### CLARK

## Industrial Truck Division



# OPERATOR INSTRUCTIONS

CLARKLIFT ROS-25-40

**ELECTRIC RIDER ORDER SELECTOR** 

BOOK NO. OI-322, 1st REV.

#### **TABLE OF CONTENTS**

| Foreword                | Page 1           |
|-------------------------|------------------|
| Model Views             | Pages 2 & 3      |
| Safety                  | Pages 4 thru 12  |
| Operator's Compartment  | Page 13          |
| Before Operation Checks | Pages 14 thru 16 |
| Operations              | Pages 17 thru 20 |
| Handy Reference Data    |                  |

#### **FOREWORD**

This manual will help the "Qualified Operator" become familiar with the vehicles major components, its operating controls, special features and the function(s) of each.

This publication is not a training manual but rather, a guide to help the "Qualified Operator" to safe and efficient operation of a Clark Forklift Truck.

Manuals to help select and train qualified operators are available at your Clark Dealer.

Clark Forklift Trucks are built to take hard work not abuse. They are built to be dependable, but — as with any other vehicle — they are only as good as the man behind the wheel and the men responsible for maintaining them.

Illustrations in this manual guide the operator through correct procedures of checking, starting, operating and stopping the lift truck.

Read it — Study it — Keep it handy.

#### **ROS-25**



| SPECIFICATIONS                                      |  |  |  |
|---|--|--|--|
| Model:ROS-25  |  |  |  |
| Weight: (Without Battery and With                   |  |  |  |
| [1829mm/3658mm] 72"/154"                            |  |  |  |
| FFL/TSU Upright)[1910Kg.] 4,210 lbs.                |  |  |  |
| Rated Capacity: [1250 Kg] 2500 pounds at            |  |  |  |
| [610mm] 24" load center (Computed from              |  |  |  |
| front edge of operator's platform). This            |  |  |  |
| capacity applies to upright MFH up to and           |  |  |  |
| including [3912mm] 154".                            |  |  |  |
| Travel speed empty [8.0Km/h] 5.0 MPH                |  |  |  |
| Travel speed loaded [6.8Km/h] 4.2 MPH               |  |  |  |
| Lift speed empty [.34m/s] 66.0 FPM                  |  |  |  |
| Lift speed loaded [.22m/s] 44.0 FPM                 |  |  |  |
| Lower speed empty [.33m/s] 65.0 FPM                 |  |  |  |
| Lower speed loaded [.30m/s] 60.0 FPM                |  |  |  |
| Battery (Standard) [24 volt] 24 volt                |  |  |  |
| Length (with [1016mm] 40" forks) [2643mm] 104-1/16" |  |  |  |
|   |  |  |  |
| Wheelbase [1311mm] 51-5/8" Width [1067mm] 42"       |  |  |  |
| Turning radius [1543mm] 60-3/4"                     |  |  |  |
| running radius [15-611111] 60-5/4                   |  |  |  |

#### **ROS-40**

#### **SPECIFICATIONS** Weight: (Without Battery and With [2108mm/4191mm] 83/165" FFL/TSU Upright) . . . . . . [2722Kg.] 6,000 lbs. Rated Capacity: [2000 Kg] 4000 pounds at [610mm] 24" load center (Computed from front edge of operator's platform). This capacity applies to upright MFH up to and including [4191mm] 165". Travel speed empty ...... [6.8Km/h] 4.2 MPH Travel speed loaded . . . . . . [5.8Km/h] 3.6 MPH Lift speed empty..... [.25m/s] 50.0 FPM Lift speed loaded ..... [.15m/s] 30.0 FPM Lower speed empty . . . . . . [.19m/s] 37 FPM Lower speed loaded ..... [.27m/s] 54 FPM Battery (Standard) ..... 24 volt 24 volt Length (with [1016mm] 40" forks) [2815mm] 110-13/16" Wheelbase . . . . . . . . . . . [1743mm] 68-5/8"

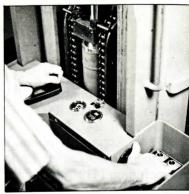
Turning radius . . . . . . . . . [1975mm] 77-3/4"



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- 1. Only thoroughly trained personnel should be authorized to operate the ROS (Rider Order Selector) model machines.
- 2. Learn how your truck is operated. Know its safety devices, how they function and how the special attachments, if any, work.



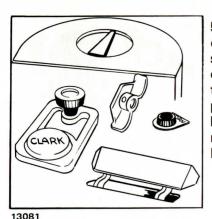
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- 3. The wearing of safety shoes is recommended. Dress suitably and avoid loose fitting clothing.
- 4. Avoid operating truck with wet or greasy hands or shoes.

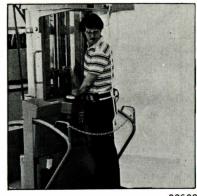


Page 4



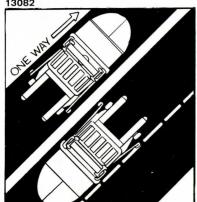
5. Test brakes, steering controls, horn, travel speed limit switch and devices for proper operation. Report any faulty performance immediately, and do not operate the machine until it is properly repaired.

6. Always look all around truck before moving it in any direction. Then remember to start and stop slowly.



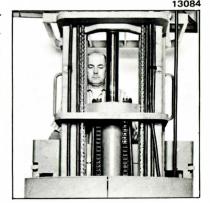
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7. Operate truck only in designated truck routes and keep operating aisles clear.

One-way aisles are recommended, if this is not practical in your operation, heed highway regulations and drive to right of aisle centerline. 8. Always be alert for pedestrians, other vehicles or obstacles in path of travel.



Code: OI-322 REV. SEPT. 81

Page 5

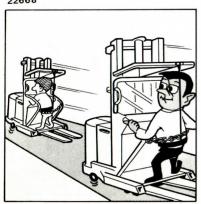


9. Sound horn at all 10. Always obey all corners, exits, entrances posted traffic rules and and when approaching warning signs. pedestrians.



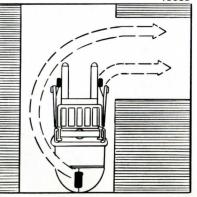
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11. Maintain a safe distance from the truck ahead of you at all times.
Assure ample distance to stop smoothly and safely.

12. Be careful of drive end swing when turning while in reverse. Be cautious of trail frame direction of travel when turning while in forward.



Page 6

Code: OI-322 REV. SEPT. 81



13. Always be aware of 14. The ROS truck can the position of the fork tips when truck is in motion.

easily tip over. Be extremely cautious when operating near edge of loading dock or ramp, and do not operate on slopes or ramps.



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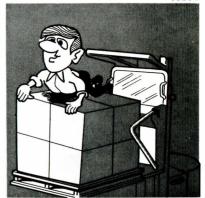
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to push or tow another. Never allow your truck to be pushed or towed by ROS (Rider Order Selecanother.

Should a truck become disabled and require moving, notify the proper authority immediately.

15. Never use your truck 16. Never allow stunt riding or indulge in horseplay while operating a tor) model machine.

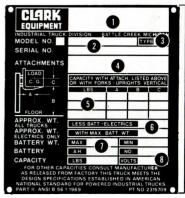


Page 7



17. Never carry unauthorized passengers.

18. Know the rated capacity of your truck and never exceed it or the rated capacity of the attachment if the truck is so equipped.

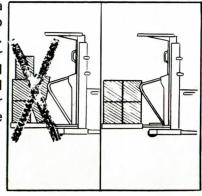


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overload and/or poor balance. If the safety of the load is questionable, Don't Move It.

19. Thoroughly inspect 20. Unstable loads are a load to be moved for hazard to you and to your fellow workers. Make certain that your load is well stacked and . . . evenly positioned across both forks. Never lift a load with only one fork.



Page 8

Code: OI-322 REV. SEPT. 81



13097



of unobstructed overhead clearance. Then lift gradually and smoothly.

Two lifting speeds are system (Paragraph 21) available and may be malfunction, for any selected and utilized as reason, and continue to operating conditions lift when button is rewarrant.

23. Always travel with lift or lower while truck is moving in any direction.

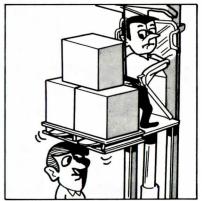
21. Always make certain 22. Load may be lowered by pressing "Lower" button.

> NOTE — Should the lift leased – press and hold "Lower" button to activate a lowering valve and stop the lifting of the load.

24. Do not permit anyload near the floor. Never one to stand or walk under elevated forks or attachment if truck is so equipped.



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Page 9

Code: OI-322 REV, SEPT, 81



25. Never reach around 26. Slow down for turns, or over windshield to ramps, bumps, cross place hands or fingers on upright. Stay in proper operator's position and at all times when visibilkeep hands and arms ity is restricted. within the confines of the operator's compartment.

aisles, congested areas, wet or slippery floors and

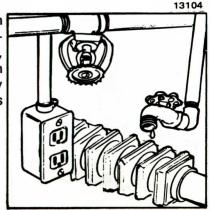


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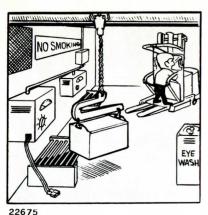
27. Know and observe floor load limits and overhead clearances in all ing, near water pipes, operating areas.

28. Use caution when placing loads, or travelelectrical wire, steam pipes, heaters or any other fragile or dangerous equipment or material.



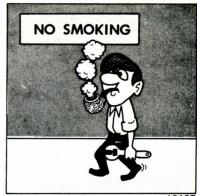
Page 10

Code: OI-322 REV. SEPT. 81

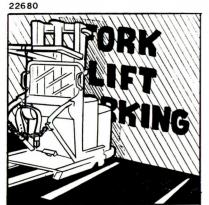


29. Batteries should be 30. Never smoke or serviced and recharged only in designated charging areas and only by personnel trained in safe bat- where fuel or other flamtery servicing practices.

allow anyone to smoke in areas where batteries are being charged or in areas mable fluids are used or stored.

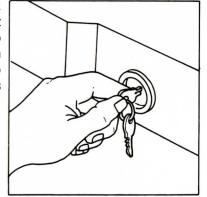


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31. Park trucks in authorized areas only. Lower forks to floor.

32. When leaving truck make certain that circuit switch has been turned to "OFF" and key has been removed. Remember to block wheels if truck is left on an incline.



Code: OI-322 REV. SEPT. 81

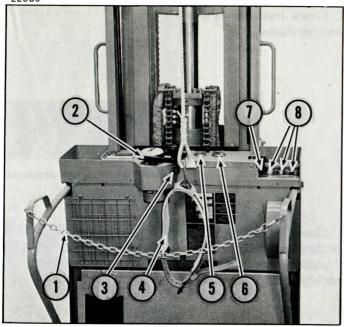


33. A scheduled planned maintenance and lubrication program should be followed.

All adjustments and repairs should be performed by thoroughly trained and authorized personnel only.

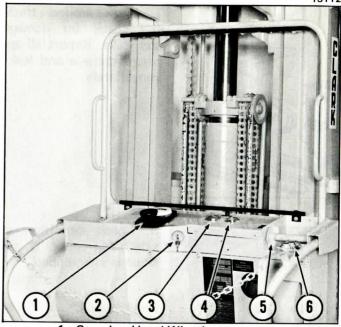
34. Prominently placed on every Clark truck is a list of basic rules for safe operation. These rules are for your protection. Be familiar with them.

# 



- 1. Safety Chain
- 2. Steering Hand Wheel
- 3. Circuit Locking Switch
- 4. Safety Harness

- 5. Battery Discharge Indicator
- 6. Hour Meter
- 7. Speed, Forward & Reverse Switch
- 8. Lift, Lower & Horn Buttons



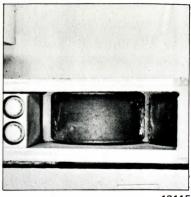
- 1. Steering Hand Wheel
- 2. Circuit Locking Switch
- 3. Hour Meter
- 4. Battery Discharge Indicator
- 5. Speed, Forward & Reverse Switch
- 6. Lift, Lower and Horn Buttons

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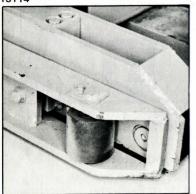
#### **Before Operation**



- and check for damage and leaks. Report all apparent damage and leaks immediately.
- 1. Walk around truck 2. Check trail wheels and tires for damage.





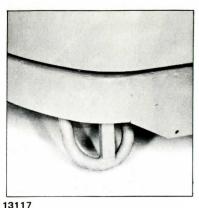


- 3. Check condition of 4. Check swivel casters side guide rollers if machine is so equipped.
  - for damage and condition of caster wheel and tire if machine is so equipped.



Page 14

#### **Before Operation**

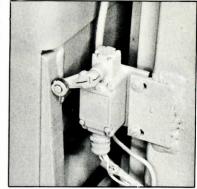


5. Check condition of stabilizer skids if machine is so equipped.

6. Check condition of 1-A cut-out switch. Make certain that switch arm is

6. Check condition of 1-A cut-out switch. Make certain that switch arm is operable and that roller is in contact with cam portion of carriage.

(1-A cut-out switch is travel speed limit switch located on lower right hand upright outer rail.)



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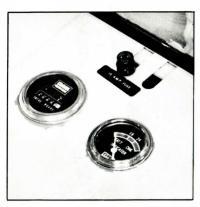


7. Enter operator's compartment, hook the chain to the safety bars, and put the safety belt on.

8. Insert key in circuit locking switch and turn key to "ON" position.

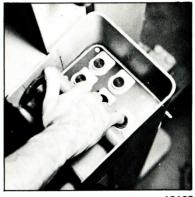


#### **Before Operation**



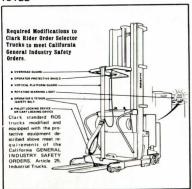
9. Check battery charge 10. Press horn button to indicator (if truck is so determine if the horn is equipped) and hour operational. meter. Make certain that they are undamaged and functioning properly.

If indicator needle does not remain in the "Green" during operation - Stop truck as battery does not have sufficient charge.



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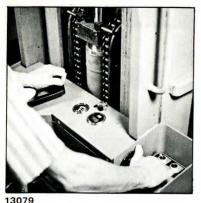
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11. Check illustrated optional features to insure that they are undamaged and functioning properly.

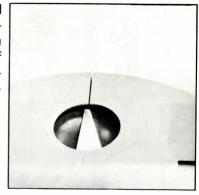
12. Each shift operator must complete the daily check list (available from vour Clark dealer). Make all the checks listed and give completed check list to designated authority.

| DUIPMI         | ELECT  | RIC TRUCK<br>AILY CHECKLIST   |  |
|----------------|--|---|--|
|                | Check Before   | Start Of Each Shift   |  |
|                |  | Date  |  |
| uck N          | 0  |   |  |
| erator         | Sup  | ervisor's OK  |  |
|                |  |   |  |
|                |  |   |  |
| our Me         | eter Reading:  |   |  |
| ert of         | Day End of I   | Day Hrs. for Day  |  |
|                |  |   |  |
|                | Roses Accordingly OK Needs Attention or Repair   |   |  |
|                | ▼ Boxes Accordingly OF   | Needs Attention or Repair   |  |
|                |  | Operational Checks:   |  |
| Visual Checks: |  |   |  |
| _              |  |   |  |
|                | Obvious damage and leaks   | Horn  |  |
|                | Tire condition   | Steering  |  |
|                | Tire condition  Battery plug connection  | Steering Service brakes   |  |
|                | Tire condition   | Steering Service brakes Battery Load Test   |  |
|                | Tire condition  Battery plug connection  Note: Be sure the battery plug  | Steering Service brakes Battery Load Test Note: Watch battery indicator while holding tilt lever on full back tilt.   |  |
|                | Tire condition  Battery plug connection  Note: Be sure the battery plug connection is tight.  Head and tail lights   | Steering Service brakes Battery Load Test Note: Watch battery indicator while holding tilt lever on full back tilt. If needle falls to red area, battery  |  |
|                | Tire condition  Battery plug connection  Note: Be sure the bettery plug connection is tight.  Head and tail lights  Warning lights                                     | Steering Service brakes Battery Load Test Note: Watch battery indicator while holding tilt lever on full back tilt.   |  |
|                | Tire condition Battery plug connection Note: Be sure the battery plug connection is tight.  Head and tail lights  Warning lights  Hour meter                           | Seering Service brakes Battery Load Test Note: Watch battery indicator while Holding till twer on hill lack tilt. If needle falls to red area, bettery down't have sufficient charge to operate truck properly.                 |  |
|                | Tire condition Battery plug connection Note: Be sure the bettery plug connection is tight. Head and tail tights Warning lights Hour mater Other guages and instruments | Steering Service brakes Battery, Load Test Note: Wetch battery indicator while hotsing tilt twee on full back tilt. If needle falls to red area, battery down't have siftlenet charge to greate to the property.  Parking brake |  |
|                | Tire condition Battery plug connection Note: Be sure the battery plug connection is tight.  Head and tail lights  Warning lights  Hour meter                           | Seering Service brakes Battery Load Test Note: Watch battery indicator while Holding till twer on hill lack tilt. If needle falls to red area, bettery down't have sufficient charge to operate truck properly.                 |  |



13. Assume proper ROS 14. Turn steer hand operator's position with left hand on steering tion indicator points in hand wheel and right the desired direction of hand on hand grip at control cavity.

wheel until steering direcforward travel or opposite the desired line of reverse travel.



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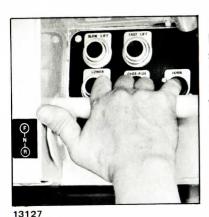


15. Look in all directions to insure that path of travel is unobstructed.

16. Place left foot on brake pedal and depress. This will release brake and activate a switch making power available to the drive motor through the directional switch.

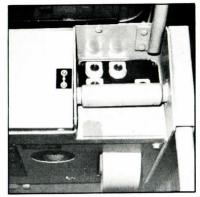


Code: OI-322 REV. SEPT. 81



17. Place thumb of right hand on direction control switch 'wing' (top "wing" for forward and bottom "wing" for reverse) for the desired direction of travel.

18. Some models are equipped with "twist grip" directional and speed control. On these models twist grip forward or backward for desired direction of travel.



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19. Carefully depress selected switch wing (or twist grip handle on some models) to start travel in the desired direction. Further pressing (or twisting) will increase travel speed.

20. To stop truck let directional and speed control switch return to neutral position by releasing pressure on switch "wing" or twist grip and lift foot from brake pedal. This will activate switch cutting power to drive motor and apply brakes.



Page 18

Code: OI-322 Jun 73

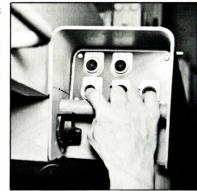


21. Before lifting make certain of overhead clearance then press lift button.

Two lifting speeds are available (fast lift and slow lift) and may be selected and utilized as operating conditions warrant.

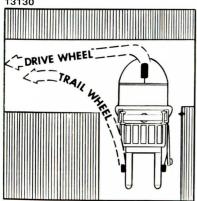
22. To lower load press button marked lower.

NOTE — Should the lift system (Paragraph 19) malfunction, for any reason, and continue to lift when lift button is released, press and hold "LOWER" button to activate a lowering valve and stop the lift.



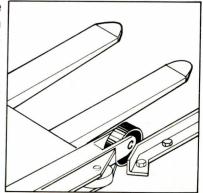
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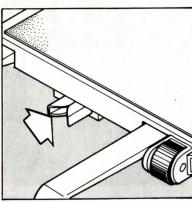


23. Use caution when making right or left turn into aisle. Remember that trail wheels do not follow the turn path of the drive wheel. They will tend to "cut" the corner.

24. On trucks which are optionally equipped with side guide rollers, particular attention must be applied to insure aisle entry is made load wheels first with guide rollers parallel to guide rail.



Code: OI-322 Jun 73



13132

25. On models which are optionally equipped with a pallet lock mechanism make certain that lock is secure before attempting lift.

#### NOTE

Some models are optionally equipped with a no slack switch, which stops current to the drive motor if the lift chains should go slack. If your truck is not equipped with it, make sure the forks are clear of racks, or other obstruction, *BEFORE* pushing the 'lower' button, to prevent the platform and load from falling.

#### For Handy Reference

#### RECORD THE FOLLOWING INFORMATION PERTAINING TO YOUR TRUCK.

| Model No                                      |  |
|---|--|
| Serial No                                     |  |
| Attachments                                   |  |
| Truck Weight W/Battery                        |  |
| Truck Rated Capacity                          |  |
| Gross Truck Weight (W/Battery and Rated Load) |  |
| Customer Truck Identification No              |  |

#### CLARK EQUIPMENT COMPANY INDUSTRIAL TRUCK DIVISION CUSTOMER SERVICES BATTLE CREEK, MICHIGAN 49016

Additional copies of this manual may be purchased from:

YOUR AUTHORIZED CLARK DEALER