# Operator's Manual







## WARNING

FOR YOUR SAFETY AND THE SAFETY OF OTHERS;

**BEFORE YOU OPERATE THIS TRUCK!** 

READ ALL WARNINGS AND INSTRUCTIONS IN THE OPERATOR'S MANUAL AND ON THE TRUCK.

CHECK THE TRUCK FOR CORRECT OPERATION.

DO NOT OPERATE THIS TRUCK UNLESS YOU ARE TRAINED AND AUTHORIZED TO DO SO.

## **FOREWORD**

Federal and state laws require that operators be carefully trained in the safe operation of industrial trucks.

Before you start operating this truck, make sure that you understand all driving procedures. It is important to operate your truck safely and efficiently.

This manual will help you learn how to operate your truck. It describes the controls, special features and their function.

This manual is not a training manual, it is a guide to help authorized operators safely operate this truck. Instructions in this manual show the operator correct procedures for checking, starting, operating and stopping the truck. These instructions do not replace the requirement for proper training.

Clark industrial trucks are built to take hard work, but not abuse. They are built to be dependable but as with any truck, they are only as efficient as the operator and the persons responsible for maintaining them.

Do not make any repairs to this truck unless you have been trained to make repairs and are authorized by your employer.

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## **GENERAL SAFETY RULES**

### **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 B56.1-1983.

Do not operate the truck in hazardous areas.

#### MESSAGE TO CLARK CUSTOMERS

Experience with lift truck accidents has shown that when accidents happen and people are killed, or injured, the cause had 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 truck 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.

This book is designed to help your operators become professional lift truck operators. It cannot cover every possible situation which may result in an accident. We need your help; you must identify hazards in work areas and correct them. Your operators need your help. Make sure they learn the material in this book, the material in the operator's manual and your company rules. Provide them with properly maintained equipment, give them time to practice under close supervision and repeat training often. Let's join together setting new standards in safety. If you need help with your training program contact your local Clark dealer or Clark Equipment Company, Marketing Training & Communications, 525 N. 24th St., Battle Creek, Ml. 49016.

## SUMMARY OF SAFE OPERATING PROCEDURES

## **Tow Tractor**

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.

Do not operate this truck unless you have checked its condition. Give special attention to tires, horn, battery, controller, limit switches, brakes and steering mechanism.

Operate from designated operator's position only for which instructions are given.

Do not tow 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 trailers.

Do not overload truck or trailers. Check capacity plate for load and draw bar weight information.

Start, stop, travel steer, and brake smoothly. Remember, loaded trailers will require a longer distance to stop. Prepare for the extra distance. Slow down for turns and on uneven or slippery surfaces that could cause truck to skid or overturn.

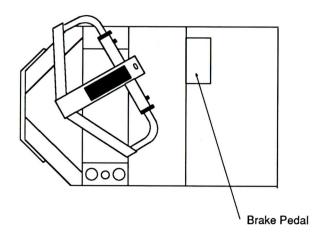
Operate carefully on ramps; travel slowly and do not angle or turn.

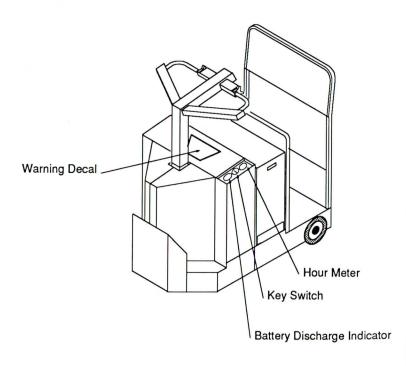
Observe applicable traffic regulations. Yeild right-of-way to pedestrians and emergency equipment. Slow down and sound horn at cross aisles and whenever vision is obstructed.

Do not travel with other personnel on the truck.

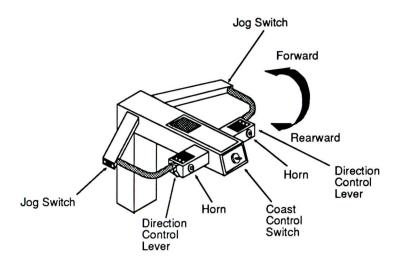
Before leaving the truck, make sure you have parked in an authorized area and are not blocking fire lanes, walkways and stairways and have turned the key switch to the off position.

## KNOW YOUR TRUCK.





## KNOW YOUR TRUCK



## CONTROLS AND INDICATORS

Key Switch

To prevent unauthorized use of this truck

**Brake Pedal** 

This pedal is designed to apply the brake and stop the truck when in a raised position. Its operation should be checked before putting the truck into service. Its proper adjustment should be checked regularly and maintained.

Coast Control The coast control switch has two (2) positions of use:

a. Coast position. This is used when the operator is walking along side the truck. The truck can only attain walking speed in this mode of operation and will coast to a stop. THE TRUCK HAS NO BRAKE IN THIS POSITION.

b. Brake position. This is used when the operator is on the truck in the drivers compartment. The truck will attain maximum speed and is stopped by the brake pedal operation as described above.

Jog Switch

The Jog Switch is used in conjunction with the coast switch to give brief amounts of power to the drive unit of the truck. The direction of travel is choosen by pushing the switch in the desired direction. The truck will only attain walking speed.

Battery Discharge Indicator Indicates battery charge condition: Red segment indicates discharged (dead) condition. Green segment indicates fully charged condition.

Hour Meter

Records the hours of truck operation.

## **OPERATING HAZARDS**

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



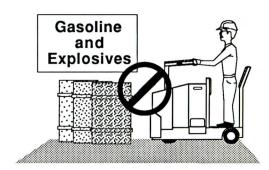
Safeguard pedestrians at all times. Do not drive a truck up to anyone standing in front of a bench or other fixed object.



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



Do not use this truck in explosion and fire hazard locations.



## **OPERATING HAZARDS**

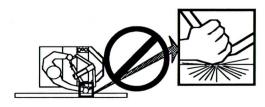
Report all accidents involving personnel, building structures, and equipment.



Do not block access to stairways and/or fire equipment.



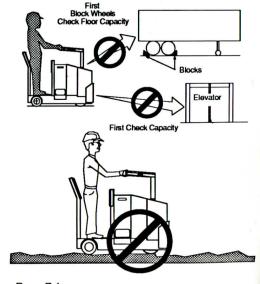
Keep hands and fingers inside the protected area of the control handle when traveling or turning while in the riding position.



Before entering trailers be certain that dock boards are secure and trailer wheels are blocked from rolling.

Do not enter trailers or elevators unless you know the allowable floor load limits.

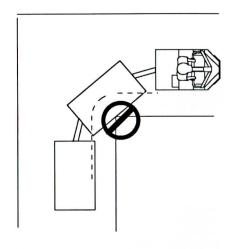
This truck is intended for smooth level floor use only.



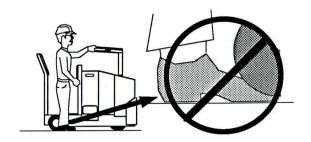
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## **OPERATING HAZARDS**

Use caution when making a right or left turn into an aisle. Remember the rear wheels do not follow the turn path of the front wheels. Also when making a turn allow for "corner-cutting" of the trailers.



When walking beside this truck be cautious not to get your feet under it or to have the wheels run over them.



## **BEFORE OPERATION CHECKS**

Inspect truck, looking for damage and leakage. DO NOT operate the truck until it is repaired.

Inspect steering for looseness or lack of lubrication.

Inspect drive unit. Look for leakage.

Check all wheels for flat spots or missing pieces.

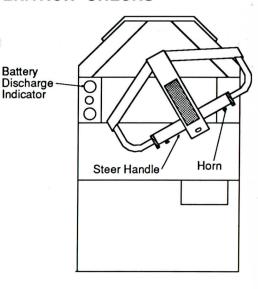
Make sure the operator's manual is kept with the truck.

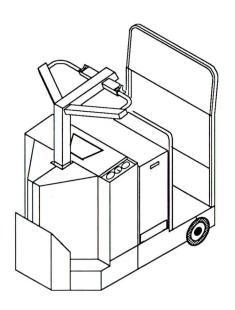
Check the condition of electrical cables and wiring and make a report of all worn or cracked cables.

Connect the battery to truck (if disconnected), and turn the key switch to the "ON" position.

Check the charge condition of the battery. If gauge reads in red area, have battery charged before operating truck.

Press horn button to check horn function. If horn does not function, report the failure and have it repaired before the truck is put into operation.





## **BEFORE OPERATION CHECKS**

Before operating the truck look in all directions to make sure your path is clear.

Put your foot on the brake pedal and press down. This will release the brake and energize the drive motor.

Turn handle until steering is in the desired direction of travel.

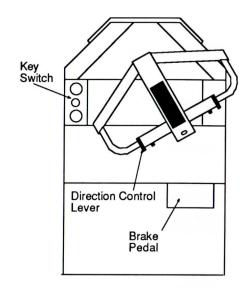
Turn directional control lever forward (away from you) slowly. The truck must move slowly in a forward direction. Push lever more to increase speed. Truck should accelerate smoothly to maximum speed. Return lever to "Neutral" position and remove your foot from brake pedal to stop truck.

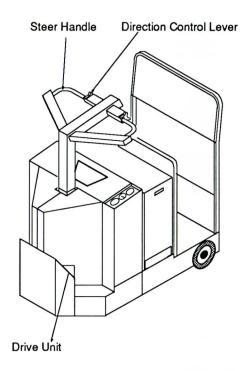
Turn directional control lever backwards (towards you) slowly to move truck in reverse direction. The truck must move slowly in reverse. Pull lever more to increase speed. Truck should accelerate smoothly to maximum speed. Return lever to "Neutral" position and remove your foot from brake pedal to stop truck.

Lift foot from brake pedal to apply brake and stop truck travel.

Brake action should be smooth and stop the truck in normal distance. Note any unusual brake operations.

Check steering. Turn the steering handle fully left then right. Steering should turn smoothly without binding or any loss of steering control.





## OPERATION OF TOW TRACTOR

#### Traveling

Connect the battery, if not connected.

Enter the operator's compartment.

Turn the key to the "ON" position.

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

Turn steering handle until steering is in the desired direction of travel.

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

Turn directional control lever slowly in the direction you want to travel.

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

Your truck can be operated while standing in the forward or reverse direction of travel.

Your truck can be operated while walking along side by turning the coast control switch to coast position and pushing jog control switches in the direction that you want to travel.

The jog control switches are located on either end of the control handle.

The rate of travel when using the jog control switch is about walking speed.

## **Parking**

Park trucks in authorized areas only.

Make sure truck does not block fire aisles, fire equipment, stairways, or walkways.

When leaving truck, make sure that circuit switch has been turned to "OFF" position and key had been removed. Remember to put chocks against the wheels if truck is left on an incline.

## **BATTERY RETAINMENT AND CARE**



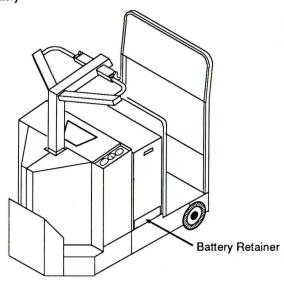
WARNING BATTERY SERVICE

BATTERY ACID IS VERY CAUSTIC.
BATTERY SERVICE MUST BE DONE BY TRAINED PERSONNEL.
BATTERY ACID CAN CAUSE SEVERE BURNS AND INJURY.

Make sure that the battery retainers are in proper position and secure.

Do not drive truck if the battery can move horizontally more than .50 inches. Provide solid blocking to limit battery movement to .50 inches.

Use battery of proper voltage. PT-50 12 volt battery PT-70 24 volt battery



## MAINTENANCE

#### DAILY

Charge, service and clean battery. Inspect visually for damage or leakage.

Inspect visually for loose or missing parts.

Check electrical interlock (brake switch) operation.

Check for smooth and proper functioning of all controls.

Tighten any loose bolts, nuts.

#### WEEKLY

Check transmission lubricant level by removing the pipe plug below intermediate gear bearing cover.
Use 80W90 APIGL-5 transmission grease.

Check battery water level.

Equalize battery charge (see manufacturer's instructions).

#### MONTHLY

Service all grease fittings (see lubrication chart).

#### SEMI-ANNUALLY

Thoroughly scrub battery.

Throughly clean machine.

Carefully inspect for loose or missing parts. Tighten or replace as required.

Inspect for wiring damage.

Check contactors.

Check brake adjustment.

Service drive motor (see manufacturers instruction's)

#### **ANNUALLY**

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

Check all adjustments.

#### **BRAKE**

This brake is electrically released and (spring) mechanically applied. It is to be repaired and adjusted only by a mechanic trained in its maintenance.

#### MASTER CONTROL SWITCH

This switch is located in the side of the handle. It controls the travel direction of the truck. This switch is not adjustable and if defective must be repaired or replaced.

#### DRIVE MOTOR

The commutator should be checked for dirt, wear or damage. Clean, repair or replace as required.

## LUBRICATION

LUBRICATION CHART			
Gear Case Transmission	Drain, flush and refill	B0 W-90/API GL-5	500 Hrs
Load Wheel Axle	Use lube gun and ad- aptor for flush type fitting	Tex. Ref. C&C #880	150 Hrs
Platform Casters	Use standard lube gun	Tex. Ref C&C #880	150 Hrs
Handle Bearings	Remove, clean & grease.	Tex. Ref. C&C #880	150 Hrs

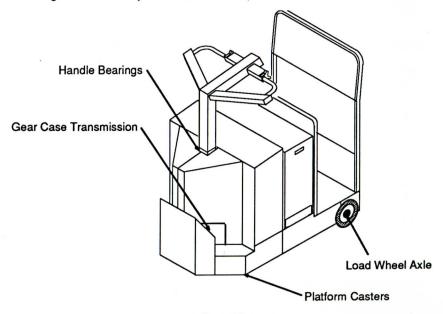
#### LUBRICATION

To obtain maximum life of any industrial equipment, a well planned maintenance program should be followed. The following is intended to provide guidelines for proper lubrication intervals as called out in the lubrication chart. Some operating conditions will require more frequent check and lubrication than listed. For example, applications with much dust or moisture will require modification of the schedule to fit that particular application.

High grade lubricants and fluids should be used. Those listed above are typical and any lubricant with equal specifications may be used.

#### FLUSH GREASE FITTING

Flush grease fittings are used throughout this electric truck. The adapter for greasing the fittings is available at your dealer under the part number 861632.



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Model Number
Serial Number
Attachments
Battery Number
Weight
Voltage
Truck Capacity
Customer Truck Number

Additional copies of this manual may be purchased from YOUR AURTHORIZED CLARK DEALER

# **CLARK**