## Operator's Instruction Manual



EM 10 thru 15S



Book No. 3796514 OI-505, 1st REV.





### **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 completely trained in the safe operation of lift trucks.

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

This manual will help you learn how to operate your lift truck. This manual describes the controls, special features and the functions of each control.

This manual is not a training manual, it is a guide to help authorized operators safely operate a lift truck. Illustrations in this manual show the operator correct procedures for checking, starting, operating and stopping the lift truck.

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

Do not make any repairs to this lift truck unless you have been trained in lift truck repair procedures and authorized by your employer.

MANUALES DE INSTRUCCION PARA OPERADORES IMPRIMIDOS EN ESPANOL SON OBTENIDOS DE SU DISTRIBUIDOR CLARK.

BETRIEBSANLEITUNGHANDBUCHEN IN DEUTSCH DRUCKEN DER IHRE CLARK VERTEILER ERHALTLICH WERDEN.

MANUELS D'INSTRUCTION POUR OPERATEURS IMPRIMEES EN FRANCAIS SONT OBTENABLES DE VOTRE DISTRIBUTEUR CLARK.

### TABLE OF CONTENTS

Operator's Warning						•	•		•	•	•	•	•	•	•	•			•	•	Page	0
Foreword									•							•	•		•		Page	1
Drive Safely																		•			Page	3
ITA Recommended Practices																			•		Page	4
Portraits								•	٠								•		•		Page	5
Safety																•	•		Pa	iges	; 6-	16
Operator's Compartment .																				. F	age	17
Before Operation Checks																			Pa	iges	18-	24
Operation	•													•					Pa	iges	25-	30
Parking Instructions		•																	Pa	iges	31-	33

#### **PRIVE SAFELY**

BEFORE YOU OPERATE THIS LIFT TRUCK, READ AND UNDERSTAND THE INSTRUCTIONS, SIGNS AND MESSAGES IN THIS MANUAL AND ON THE LIFT TRUCK.

INJURY OR DEATH TO YOU OR OTHER PERSONNEL WILL OCCUR IF YOU DO NOT FOLLOW THESE INSTRUCTIONS AND MESSAGES.

STAY ALERT!

#### SUMMARY OF SAFE OPERATING PROCEDURES

- 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, Lights, Battery, Controller, Lift and Tilt Systems including forks and attachments, chains, cable and limit switches, brakes, steering mechanism, fuel system, and guards.
- 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 operate truck without overhead guard, unless conditions prevent use of a guard. Use special care if operation without overhead guard is required.
- 5. Do not handle loads which are higher than the load backrest or load backrest extension unless load is secured so that no part of it could fall backward.
- 6. 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.

- 7. Do not overload truck. Check capacity plate for load weight and load center information.
- 8. Start, stop, travel, steer and brake smoothly. Slow down for turns and on uneven or slippery surfaces that could cause truck to slide or overturn. Use special care when traveling without load as the risk of overturn is greater.
- 9. Elevate forks or other lifting mechanism only to pick up or stack a load. Lift and lower with mast vertical or tilted slightly back NEVER FORWARD. Watch out for obstructions, especially overhead.
- 10. Operate tilting mechanism slowly and smoothly. Do not tilt forward when elevated except to pick up or deposit a load. When stacking, use only enough backward tilt to stabilize load.
- 11. Travel with load or lifting mechanism as low as possible and tilted back. Always look in direction of travel. Keep a clear view and when load interferes with visibility, travel with load or lifting mechanism trailing (except when climbing ramps).

- 12. Use special care when operating on ramps travel slowly, and do not angle or turn. When truck is loaded, travel with load uphill. When truck is empty, travel with lifting mechanism downhill.
- 13. Observe applicable traffic regulations. Yield right-of-way to pedestrians. Slow down and sound horn at cross aisles and wherever vision is obstructed.
- 14. When using forks, space forks as far apart as load will permit. Before lifting, be sure load is centered and forks are completely under load.
- 15. Do not allow anyone to stand or pass under load or lifting mechanism.
- 16. Do not lift personnel except on a securely attached specially designed Work Platform. USE EXTREME CARE WHEN LIFTING PERSONNEL. Place mast in vertical position, place truck controls in neutral and apply brakes. Lift and lower smoothly. Be available to operate controls as long as personnel are on the Work Platform. Never transport personnel on forks or Work Platform.
- 17. Before getting off truck, neutralize travel control, fully lower lifting mechanism and set parking brake. When leaving truck unattended, also shut off power.

#### EM 10-12-15S



LIFTING CAPACITY

EM10 1000 Kg 2000 Lb

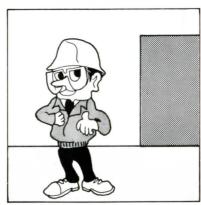
EM12 1250 Kg 2500 Lb

EM15 1500 Kg 3000 Lb



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1.Only physically qualified and trained personnel can operate Clark lift trucks.



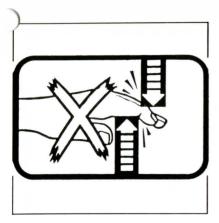
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2. Do not wear loose-fitting clothing when operating lift truck. Operators should wear suitable clothing with a hard hat, safety glasses and safety shoes.



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3. KEEP AWAY FROM FORKS
Do not ride on or stand
under forks or attachments.Personal injury will
result if personnel stand
on or under raised forks
or attachments.



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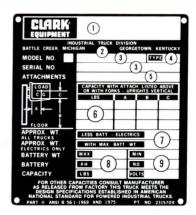
4. KEEP HANDS OFF Do not reach into or climb on the upright. Personal injury will result if any part of your body is put between moving parts of the upright.

#### SAFETY



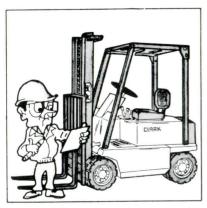
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5. Prominently placed on every Clark truck is a list of basic rules for operation. These rules are for the protection of you and others in your operating area. Be familiar with them.



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6. Know the capacity of your truck and its attachments (if any) and never exceed it. Study your truck data capacity plate and learn the facts stamped in areas 1 through 9.



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7. Check your lift truck with the use of the driver's daily checklist, before starting your daily operations. Also know your truck completely —— its operation, safety devices, how they function, and special attachments, if any. Do not operate damaged or faulty lift truck.



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8. Do not operate truck in unaethorized areas. Always obey all traffic signs, right-of-ways to pedestrians, etc. Slow down, sound horn at cross aisles or wherever vision is obstructed.



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9. Do not operate truck without an overhead guard and load backrest extension to protect you from falling objects. The overhead guard will protect you from objects but will not withstand the impact of a falling capacity load.



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10.Do not start, stop, travel, steer, brake or change directions suddenly.Truck can tip up or over, causing damage to truck, load or personal injury. Operate truck smoothly, slow down when turning, and avoid uneven or slippery surfaces. Use special care when traveling without load as risk of tipping is greater.

#### SAFETY



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11. Do not use your lift truck to lift personnel.



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12. Never operate a lift truck with wet or greasy hands or shoes.

# CLIARK

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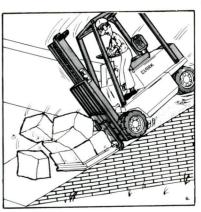
13. Travel with mast tilted back to cradle the load and keep forks as low as possible. Keep a clear view in direction of travel.

#### SAFETY



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14. Do not drive forward when handling loads that restrict your vision. Operate your truck in reverse to improve visibility under this condition, except when climbing ramps.



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15. Do not drive on ramps with load downhill. This could cause truck to tip up and lose control, resulting in an accident. Travel with load uphill, and when truck is empty, travel with lifting mechanism downhill.

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16. Do not angle or turn truck while operating on a ramp, truck may lose stability and tip over. Travel slowly and operate straight up and down ramps.

#### SAFETY



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17. Do not raise load higher than necessary when stacking or unstacking loads or use excessive forward or reverse tilt. This could cause truck to tip up, resulting in damage or personal injury. Cradle the load back and only raise slightly higher than stacking surface.



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18. Do not permit any one to stand or pass under the load or lifting mechanism.



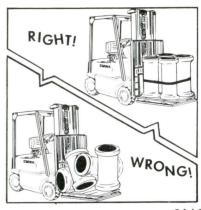
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19. Do not operate truck without forks completely under load, or lift load with one fork. Space forks as far apart as load will permit, with forks completely under load and centered.



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20. Do not handle loads which are higher than the load backrest extension. They could fall off, endangering your life and others.



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21. Do not handle unstable loads, for they are a hazard to you and others. Make sure load is well stacked and evenly positioned across both forks. Use special care when handling long, high or wide loads to avoid losing the load, striking bystanders or tipping truck over.



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22. Do not overload truck or add counterweight to lift truck. Know lift truck load capacity stamped on nameplate. Overloading can cause the truck to tip over, damage the truck or cause other hazards.



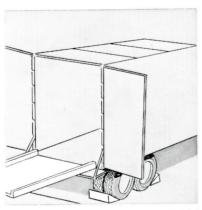
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23.Do not travel with load raised. This could cause the truck to tip over, load to drop or damage overhead obstructions, upright and load. Watch out for water pipes, lights, heat ducts, etc., when stacking load.



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24. Use extreme caution when you operate truck near edge of dock. This could cause truck to fall off, resulting in personal injury. Maintain a safe distance from the edge of loading docks when operating truck.



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25. Do not operate your truck over bridge plates without checking them first. Check wheels of vehicles being loaded or unloaded. Check bridge plates for adequate strength, placement, and being secure.



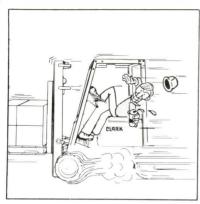
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26. Do not operate your truck from outside the driver's compartment. Keep hands on designated grips and feet and arms within operator's compartment.



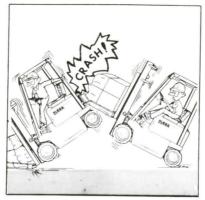
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27.Do not carry passengers on a lift truck. The quick response of a lift truck will cause riders to fall off or they could distract you and cause an accident.



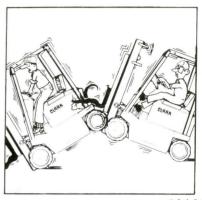
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28. Careless driving is dangerous. It can cause damage to equipment and personal injury. A good driver never indulges in stunt driving or horseplay.



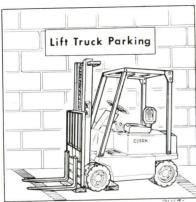
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29. Do not operate your truck closely behind another or an accident could occur, causing damage to equipment or injury to yourself and others. Always maintain a safe distance for stopping under any conditions.



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30. Do not use or allow your lift truck to be pulled or pushed by another lift truck. This could cause damage to both trucks or personal injury. Always notify the proper authority immediately after a lift truck becomes disabled and requires moving.



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31. After operating park truck in designated parking area. Before getting off truck, rest forks on floor, place directional lever in neutral position, set parking brake and shut off power. Remove key switch and where necessary block drive wheels to prevent roll.

## **OPERATOR'S COMPARTMENT & CONTROLS**



21495

- 1. Directional Control Lever
- 2. Hour Meter
- 3. Battery Discharge Indicator
- 4. Horn Button
- 5. Key Switch
- 6. Parking Brake
- 7. Steering Handwheel
- 8. Pylon Release Lever
- 9. Brake Pedal
- 10. Accelerator Pedal
- 11. Seat and Battery Cover Release Latch
- 12. Lift Control Lever
- 13. Tilt Control Lever
- 14. Auxiliary Control Lever
- 15. Emergency Battery Disconnect
- 16. Operator's Manual

# 

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1. Each shift operator must complete an operator's daily checklist (available from your Clark Dealer). Make all checks listed and give completed checklist to designated authority.



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2. Walk around truck and visually check for damage and leaks. Note all damage and leaks on checklist.



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3. Check the condition of drive wheels and tires. Drive tire pressure must be [970 kPa] or 140 psi and steer tire pressure must be [790 kPa] or 114 psi.



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4. Check condition of steer wheel and tire assembly. Note any apparent damage on checklist.



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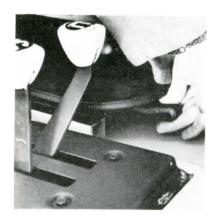
5.Check condition of overhead guard and load backrest extension.

Make certain they are properly positioned and mounted securely.



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6.Remove blocks from drive wheels, enter operator's compartment and seat yourself.



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7. Seat adjustment is accomplished by releasing short lever under front edge of seat.

Position seat to provide easy access to all controls, free lever and make sure seat is locked in desired position.



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8. Apply pressure to brake pedal with either foot. Pedal should be "firm." If pedal is "spongy" or "fades" under pressure do not operate the truck. Report brake deficiency immediately.



19541

9. Insert key into switch and turn clockwise to "on" position.



10720

10. Press horn button to determine if horn is operational.

If horn does not function properly report it immed—iately to designated authority.



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11. Check hour meter to insure that it is undamaged and functioning properly.

Report any malfunction or damage to the proper authority.



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12. Check battery discharge indicator for damage. Needle should remain in green area, check this meter frequently during operation.

Report any malfunction immediately.



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13.Gently pull back on tilt control lever and hold.When upright reaches full back tilt check position of discharge indicator needle and release lever. If needle does not remain in green, battery does not have sufficient charge. Push forward on lever to return upright to near vertical position and release lever.



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14. Check for adequate unobstructed overhead clearance. Gently pull lift control lever back.Observe upright lift and report any erratic or unusual operation. Release lever to stop lift.



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15. Push forward on lift control lever and observe descent of upright. When forks reach floor release lever, it will return to neutral and stop upright lowering. Report any erratic or unusual operation immediately.



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16. Check to insure unobstructed forward path of travel.

Apply service brake.

Place directional control switch lever in position for forward travel.



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17. Check steering operation by turning handwheel to right and then to left. Return handwheel to proper position for desired direction of travel.



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18. Keep foot on service brake pedal and release hand parking brake.

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19. Place right foot on accelerator (release service brake if operating with left foot) and press gently until truck begins to move forward.

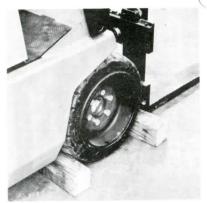
Release accelerator and apply service brakes to stop truck.

#### **OPERATION**



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20. Place directional control lever in reverse position, gently press accelerator pedal with right foot until truck moves backward. Release accelerator pedal, apply hand brake and move directional control lever to neutral.



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21. Turn key switch counterclockwise to "off" position and remove key. Dismount from truck and block drive wheels to prevent accidental roll.



19938

1. Remove blocks at drive wheels, enter operator's compartment and seat yourself in operator's seat.

#### **OPERATION**



19503

2. Adjust operator's seat to position which is comfortable for you and provides easy access to all hand and foot controls.

Make sure seat locks in selected position.



19541

3. Insert key into switch and turn clockwise to "on" position.



19502

4.Place foot on brake pedal and push down to apply the service brakes.

#### **OPERATION**



19936

5. Release hand parking brake.



19545

6. Place directional control switch lever in proper position for desired direction of travel. Push to front for forward or pull back for reverse.



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7. Check all around truck to insure that desired path of travel is unobstructed.

#### **OPERATION**



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8. Carefully pull back on lift control lever to raise forks from floor slightly.



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9. Pull back on tilt control lever to tilt upright back slightly and raise fork tips from floor.

#### **OPERATION**



19939

10. Place right foot on accelerator pedal and press gently until truck begins to move in desired direction. Depress accelerator smoothly until speed is increased to desired level.



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11. Be alert for pedestrians, other trucks or obstacles in your path of travel.



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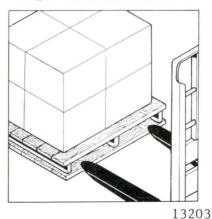
12.Allow adequate stopping (plugging) distance before changing direction of travel from forward to reverse or reverse to forward.



19502

13. To stop truck release accelerator pedal and place right foot on service brake pedal. Gently press down on brake pedal to come to a smooth stop.

#### **OPERATION**



14. Remember to enter load slowly and squarely.

Load should be centered and forks should be near outside edges.



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15. If they are not, adjust them by lifting fork lock lever and sliding forks to desired position.

#### **OPERATION**



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17.Be constantly alert for unusual or erratic operation.

Report any malfunction immediately so that adjust-ments or repairs may be performed by thoroughly trained and qualified personnel.



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16. Then remember to lower lever to lock forks securely into notch atop fork bar.

# Lift Truck Parking

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1. Park lift trucks in designated parking areas only.
Do not obstruct traffic

#### **PARKING**



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2.Place directional control switch in "NEUTRAL" position.



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3.Lower forks or attachment to floor.

lanes or aisles.

#### **PARKING**



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4. Tilt upright forward until fork tips rest on floor.



19936

5. Apply hand parking brake.



19541

6.Turn key switch counterclockwise to "off"position and remove key.

#### **PARKING**



19940

7. Carefully dismount from truck and where necessary block drive wheels to prevent accidental roll.





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



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5CG Printed in U.S.A.