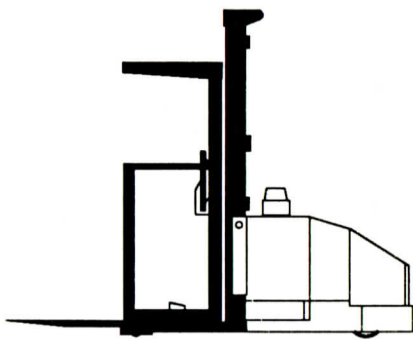

Operator's Manual

Do not remove this manual
from the truck.



OP 7

CLARK

Book No. 2771564
OM - 549

Record the following information pertaining to your truck.

Model No. _____

Serial No. _____

Customer Truck Identification No. _____

Truck Weight, Empty _____

Truck Rated Capacity _____

Truck Gross Weight _____

Truck Gross Weight, Loaded w/ Rated Load _____

Special Equipment or Attachments _____

IMPORTANT

Do not expose this manual to hot water or steam.

**The following warnings are provided pursuant to
California Health & Safety Code Sections 25249.5 et. seq:**



Operator's Manual

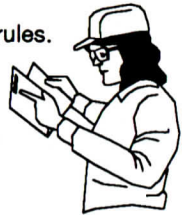
You must be trained and authorized to operate a lift truck

YOU can prevent accidents!

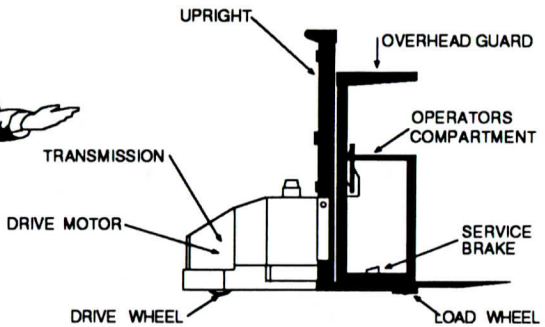
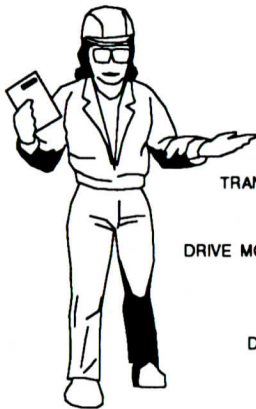
First: Learn safe operating rules and your company rules.

Next: Read and understand your Operator's Manual

Learn about the unit you operate

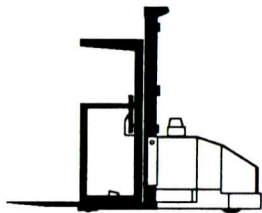


KNOW YOUR TRUCK



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 Customers

Experience with lift truck accidents has shown that when accidents happen and people are killed, or injured, the cause has its roots in three areas; the selection of operators, their training and their supervision.

When lift truck operators are selected you must consider people who can become responsible professional operators. Lift trucks are not cars and they're not ordinary trucks. They are specialized machines with specialized operating characteristics designed to perform specialized jobs. Under the Occupational Safety and Health Act you must train your lift truck operators. That is your responsibility. We are here to help, but only you know how a specific machine is used. Only you can properly train your operators for the jobs they must perform. Once they are trained and you are absolutely sure they know how to operate the equipment and follow basic safety rules, you must make sure they do. If you don't, the results can be accidents that end up in costly damage to your products, your facilities, your equipment, and worst of all, serious injury or death to the people who use these machines or work around them.

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. But, it cannot cover every possible situation which 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 as well as to know and follow your company safety rules! Be sure that your equipment is maintained in a safe condition. Do not operate a damaged truck. And practice safe operation every time you use your lift truck. Let's join together to set new standards in safety.

Message To CLARK Lift Truck Operators

Lift trucks are specialized machines with unique operating characteristics designed to perform specific jobs. 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**

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 their function. The correct operating procedures are shown and explained. Illustrations and important safety messages are included for clear understanding. And, 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. But, it cannot cover every possible situation. 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. Know and follow your company safety rules. Be sure that your equipment is maintained in a safe condition. Do not operate a damaged truck.

Be sure that you understand all driving procedures. Federal Occupational Safety and Health Act (OSHA) and state laws require that operators be completely trained in the safe operation of lift trucks.

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 lift truck repair procedures and authorized by your employer.

CONTENTS

A MESSAGE TO CLARK LIFT TRUCK CUSTOMERS	ii
A MESSAGE TO CLARK LIFT TRUCK OPERATORS	iii
ABOUT THIS MANUAL	v
TRUCK APPLICATION	vi
1 GENERAL SAFETY RULES AND PRACTICES	1.1
2 OPERATING HAZARDS	2.1
3 KNOW YOUR TRUCK	3.1
4 OPERATOR CARE AND MAINTENANCE	4.1
5 OPERATING PROCEDURES	5.1
6 EMERGENCY TOWING	6.1
7 MAINTENANCE AND LUBRICATION	7.1

About This Manual

The purpose of this manual is to provide a digest of essential information about the safe operation of your lift truck and to acquaint you with its features and how they function and are maintained.

This manual has been printed on a special weather resistant material and is intended to remain on, and be a permanent part of this lift truck.

Be sure to put this operator's manual back in the holder (located in operator's compartment) when not in use.

NOTICE - - The descriptions and specifications included in this manual were in effect at the time of printing. Clark Equipment Company reserves the right to make improvements and changes in specifications or design, without notice and without incurring obligation. Please check with your authorized Clark dealer for information on possible updates or revisions.

TRUCK APPLICATION

This truck is designed for a specific application. Make sure you are using this truck correctly for the job it was intended to do.

The Clark OP7 Order Selector is specifically designed to operate in narrow and very narrow high-density storage aisles. Upright options permit max. fork heights of up to 14 feet with simultaneous lift/lower and travel. It can be adapted to rail guidance systems.

The operator rides on a platform that goes up and down with the load. The operator positions the truck next to the designated location in the rack system and picks or replenishes material by reaching into the rack system.

This type of vehicle is intended to travel parallel to the face of the load openings during the picking or replenishing operation. This type of truck is not intended to be used for right angle stacking.

The OP7 is designed to operate on smooth, dry and level surfaces and is not intended for ramps or inclined surfaces.

1 General Safety Rules

INDEX

Daily Inspection	1.2
Do's and Don'ts	1.2
No Riders	1.3
Pedestrians	1.3
Operator Protection	1.3
Fork Safety	1.3
Pinch Points	1.3
Travel	1.3
Tipover	1.3
Surface Capacity	1.3
Grades, Ramps, Slopes and Inclines	1.3
Parking	1.3

IMPORTANT NOTICE



This is the industry's "Safety Alert Symbol". This symbol is used to call your attention to items or operations that could be dangerous to you or other persons using this equipment. It is essential that you read the instructions and safety regulations before you attempt to assemble or use this unit.

PRELIMINARY SERVICE

Examine your Clark Electric Truck carefully to determine if it has been damaged in shipment. Any damage should be reported immediately to the transportation company.

OPERATION

This truck has been designed for level floor operation and should be operated in accordance with instructions in ANSI B 56. 1- - 1969-1975.

General Safety Rules Daily Inspection



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.

Do's And Don'ts



DON'T MIX DRUGS AND ALCOHOL WITH YOUR JOB.



DON'T BLOCK SAFETY OR EMERGENCY EQUIPMENT



DO WATCH FOR PEDESTRIANS.



DON'T SMOKE IN "NO SMOKING" AREAS



DO WEAR SAFETY EQUIPMENT WHEN REQUIRED

General Safety Rules Operating

1. Do not operate this truck unless you have been trained and authorized to do so. Read all warnings and instructions in operator's manual and on this truck.
2. Do not operate this truck until you have checked its condition. Give special attention to Tires, Horn, Battery, Controller, Lift System including platform, forks and attachments; chains, cable and limit switches, brakes, steering mechanism, guards and operator safety and tether equipment.
3. Operate truck only from designated operating position. Never place any part of your body into the mast structure, between the mast and the truck, or outside the truck. Do not carry passengers.
4. Do not handle unstable or loosely stacked loads. Use special care when handling long, high or wide loads to avoid losing the load, striking bystanders, or tipping the truck.
5. Do not overload truck. Check capacity plate for load weight information.
6. Order selector trucks will tip over if not operated correctly. Start, stop, travel, steer and brake smoothly. Slow down for turns and avoid uneven or slippery surfaces that could cause truck to slide or overturn. Operate carefully when traveling without a load as the risk of overturn is greater.
7. Elevate forks or other lifting mechanism only to pick up or stack a load. Watch out for obstructions, especially overhead.
8. Travel with load of lifting mechanism as low as possible. Always look in direction of travel. Keep a clear view and when load interferes with visibility, travel with load or lifting mechanism trailing.
9. Order selector trucks are not designed to operate on ramps or inclines. Do not operate on ramps or inclines.
10. Observe applicable traffic regulations. Yield right-of-way to pedestrians. Slow down and sound horn at cross aisles and wherever vision is obstructed.
11. Before lifting, make sure load is centered and forks are completely under load.
12. Do not put any part of your body under the forks or load. Do not allow anyone to stand or walk under load or lifting mechanism.
13. Do not carry other personnel on the forks or platform.
14. Wear the safety belt and attach the lanyard to the overhead guard when operating truck.
15. Before leaving the truck, make sure the control handle is deactivated, the lifting mechanism is lowered, and all power is turned off. Do not park truck on incline.

2 Operating Hazards Index

- Loose Loads 2.2
- Long and Wide Loads 2.2
- Low Overhead Clearance 2.3
- Fast Turns and High Loads 2.3
- Right- Angle Stacking 2.4
- Chain Slack 2.4
- Pallets and Skids 2.5
- U.L. Construction Type 2.5
- Drop-offs 2.6

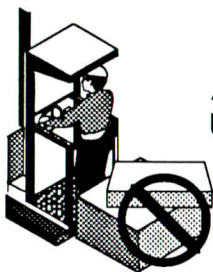


This section shows hazards that may cause you, or someone around you, to be killed or badly hurt. As the operator, you must look for other hazards. Get your boss to help you identify and avoid those hazards.

Operating Hazards

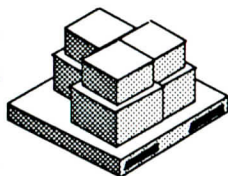
Be thoroughly trained in the operation of the steering, brake, and controls of this truck.

Certificate
Operator Training

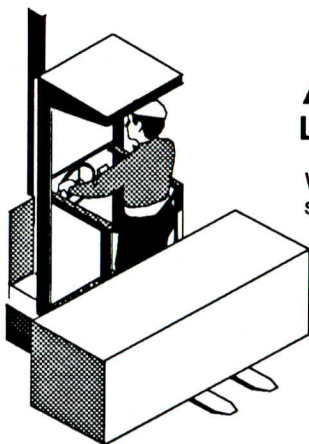


⚠ WARNING: Uneven Loads

Never carry uneven material.



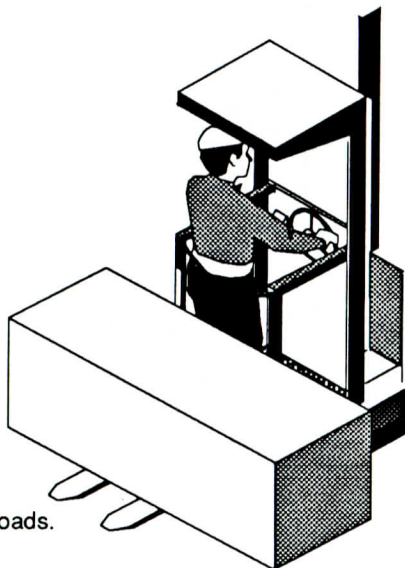
Stack loose material evenly.



⚠ WARNING: Long and Wide Loads

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

Keep wide loads low and watch load balance. Do not let the load rest on the outrigger.

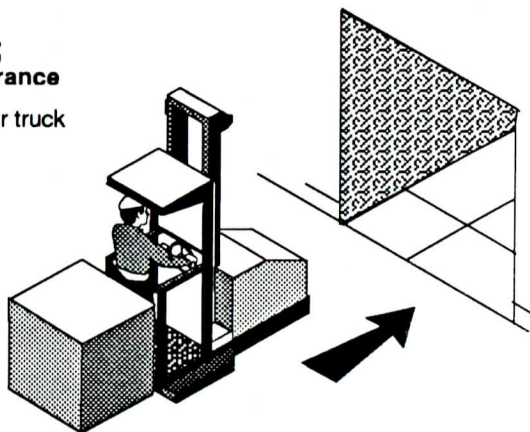


Center wide loads.

Operating Hazards

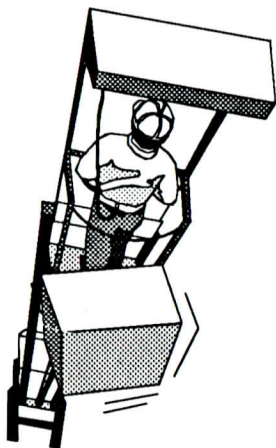
WARNING; **Low Overhead Clearance**

Know the height of your truck
check your clearance.



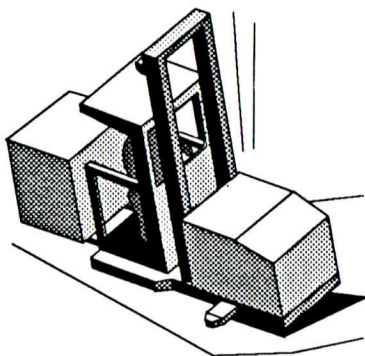
WARNING; **High Loads**

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



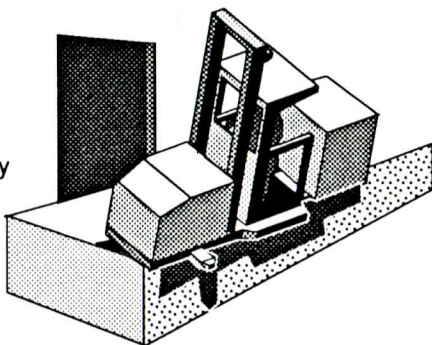
WARNING; **Fast Turns**

Slow down before turning. Truck
can tip over.



Operating Hazards

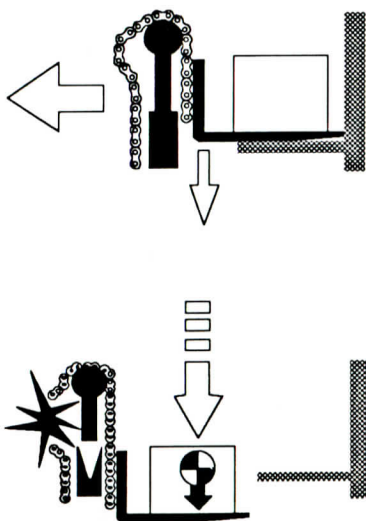
Maintain a safe distance from the edge of docks and platforms when operating industrial trucks. Use caution when floor is slippery from ice, water, grease or loose material.



WARNING:

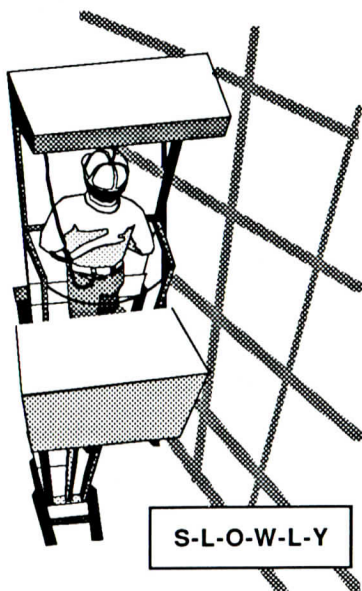
Chain Slack

Slack chains mean rail or carriage hang-up. Raise the forks before you move.



WARNING:

Right-angle stacking



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

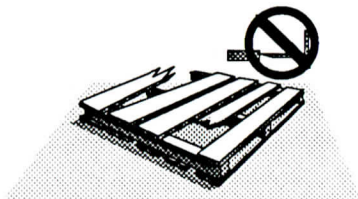
Operating Hazards

Pallets and Skids



WARNING:

Poorly maintained and/or damaged pallets and skids.



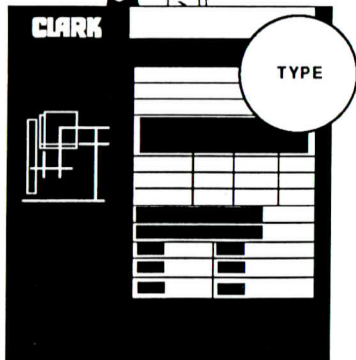
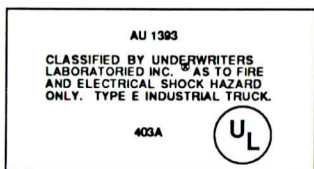
Do not move or store materials on damaged pallets or skids. Items can fall through them causing severe injury or death.



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

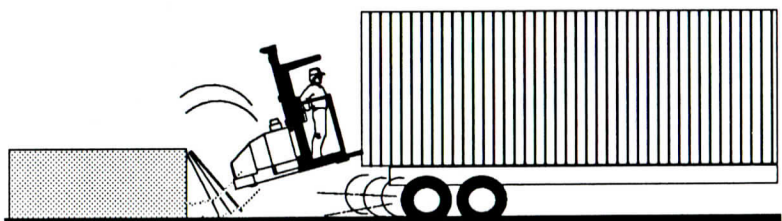
U.L. Construction Type

Know the U.L. construction type of your truck and make certain that trucks of this type may be operated in restricted areas before entering. Never take an unauthorized truck into restricted or hazardous areas.



Operating Hazards Drop-offs

 **Warning: Dock or trailer drop-offs**



TO AVOID THESE HAZARDS YOU MUST:

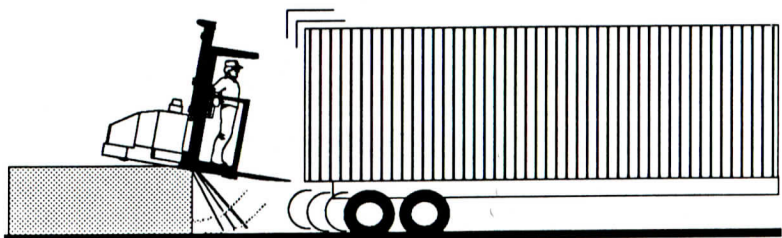
Talk to the truck driver yourself, make sure he does not move the trailer until you are done!

Apply trailer brakes.

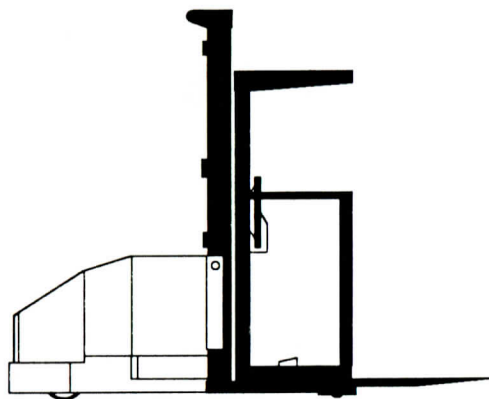
Use wheel chocks.

Use trailer-to-dock locking systems, if available.

 **Warning: Trailer creep**



3 Know Your truck



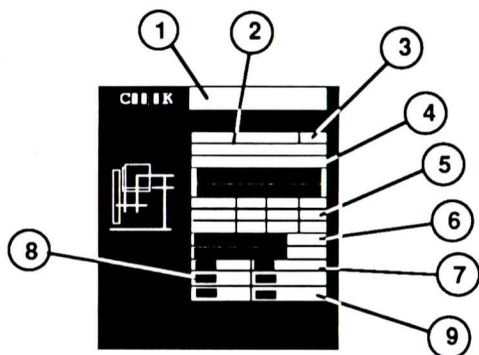
Truck Data and Safety Plates 3.2- 3.3

Safety and Warning Decals 3.4

Operator's Compartment & Controls 3.5- 3.6

How Your Lift Truck Operates 3.6

Know Your Truck Truck Data and Safety Plates



KNOW AND UNDERSTAND THE MEANING OF THE DATA ON YOUR TRUCK'S NAMEPLATE

1. Truck registered name.

2. Truck model number and serial number. These are identification numbers assigned to this particular truck and should be used when requesting any information or when ordering service parts for this truck from your authorized CLARK dealer. The serial number is also stamped in the frame.

3. Type Designation. The code letters signify the type of construction with safeguards against fire, explosion or electrical shock hazards for operation in nonclassified and classified areas. Check with proper authority before entering areas where flammable or explosive material may be present.

4. Attachment description (if any installed). The user must see that the truck is marked to identify the attachment(s), including the weight of the combination and truck capacity with the attachment.

5. Capacity rating, load center, and lifting height data. This 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 MAXIMUM SPECIFIED.**

6. Truck weight, less load.

7. Battery weight.

8. Battery ampere-hour rating.

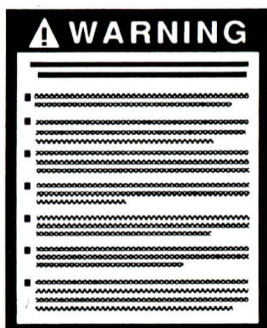
9. System voltage.

IMPORTANT - When attachments are added or if the truck is modified, the capacity of the truck may be affected.

Contact your authorized Clark dealer for new nameplate showing the revised capacity.

Know Your Truck Truck Data and Safety Plates

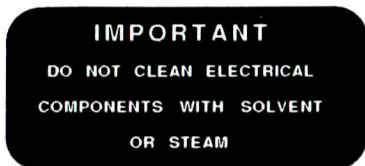
Operator Safety Warning Decal



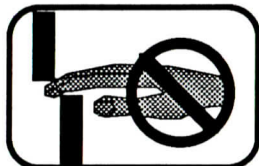
The operator's warning decal describes basic instructions for safe operation of a lift truck. Read and understand these instructions and the other safety messages in this manual and on the truck.

- Do not operate this order picker truck unless you are trained and authorized. Read and understand operator's manual before operating lift truck. Clark dealers have replacement manuals.
- Do not operate damaged or faulty truck. Do not attempt repairs unless you are trained and authorized.
- Before operating truck, fasten restraining chain and secure pallet or cart to forks following instructions in operator's manual.
- Look where you drive. Watch out for people, obstructions (especially overhead), and drop-offs.
- Order picker trucks will tip over if not properly operated. Lower forks or attachments and slow down before turning. Do not operate on slopes.
- Protect against falling objects. Overhead guard must be in place.
- Do not load truck over capacity on nameplate. Move long, high or wide loads carefully. Do not move unstable loads.
- Before getting off truck, lower forks or attachments all the way and turn off key. Brake applies automatically.

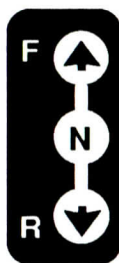
Know Your Truck Safety and Warning Decals



The electrical decal is located above the lift and lower control. The instructions on the decal are to prevent damage to the electrical components.



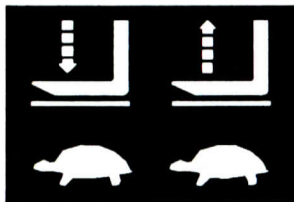
"Keep hands off" decals are located on the upright. Do not reach into or climb on the upright. Personal injury will result if any part of your body is put between the moving parts of the upright.



The directional control decal is located next to the directional control, on control housing. This shows the operator the direction the truck will move when the control is activated.



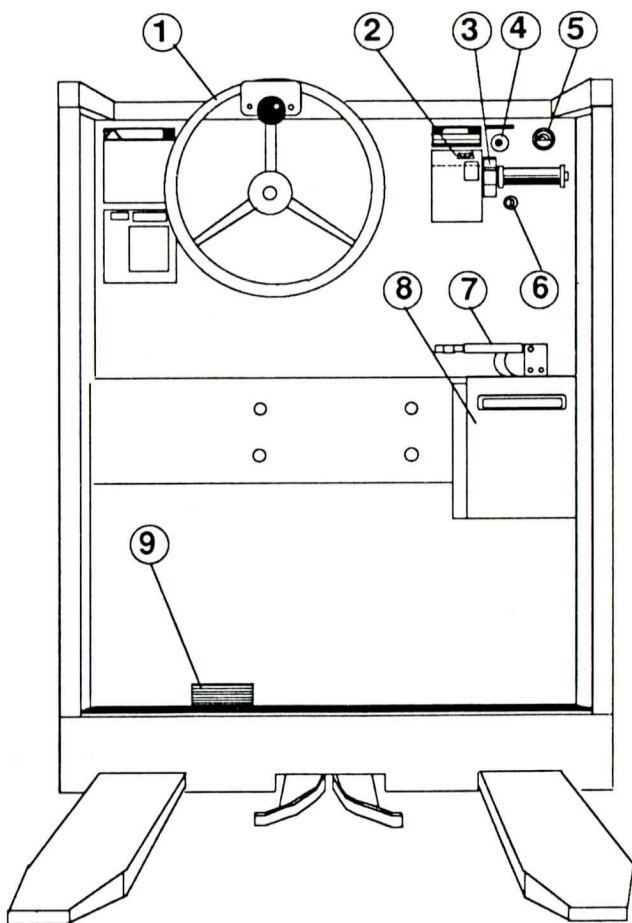
"Keep away from the forks" decal is located on the lift cylinder in front of the operator's compartment. Do not ride on or stand under forks or attachments. Personal injury will result if personnel stand on or under raised forks.



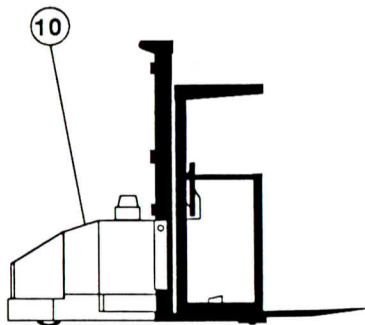
This decal shows the button positions to raise or lower forks. This control is located just above directional control decal on control housing.

Know Your Truck

Operator's Compartment & Controls



1. Steering Wheel
2. Fork Lift and Lower Buttons
3. Forward-Reverse and Speed Control
4. Horn Button
5. Battery Gauge (optional)
6. Key Circuit Switch
7. Pallet Clamp Lever (optional)
8. Operator's Manual Holder
9. Brake Pedal
10. Hour Meter (optional)



Know Your Truck

OPERATOR'S COMPARTMENT & CONTROLS

How Your Lift Truck Operates:

Lift and Lower Control

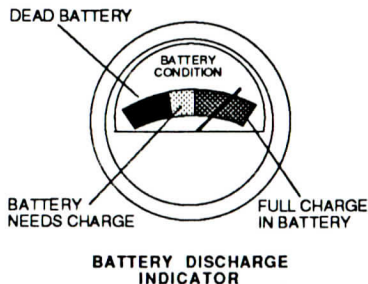
The lift and lower is controlled by a rocker switch above the control switch. Pushing the rocker switch down on the front will lift the platform and pushing the rocker switch down on the back will lower the platform.

Forward-Reverse and Speed Control

Direction of truck is controlled by moving the Forward-Reverse and Speed Control. Rotating the Control forward produces forward motion and rotating Control back produces rearward motion. The speed of the truck is controlled by the degree of rotation of the Control.

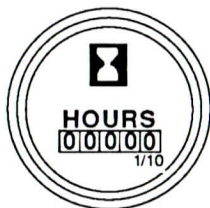
Battery Gauge (optional)

The battery discharge indicator (BDI) is used in conjunction with the key switch to indicate the degree a battery has been drained of its charge.



Hour Meter (optional)

The hour meter is provided to indicate the hours spent in operation of the truck. The hour meter is located on the front of the truck and to the left of the access cover.



HOUR METER

Key Switch

A key switch is provided to prevent unauthorized use of the truck. The key switch must always be turned on to operate the truck.

Service Brake

The brakes on your order selector truck are applied unless the pedal is depressed. Operating the pedal releases the brake and closes a switch in the control circuit thus allowing operation of the truck. Operation of brake should be checked before putting the truck into service.

4 Operator Care and Maintenance

Daily Safety Inspection 4.2-4.4

NOTICE

The Occupational Safety and Health Act (OSHA) requires that the user examine his trucks before each shift to be sure they are in safe working order. Defects when found shall be immediately reported and corrected. The truck shall be taken out of service until it has been restored to safe operating condition.

Operator Care and Maintenance Daily Safety Inspection

Before using a lift truck, it is the operator's responsibility to check its condition and be sure it is safe to operate.

Check for damage and maintenance problems, and have repairs made before you operate the truck. Unusual noises or problems should be reported immediately to the user's supervisor or other designated authority.

Do not make repairs yourself unless you have been trained in lift truck repair procedures and authorized by your employer. Have a qualified mechanic correct all discrepancies using genuine Clark or Clark-approved parts.

Do not operate a truck if it is in need of repair. If it is in an unsafe condition, remove the key and report the condition to the proper authority. If the truck becomes unsafe in any way while you are operating it, STOP operating the truck and report the problem immediately and have it corrected.

Lift trucks should be inspected every 8 hours, or at the start of each shift. This daily inspection should include a visual check for leaks and any obvious damage which may have been caused by operation during the last shift. Be sure that the overhead guard is in good condition. Look the upright and lift chains over. Check the forks for damage. Look for loose bolts and fittings. Check the tires, wheels and wheel mounting bolts. Check the hydraulic reservoir oil level. Check all of the controls. Operate the truck briefly to be sure that all systems are operating correctly, and that all instruments, warning lights and the horn are functioning.

As an aid in carrying out this inspection, CLARK has prepared a form called "Driver's Daily Checklist". We recommend that you use this form to make a daily record of your inspections and truck condition.

Copies of this form may be obtained from your CLARK dealer.

Operator Care and Maintenance

Daily Safety Inspection

HOW TO PERFORM THE DAILY SAFETY AND OPERATING CHECKS

Visual Checks

First, perform a visual inspection of the truck and its major components. Walk around your lift truck and take note of obvious damage which may have been caused by operation during the last shift.

Check that all capacity, safety, and warning plates or decals are attached and legible.

Check that battery is installed and secured in position correctly. Check battery connector for safe condition. Look for any external leakage around drive axle.

Check for hydraulic oil leaks and loose fittings. **WARNING -- DO NOT USE BARE HANDS TO CHECK.** Oil may be hot or under pressure.

Be sure that the driver's overhead guard and any other safety devices are in place, undamaged and attached securely.

Then, check all of the critical components that handle or carry the load.

Look the upright and lift chains over. Check for obvious wear and maintenance problems such as damaged or missing parts, leaks, slack or broken chains, bent parts, etc. Check all attachments, chains, cables, and limit switches.

Carefully inspect the load forks for cracks, breaks, bending, twists, and wear. Be sure that the forks are correctly installed and locked in their proper position.

Inspect the wheels and tires for safe mounting and wear condition.

Check fluid levels.

Functional Checks

Test warning devices, horn, lights, and other safety equipment and accessories.

Turn key on, be sure all controls and systems are functioning correctly. Check the hourmeter for operation. Operate the service brake, hydraulic lift, directional control, and steering system. Be sure all controls operate freely and return to neutral properly.

Operator care and Maintenance Daily Safety Inspection

WHEN FUNCTIONAL CHECKS ARE COMPLETED:

- Bring truck to a complete stop.
- Make sure directional control is in the neutral position.
- Turn the key switch to the OFF position.
- Lower the forks fully to the floor.

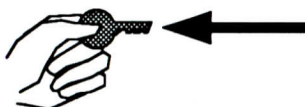
Standard Shut Down Procedure

When parking and leaving truck unattended, lift mechanism shall be fully lowered, controls placed in neutral, brakes set, and key removed. Block the wheels if truck is parked on an incline or has possibility of moving.

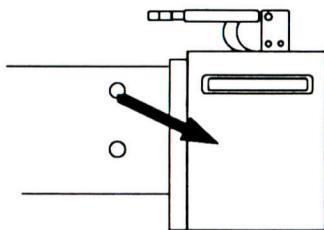
Make a record on the "Driver's Daily Checklist" of all the operating and truck problems that you find. Review the checklist to be sure it has been completed and turn it in to the person responsible for lift truck maintenance. Be sure any unusual noises or problems are investigated immediately.

Do not operate a lift truck that has a maintenance problem, or is not safe to operate.

Remove the key from the key switch and put an "Out of Service" tag on the truck.



Be sure to put this operator's manual back in the holder. Read the manual again if you are not sure of all lift truck operating procedures.



If all of the "Before Operation" checks were normal or satisfactory, the truck can be operated.

5 Operating Procedures

Before Operation 5.2

How to Operate Your Truck 5.3- 5.5

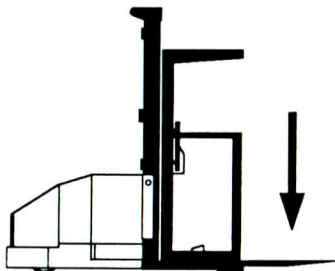
After Operation 5.6

Operating Procedures Before Operation

Warning - Inspect your lift truck before operating at the start of the day or shift. Before putting your truck to use, check the operation of the controls and all systems.

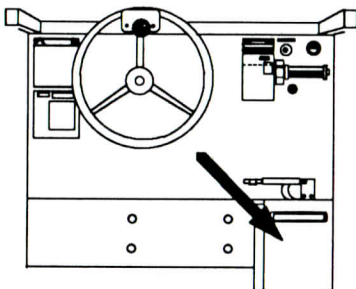
Before operating a lift truck check to see that:

1. Forks are fully lowered to the floor
2. You are familiar with how all the controls function
3. All controls are in neutral or other correct position
4. Truck has been checked and is ready to operate



Be sure that read and understand the information in the Operator's Manual before operating a lift truck.

The Operator's Manual is designed to be attached to the truck and stored in the operator's compartment. It is placed there for ready reference by the operator. Refer to it often; whenever you have questions about an operating procedure.



Before using a lift truck, the operator must check the truck and complete the "Driver's Daily Checklist".

NOTICE

**THIS EQUIPMENT CAN BE DANGEROUS IF NOT USED PROPERLY.
SAFE OPERATION IS THE RESPONSIBILITY OF THE OPERATOR.**

DO NOT OPERATE THE TRUCK, ANY OF ITS FUNCTIONS OR ATTACHMENTS, FROM ANY PLACE OTHER THAN FROM DESIGNATED OPERATOR'S POSITION.

Operating Procedures

How to Operate Your Truck

Enter the operator's compartment. Attach the safety chain to the safety bar. Lower the side safety rails, put on the safety belt and attach the safety line to the overhead guard.

Turn the key to the "ON" position.

Put your left foot on the brake pedal and press down. This will make power available to the drive motor.

Turn steer hand wheel until steering direction indicator points in the desired direction of forward travel or opposite the desired line of reverse travel.

Look in all directions to make sure that your path of travel is clear.

Put a grip on the directional control with your right hand and slowly turn it in the direction you want to travel.

Travel speed can be increased if your path of travel is clear.

Lift your foot from the brake pedal to activate truck brake and stop truck travel.

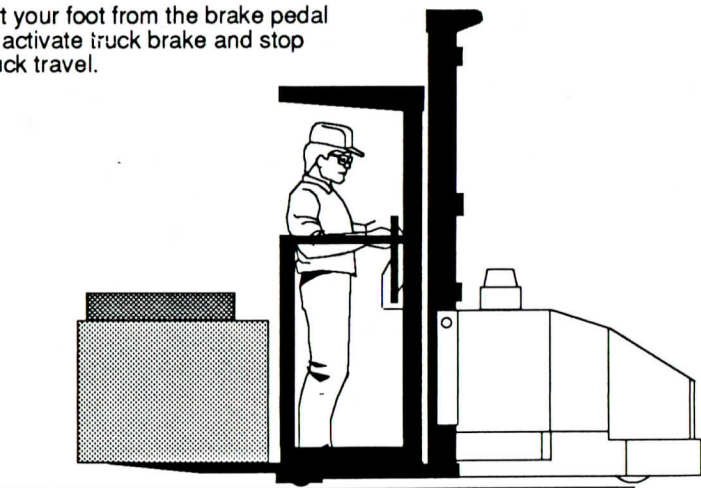
Your order selector can be operated while standing in forward or reverse direction of travel. This truck has a 61 inch turning radius.

Before forks are raised, make sure there is enough overhead clearance. Press the "lift" button. When lift has been completed press "lower" button and lower forks.

NOTE: If lowering system does not operate, travel will automatically stop. To regain full operation, push the lift button and raise the load.

To lower the platform during a power failure, push the lower button or open the drive unit doors and press and hold the emergency lowering valve plunger. Lower the forks.

For your safety the trucks high speed automatically cuts out when when forks are 24 inches off the floor.



Operating Procedures

How to Operate Your Truck

Traveling

Observe all traffic regulations including authorized plant speed limits. Under normal traffic conditions, keep to the right. Maintain a safe distance, based on speed of travel, from the truck ahead and keep the truck under control at all times.

Yield the right of way to pedestrians, ambulances, fire trucks, or other vehicles in emergency situations.

Do not pass another truck traveling in the same direction at intersections, blind spots or at other dangerous locations.

Slow down and sound horn at cross aisles and other locations where vision is obstructed. If the load being carried obstructs forward view, the operator shall travel with the load trailing.

Keep a clear view of the path of travel and observe for other traffic personnel and safe clearances.

These trucks are designed for level floor operation. If it is necessary to operate them on a slight grade, ramp, or incline be sure to do so slowly and cautiously. Operators should be totally familiar with the controls, the braking action of the trucks, plugging techniques, etc. It is also recommended that the truck be operated at somewhat less than full capacity on grades, ramps and inclines to assure full braking traction on the rear drive wheel.

Loaded rider trucks should be operated on all grades with load upgrade, ascending or descending.

On all grades, the load and load engaging means shall be tilted back, if applicable, and raised only as far as necessary to clear the road surface.

Use extra caution when operating on grades. Never turn on any grade, ramp, or incline; always travel straight up and down.

Under all travel conditions the truck shall be operated at a speed that will permit it to be brought to a stop in a safe manner.

Travel with forks or load low. Do not elevate the load except during picking or stacking.

Make starts, stops, turns, or direction reversals in a smooth manner so as not to shift load and/or overturn the truck.

Do not indulge in stunt driving or horseplay.

Slow down on wet and slippery floors.

Before driving over a dockboard or bridgeplate, be sure that it is properly secured. Drive carefully and slowly across the dockboard or bridgeplate and never exceed its rated capacity.

Operating Procedures

How To Operate Your Truck

Do not drive trucks onto any elevator unless specifically authorized to do so. Approach elevators slowly, and then enter squarely after the elevator car is properly leveled. Once on the elevator, neutralize the controls, shut off power and set brakes. It is advisable that all other personnel leave the elevator before a truck is allowed to enter or leave.

Trucks shall enter elevator or other confined areas with load end forward.

Avoid running over loose objects on the roadway surface.

While negotiating turns, reduce speed, turning steering handle in a smooth sweeping motion. Except when maneuvering at a very low speed, turn handle at a moderate even rate.

Loading

Handle only stable and properly arranged loads. When handling off-center loads which cannot be centered, operate with extra caution.

Handle only loads within the capacity of the truck as rated on the nameplate.

Use caution in handling long and wide loads exceeding the dimensions to establish truck capacity. Stability and maneuverability may be adversely affected.

When attachments are used, extra care shall be taken in securing, manipulating, positioning and transporting the load. Operate trucks equipped with attachments as partially loaded trucks when not handling a load.

The Handling of suspended loads, by means of a crane arm ("boom") or other device, can introduce dynamic forces affecting the stability of a truck that are not considered in the stability criteria. Sudden starts, stops and turns can cause the load to swing and create a hazard. The following precautions shall be taken when handling suspended loads:

Do not exceed the truck manufacturer's load rating of the trucks as equipped for handling suspended loads.

The load shall only be lifted vertically and never dragged horizontally.

The load shall be transported with the bottom of the load and the mast as low as possible.

Maneuvering the truck with load elevated shall be done slowly and cautiously and only to the extent necessary to permit lowering to the transport position.

Operating Procedures After Operation

When you have finished using your truck

**Always leave your lift truck
in a safe condition...**

When you leave your truck, or
park it, follow these safety rules:

Park in a safe area away from
normal traffic

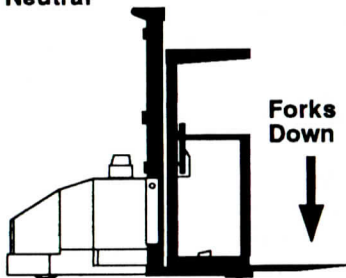
Never park on a grade.

Never park in areas which block
emergency routes or equip-
ment, or access to fire aisles,
stairways, and fire equipment.

**Before leaving the opera-
tor's position...**

1. Stop truck.
2. Lower the forks.
3. Make sure directional controls
are in neutral.
4. Turn key switch to "off" posi-
tion and remove key.
5. Block the wheels, if the truck
must be left on an incline or
you have any doubt about the
truck moving from a safe posi-
tion.

**Directional
Control in
Neutral**

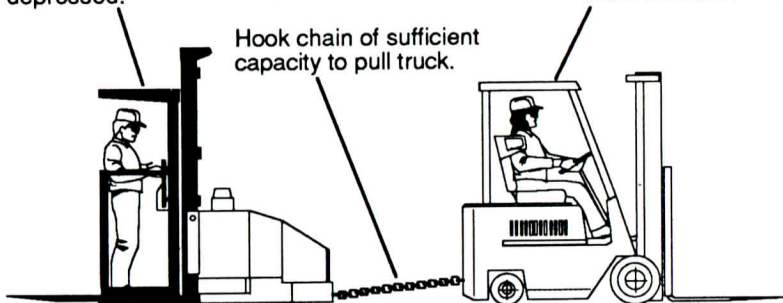


6 Emergency Towing

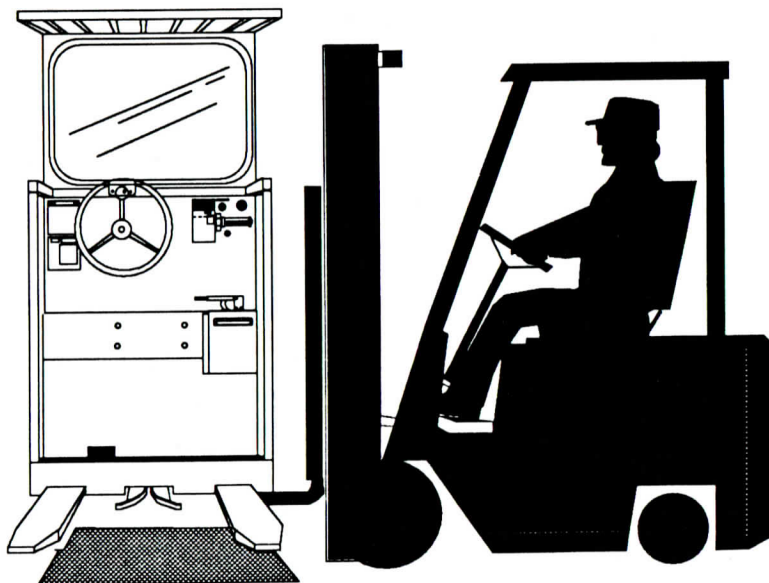
Driver must be in truck with brake pedal fully depressed.

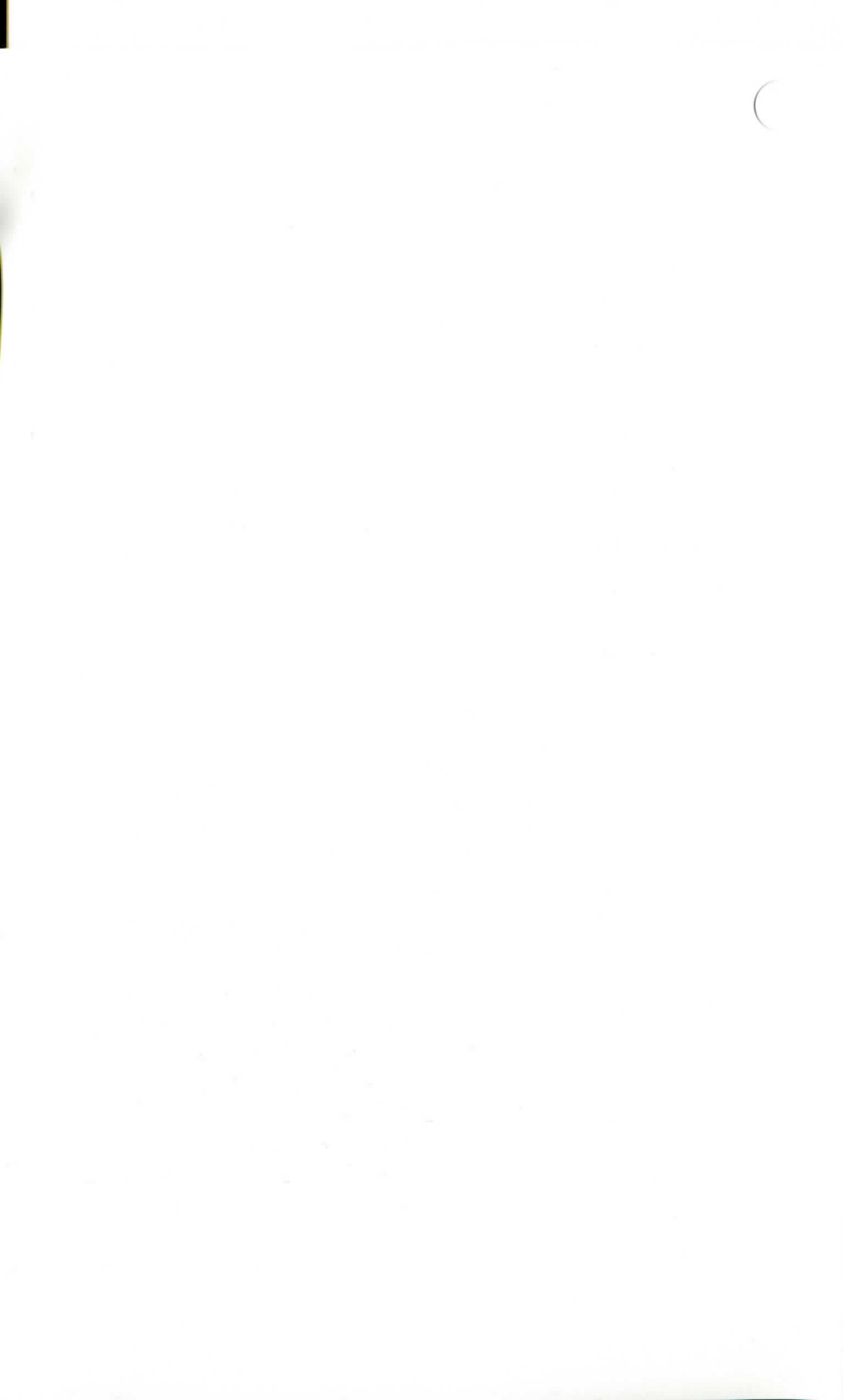
Hook chain of sufficient capacity to pull truck.

Truck of sufficient capacity to pull order selector.



Truck of sufficient capacity to lift Order Selector Truck.





7 Maintenance

Periodic Maintenance Schedule 7.2

Lubrication Chart 7.3

Battery Retainment Care 7.4

Maintenance

Periodic Maintenance

Daily

Charge, service and clean battery

Inspect visually for damage or leakage

Inspect load wheels for damage

Inspect visually for loose or missing parts

Check electrical brake switch and service brake operation

Check for smooth and proper functioning of all controls

Weekly

Check level of hydraulic fluid, (SAE10-40 oil to be full with-in 2-3 inches of fill opening with upright lowered - see lubrication chart).

Check transmission lubricant level (80W-90/API GL-5 transmission grease to pipe plug below intermediate gear bearing cover).

Check battery water level

Equalize battery charge (See manufacturer's instructions).

Monthly

Service all grease fittings (see manufacturer's instructions).

Semi-Annually

Thoroughly scrub battery

Thoroughly clean machine

Carefully inspect for loose or missing parts

Inspect for wiring damage

Change oil filter (see lubrication chart).

Check contactor tips

Check brake adjustment

Service drive motor and pump motors (see manufacturer's instructions).

Remove, clean and repack battery rollers (see lubrication chart).

Lubricate steering knob (see lubrication chart).

Inspect all tires and wheels

Annually

Drain, flush and refill gear case (see Lubrication chart).

Drain, flush and refill hydraulic reservoir (see lubrication chart).

Clean hydraulic reservoir outlet screens (see lubrication chart).

Break-in Period - 100 Hours

After approximately 100 hours of use, perform the following service.

1. Change the transmission oil
2. Change the hydraulic oil filter
3. Lubricate all grease fittings
4. Check all adjustments
5. Tighten any loose bolts, nuts, ect.
6. Adjust lift chains

Maintenance Lubrication Chart

Description	Work Directions	Materials	Working Hours															
1. Load Wheel Axle	Use Lub. Gun & Adapter for flush type fittings	Tex. Ref. C&C #880	150 HRS															
2. Sheave Pin	Use Lub. Gun	Tex. Ref. C&C #880	150 HRS															
3. Battery Roller Bearings (optional)	Remove, Clean and Repack	Tex. Ref. C&C #880	1000 HRS															
4. Lift Chain	Check for Rusting & Clean	SAE 40 Motor Oil	100 HRS															
5. Hydraulic Oil Filter	Change Oil Filter	Filter Element	250 HRS															
6. Gear Case-Transmission	Drain, Flush and Refill	80W-90/ API1-5	500 HRS															
7. Hydraulic Reservoir Out-let Screens (inside of Reservoir)	Clean in Solvent	Solvent	2000 HRS															
9. Side Guide Rollers (optional)	Use Lub. Gun & Adapter for flush type fittings	Tex. Ref. C&C #880	150 HRS															
10. Sheave Pin on Lift Cylinder	Use Lub. Gun	Tex. Ref. C&C #880	150 HRS															
11. Steering Knob	Lightly Oil	Light weight Oil	1000 HRS															
<p>After any major disassembly and/or repair the following lubricant should be performed.</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 33%;">Transmission Pivot</td> <td style="width: 33%;">Repack Bearing</td> <td style="width: 33%;">Tex. Ref. C&C #880</td> </tr> <tr> <td>Transmission Roller Bearings</td> <td>Repack Bearings</td> <td>Tex. Ref. C&C #880</td> </tr> <tr> <td>Steering Wheel Shaft</td> <td>Reoil</td> <td>Light Weight Oil</td> </tr> <tr> <td>Steering Chain</td> <td>Clean and Reoil</td> <td>Heavy Weight Oil</td> </tr> <tr> <td>Lift Chain</td> <td>Clean and Reoil</td> <td>SAE 40 Grade Motor Oil</td> </tr> </table>				Transmission Pivot	Repack Bearing	Tex. Ref. C&C #880	Transmission Roller Bearings	Repack Bearings	Tex. Ref. C&C #880	Steering Wheel Shaft	Reoil	Light Weight Oil	Steering Chain	Clean and Reoil	Heavy Weight Oil	Lift Chain	Clean and Reoil	SAE 40 Grade Motor Oil
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Lift Chain	Clean and Reoil	SAE 40 Grade Motor Oil																

Maintenance Battery Retainment Care

**DO NOT SERVICE BATTERY UNLESS
YOU ARE TRAINED AND AUTHORIZED.
BATTERY ACID CAN CAUSE SEVERE
BURNS AND INJURY.**

IMPORTANT

Use Only Batteries That Meet The Following Specifications.

	Max. Fork Hieght up to 168 inches	Max. Fork Hieght up to 168 inches
Voltage	12	24
Minimum Battery Weight	500 + lb.	1000 lb.
Minimum Battery size	32" W x 8" L x 25" H	32" W x 13.5" L x 25" H

For other industrial battery sizes, provide blocking to restrain the battery from moving not more than 12,7 MM/50 IN. in a horizontal direction

Make sure that battery cover is closed and side access doors are closed and latched before operating truck.

Minimum battery weight varies from fork height selected. Double check minimum battery compartment weight by contacting your Clark representative.





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YOUR AUTHORIZED CLARK DEALER

CLARK® Material Handling
Company

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