

OPERATOR INSTRUCTIONS

NP-500 NARROW AISLE REACH TRUCK

2500/3500/4500 LBS, RATED CAPACITIES



CLARK EQUIPMENT COMPANY / INDUSTRIAL TRUCK DIVISION

BATTLE CREEK, MICHIGAN 49016

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FOREWORD

This manual will help the "Qualified Operator" become familiar with the vehicle's 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.

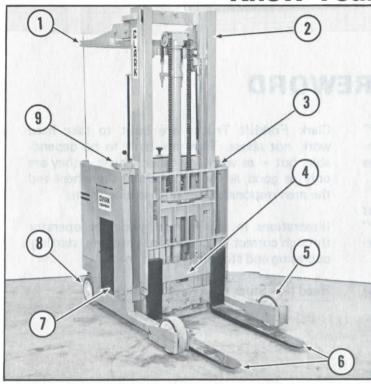
Operator training manuals are available at your Clark Dealer.

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.

Know Your Truck



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NP500 Narrow Aisle Reach Truck 2500/3500/4500 Lb. Rated Capacities

- 1. Overhead Guard.
- 2. Upright Assembly.
- 3. Load Backrest Extension.
- 4. Fork Carriage.
- 5. Load Wheels.
- 6. Load Forks.
- 7. Battery Compartment.
- 8. Drive and Steer Wheels.
- 9. Operator's Compartment.



1. Only physically qualified and thoroughly trained personnel shall be authorized to operate powered lift trucks.

2. 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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3. Learn how your truck is operated. Know its safety devices, how they function and how the special attachments, if any, work.

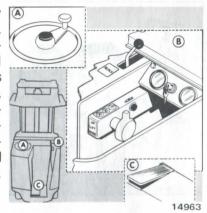
4. The wearing of "hard hats", safety glasses and safety shoes is recommended. Dress suitably and avoid loose fitting clothing.





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

6. Before operating any lift truck, test the horn, brakes, steering, hydraulic controls, directional controls, speed controls and special attachments, if any, for proper operation. Report any unusual or improper operation to designated authority immediately.



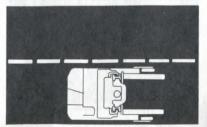
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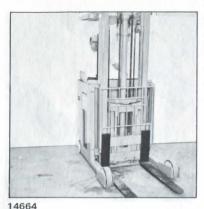


7. Always look all around the truck before moving it in any direction. Then remember to start and stop slowly and smoothly.

8. Operate the truck only in designated truck routes and keep operating aisles clear. Oneway traffic is recommended. If this is not practical in your operation heed highway regulations and drive to right of aisle centerline.







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

10. Sound horn at all corners, exits, entrances and when approaching pedestrians or bystanders.



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11. Obey all posted traffic rules and warning signs.

12. Maintain a safe distance from the truck ahead of you at all times.

Assure ample distance to stop smoothly and safely should the need arise.

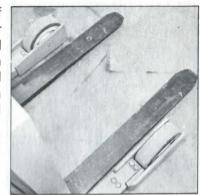


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13. Be aware of rear end swing and be alert to prevent rear end swing damage to material in your operating area.

14. Always be sure of the position of your fork tips and load wheels when truck is in motion. Be alert to avoid striking anything with fork tips or load wheel outriggers.



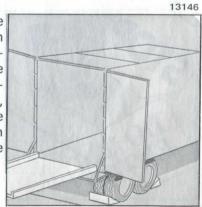
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15. Be extremely cautious when operating truck near edge of loading dock.

16. Make sure vehicle being entered has been blocked to prevent accidental roll. Bridge plates must have adequate strength, width, quard rails each side (minimum 3" high recommended), and be properly secured.



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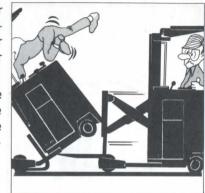
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17. Never allow stunt riding or indulge in horseplay while operating a fork lift truck.

18. Never use your truck to push or tow another. Never allow your truck to be pushed or towed by another.

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



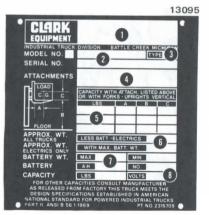
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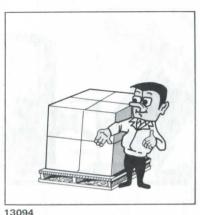


19. Never carry unauthorized passengers. The quick response of a lift truck may cause riders to fall off. Besides, they distract you and this is dangerous.

20. Know the rated capacity of your truck and its attachment (if any) and never exceed it. Study your truck data capacity plate and learn the facts stamped in areas 1 through 8. Note information stamped in area 3 and refer to item 46 on page 14.

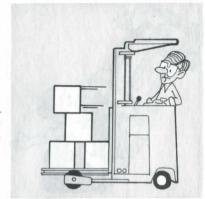


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21. Thoroughly inspect all loads to be moved for overload and/or poor balance. If the stability of a load is questionable, don't move it.

22. Unstable loads are a hazard to you and to vour fellow workers. Always make certain that your load is well stacked and evenly positioned across both forks. Never attempt to lift a load with only one fork.



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23. Before lifting, check to insure adequate unobstructed overhead clearance.

Gradually and smoothly pull up on lift/lower control arm. Smoothly return lever to neutral position to stop lift at desired level.

24. Push down on lift/ lower control arm to lower load.

Descent of load may be stopped at desired level by smoothly returning lever to its neutral position.



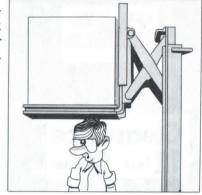
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25. Always travel with load near floor (carriage should be tilted back to cradle load if truck has been optionally equipped with tilt).

Never lift or lower load while truck is in motion.

26. Never permit anyone to stand or walk under elevated forks or other load engaging attachments.



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27. Never reach around or over windshield to place hands or fingers on upright. Stay in proper operator's position and keep hands. arms, feet and legs within the confines of the operator's compartment.

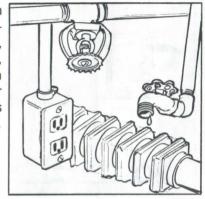
28. Slow down for turns, ramps, bumps, cross aisles, wet or slippery floors and at all times when visibility is restricted.





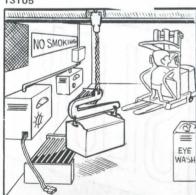
29. Know and observe floor load limits and overhead clearances in all operating areas. Make certain that floors of boxcars, trucks, trailers and elevators are adequate before entering.

30. Use caution when placing loads or traveling near water pipes, overhead sprinklers, electrical wiring, steam pipes, heaters or other fragile or dangerous equipment or material.



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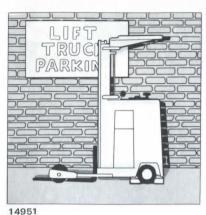
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31. Batteries should be serviced or recharged only in designated charging areas and only by personnel thoroughly trained in safe battery servicing practices.

32. Never smoke or allow anyone to smoke in areas where batteries are being charged or in areas where fuels or other flammable fluids or materials are used or stored.





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33. Park lift trucks in designated areas only. Lower forks to floor (tilt carriage forward to place fork tips on floor if truck has been optionally equipped with tilt).

Place directional control in neutral, remove switch key and block drive wheels to prevent accidental roll.

35. When handling bulky loads which, because of their size and shape, restrict your vision - operate your truck in reverse to improve visibility.

34. If truck is to be left unattended make certain that traffic aisles are unobstructed and leave truck as described in item 33.



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36. Overhead guards and load backrest extensions are for your protection. Make certain that they are securely mounted and undamaged before operating your truck.

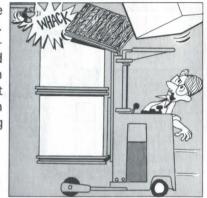


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37. Lift trucks are not designed as personnel elevators. If your truck must be used this way always use a properly designed safety platform securely attached to the forks.

38. Don't handle double tiered loads. They are unstable, difficult to control and dangerous. Even an overhead guard can't fully protect you from heavy objects falling from these heights.



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39. Overloading is extremely dangerous. You don't have complete control of your truck and you are causing unnecessary wear.

If you are in doubt about the load weight being within the rated capacity range of your truck - don't move it. break it down.

40. Don't pass other trucks traveling in the same direction at intersections, blind spots or other dangerous locations.



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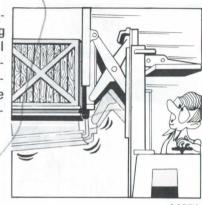


41. Be especially careful when traveling in reverse and turning. Maneuvering in tight quarters can be a pain. Always keep your body

within the running lines

of the truck.

42. Never operate pantograph while traveling with load. Even well stacked loads can be unstable under this condition. Do not drive with pantograph extended.



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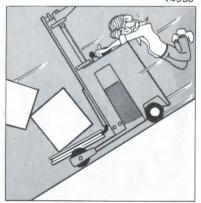
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43. Always brake to a full stop before reversing direction of travel. Your truck can reverse quickly, you can't.

44. It can be risky to drive down a ramp load first. Your load can tip forward if the ramp is steep enough. Always back down a ramp to cradle the load when there is a danger of tipping the load.

Never turn sideways on an incline.





loads of long lumber, pipe, etc.

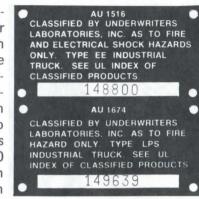
Always carry load close to floor (tilt carriage back to cradle load if your truck has been optionally equipment with tilt) whenever possible.

45. Be extremely care-

ful of load end swing

when operating with

46. Know the UL 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. Refer to item 20 on page 7 for location of UL construction type.



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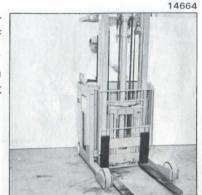
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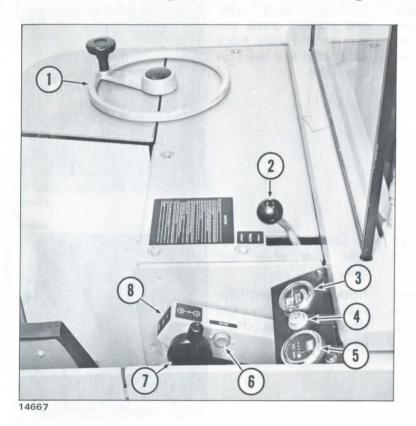
47. Follow a scheduled planned maintenance and lubrication program.

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

48. Remember - your safety and the safety of others depends on you. Keep your mind on operating your lift truck.



Operator's Compartment & Controls



- 1. Steering Handwheel.
- Reach Control Lever. (Additional optional hydraulic control levers, if any, will be positioned to the left of this lever).
- 3. Battery Charge Indicator.
- 4. Key Switch.
- 5. Hour Meter.
- 6. Horn Button.
- 7. Forward/Reverse and Speed Control.
- 8. Lift/Lower Control Arm.

DRIVER'S	TRIC TRUCK DAILY CHECKLIST
Check Bet	ore Start Of Each Shift
	Date
Truck No.	
Operator: 5	iupervisor's OK
	OK Needs Attention or Repair Operational Checks:
Obvious damage and leaks	Horn
Tire condition	Steering
Battery plug connection Note: Be sure the battery plug	Service brakes
connection is tight.	Battery Load Test Note: Watch battery indicator while
Head and tail lights	holding tilt lever on full back tilt.
Warning lights	If needle falls to red area, battery doesn't have sufficient charge to
Hour meter	operate truck properly.
Other guages and instruments	Parking brake
Battery Discharge indicator Note: Key on, needle should	Seat brake

- 1. Each shift operator must complete an operator's daily check list (available from your Clark Dealer).
- 2. Walk around truck and visually check for damage and leaks. Note all damage and leaks on check list.



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3. Check condition of drive/steer wheel and tire.

Note any apparent drive/steer wheel or tire damage on the check list.

4. Check condition of idler steer wheel and tire.

Note any apparent idler steer wheel or tire damage on the check list.



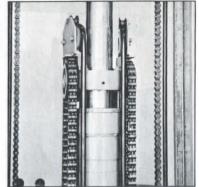
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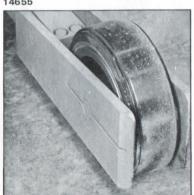
5. Check battery retainers to make certain they are undamaged and properly positioned.

6. Visually check condition of lift chains, hoses, sheaves and retainers. Note condition of these items on your check list.



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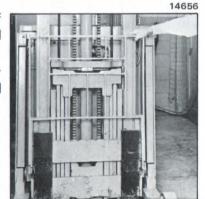


7. Check condition of load wheels and tires.

Note any apparent load wheel or tire damage on the check list.

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

Make certain that they are properly positioned and secured.



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9. Remove blocks from drive wheel and carefully enter operator's compartment.

Use caution not to step on brake pedal when entering as this will release brake and cause truck to roll if parked on an incline

10. Visually check battery connector to make certain that it has been properly connected and is undamaged.



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

12. Press horn button to insure that the horn is undamaged and functioning properly.

If horn does not function properly, report it immediately to the designated authority.



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13. Check hour meter to insure that it is undamaged and functioning properly. Report any malfunction or damage to the proper authority.

Record hour meter reading on your daily check list.

Before Operation



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14. Check battery charge in dicator for damage. Needle should remain in green area, check this meter frequently during operation.

Report any malfunction or damage immediately.



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15. Make certain that you have adequate unobstructed forward clearance. Push forward on the "reach" control lever and hold while observing forward extension of carriage and forks. When carriage is fully extended, check battery charge indicator and release lever. Indicator needle will remain in green area if battery has sufficient charge.

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16. Pull back on the reach control lever to return carriage and forks to their original position against the face of the upright and release the control lever.

Note any erratic or unusual carriage reach or retract operation on the check list.

Before Operation



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17. Check for adequate unobstructed overhead clearance. Gently pull up on lift control arm. Observe upright lift and report any erratic or unusual operation. Smoothly return control arm to its neutral position to stop lift at desired point.



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18. Push lift control arm down and hold while observing descent of upright. When forks reach desired position, slightly above floor, smoothly return control arm to its neutral position to stop lowering of upright.

Report any erratic or unusual operation immediately.



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19. If your truck has been optionally equipped with a tilting carriage you should check for proper operation.

Gently pull back on tilt control lever and hold until carriage reaches full back tilt then release control lever.

Before Operation



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20. Push forward on tilt control lever and hold until fork carriage tilts forward to near vertical position.

Release control lever to stop carriage tilting action at desired point.

Note any erratic forward and back tilt operation on your check list.



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21. If your truck has been optionally equipped with an auxiliary valve, this valve will be operated by a third lever at the left of the "reach" and "tilt" levers. Check with your supervisor for proper operation of this lever.



22. Now place your left foot on the brake pedal and push it down to floor board level.

This will release the brake and, at the same time, activate a switch which will complete the power circuit to the drive motor.

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



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24. Gently and smoothly turn the directional/ speed control knob in the proper direction for desired path of travel (counterclockwise for reverse and clockwise for forward). Further rotation of directional/ speed control knob in selected direction will increase truck speed to desired level.

25. When truck begins to move in selected direction (item 24), return directional/speed control knob to its neutral position and smoothly raise your foot from the brake pedal to apply brake and smoothly stop truck.

If brake does not operate properly do not operate truck.



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26. When truck comes to complete stop rotate the directional/speed control knob in the direction opposite that chosen in item 24 (clockwise for forward and counterclockwise for reverse). Further rotation of control knob in the selected direction will increase truck speed to desired level.

27. Stop truck as outlined in item 25 and check steering by rotating steer wheel to full left and full right turn.



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28. Push down on lift/ lower control arm until forks reach the floor. Return control arm to neutral position to stop lowering of forks at desired level.

29. If your truck is equipped with tilt push forward on tilt control lever to lower fork tips to floor. Release tilt control lever and it will return to its neutral position.



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30. Turn switch key counterclockwise to "off" position, remove key and carefully dismount from truck. Don't forget to block drive wheel to prevent accidental roll.

31. Review operator's daily check list to make certain that it has been properly marked and turn it in to the designated authority.

CLARK	DRIVER'S	RIC TRUCK DAILY CHECKLIST e Start Of Each Shift
		Date
ruck No.		
perator:	Su	pervisor's OK
1.7	Boxes Accordingly 0	Day Hrs. for Day K Needs Attention or Repair
Visual Checks:		Operational Checks:
	image and leaks	Operational Checks:
Obvious da Tire condit Battery plu	tion ag connection	Horn
Obvious da Tire condii Battery plu Note: Be	tion	Horn Steering Service brakes Battery Load Test
Obvious da Tire condii Battery plu Note: Be	tion ig connection sure the battery plug mection is tight.	Horn Steering Service brakes Battery Load Test Note: Watch battery indicator while
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Tire condi Battery plu Note: Be: cor Head and ti Warning li Hour mete Other guag Battery Dis	g connection g connection gue the battery plug mection is tight. ail lights	Horn Steering Service brakes Battery Load Test Note: Worth battery indicator while holding lift laves on full back tilt. If needle falls not area, battery down't have sufficient charge to operate trustly properly.

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1. Remove blocks from drive wheel and carefully enter operator's compartment.

Remember that pressing down on the brake pedal will release the brake and this should be avoided until ready to move the truck.

2. Look at battery connector to make certain that it is properly plugged in. Insert the key into the switch and turn clockwise to the "on" position.



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3. Smoothly and gently pull back on "tilt" control lever (if your truck is so equipped) to raise fork tips from floor slightly.

4. Gently pull up on lift control arm to raise forks from floor slight-



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5. Check all around truck to make sure that your desired path of travel is unobstructed.

6. Place your left foot on the brake pedal and push it to the floor board.

This will release the brake and activate a switch completing the power circuit to the drive motor.



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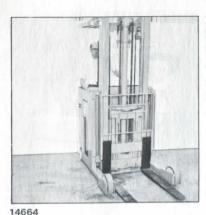
7. Turn the directional/speed control knob counterclockwise for reverse travel (clockwise for forward).

Further rotation of the directional/speed control knob will increase truck speed to the desired level.

8. Remember to come to a complete stop before changing direction of travel. This is accomplished by returning the directional/speed control knob to its neutral position and smoothly releasing the brake pedal.



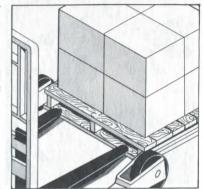
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9. Always be alert for pedestrians, other trucks or obstacles in your path of travel.

10. Remember to enter load slowly and squarely.

Load should be centered and forks should be near outside edges, if they are not —



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11. — Adjust them by lifting fork lock lever and sliding forks to the desired position. Then...

12. ... Remember to lower lever to lock forks securely into notch atop fork bar.



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13. Always remember to check for unobstructed overhead clearance before lifting load. When you are certain that clearance is adequate, gently and smoothly pull up on lift control arm. Smoothly return lift control lever to neutral to stop lift at desired level.

14. Remember that load should be lowered to position near floor (if your truck has been optionally equipped with tilt - the carriage should be tilted back to cradle the load) when traveling.



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15. Use minimum forward and reverse tilt when stacking and unstacking loads.

Never tilt load forward unless it is over stack or at low lift height.

16. Be constantly alert for unusual or erratic operation.

Report any malfunction immediately so that adjustments or repairs may be made by thoroughly trained and qualified personnel.



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Parking



1. Park lift trucks in designated parking areas only.

Do not obstruct traffic lanes or aisles.

2. Lower forks to floor.



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3. If your truck has tilt - push forward on tilt control lever to place fork tips on floor.

4. Turn key switch counterclockwise to "off" position and remove the key.



Parking



5. Carefully dismount from truck.

6. Remember to block drive wheel securely to prevent accidental roll.



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Notes

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



Additional copies of this manual may be purchased from:

YOUR AUTHORIZED CLARK DEALER