      |
| 5. Planned Maintenance                                      | 10. Display Travel Speed           |
|   | 11. Service Status                 |

## ECG and TMG Command System Display (Option)

The primary design of the Command System is to provide the operator with an easily understandable, visual feedback of the status of the truck and its system components. The operator can also select/change vehicle operating characteristics.



### Command System

- |                                       |                                       |
|---------------------------------------|---------------------------------------|
| 1. Pump Motor Temperature (Opt)       | 12. Performance Mode 4                |
| 2. Pump Motor Brush Wear (Opt)        | 13. Performance Selector Button       |
| 3. Pump Control Temperature           | 14. Battery Level (high)              |
| 4. Planned Maintenance                | 15. Battery Level (med)               |
| 5. Drive Motor Temperature (Opt)      | 16. Battery Level (low)               |
| 6. Drive Motor Brush Wear (Opt)       | 17. Seat Belt Alert                   |
| 7. Traction Control Temperature (Opt) | 18. Park Brake                        |
| 8. Drive Motor Overload               | 19. Numeric Display                   |
| 9. Performance Mode 1                 | 20. Hour Meter                        |
| 10. Performance Mode 2                | 21. Service Status                    |
| 11. Performance Mode 3                | 22. Battery Status                    |
|                                       | 23. Stored Status Code Button         |
|                                       | 24. Accessory Switches (Lights, etc.) |