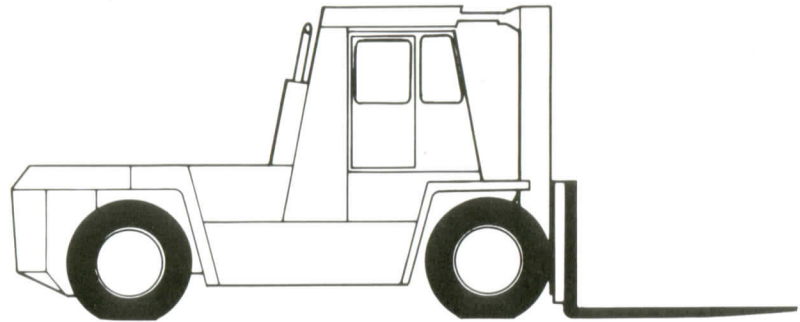

Operator's Instruction Manual



C500(Y) 400 thru 600

CLARK®

Book No. 2385967
OI-414, 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.

IMPORTANT

Do not expose this manual to hot water or steam.

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

 **WARNING**

California Proposition 65

This product contains and emits chemicals known to the State of California to cause cancer, birth defects and other reproductive harm.

CALIFORNIA

Proposition 65 Warning

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects or other reproductive harm.

 **WARNING**

The engine exhaust from this product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

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 truck unless you have been trained in lift truck repair procedures and authorized by your employer.

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

BETRIEBSANWEISUNGEN IN DEUTSCHER SPRACHE KOENNEN SIE BEI IHREM CLARK-HAENDLER ERHÄLTEN.

MANUELS DE L'OPERATEUR EN LANGUE FRANCAISE PEUVENT ETRE COMMANDES CHEZ VOTRE DISTRIBUTEUR CLARK.

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DRIVE 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 manuals 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. Lift trucks will tip over if not properly operated. 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.

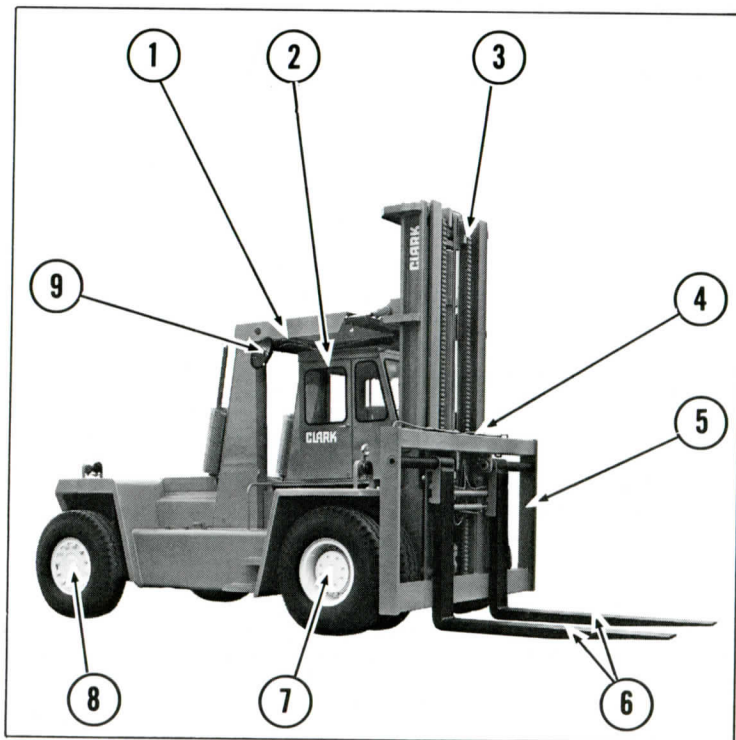
14. When using forks, space forks as far apart as load will permit. Before lifting, be sure load is centered and forks are completely under load.

15. Do not allow anyone to stand or pass under load or lifting mechanism.

16. Never lift or transport personnel on the forks of a lift truck. Use a manlift specifically designed for this purpose. When operating rider order selector trucks, hook the chain to the safety bars, and put the safety belt on.

17. Before getting off truck, neutralize travel control, fully lower lifting mechanism and set parking brake. When leaving truck unattended, also shut off power.

Know Your Truck



1. Overhead Guard
2. Operator's Compartment and Controls (see page 14 or page 15)
3. Upright Assembly
4. Upright Deck Number
5. Fork Carriage
6. Load Forks
7. Drive Axle and Wheels
8. Steer Axle and Wheels
9. Lower Front View Mirror

A1455

CLARK C500

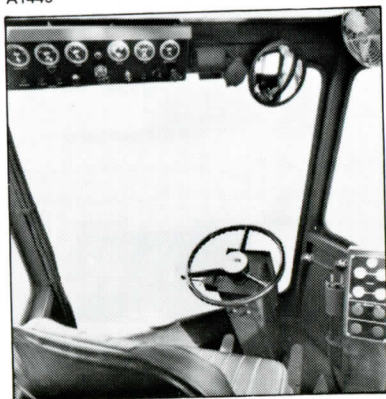
Capacities from 40,000 lbs. through 65,000 lbs., pneumatic tires with a three-speed Hydratork transmission and a Cummins diesel engine.

Safety



13696

A1445

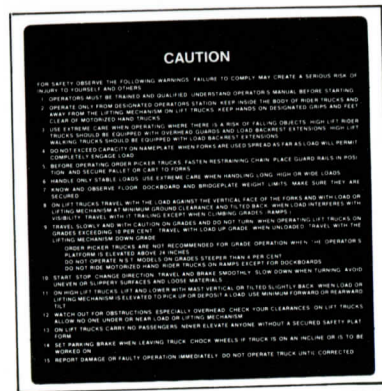


1. Only physically qualified and thoroughly trained personnel shall be authorized to operate the Clarklift C500Y 400 through 650 model machines.

3. Learn how your truck is operated. Know its safety devices, how they function and how the special attachments, if any, work. Refer to pages 15 and 16 for specific control identification.

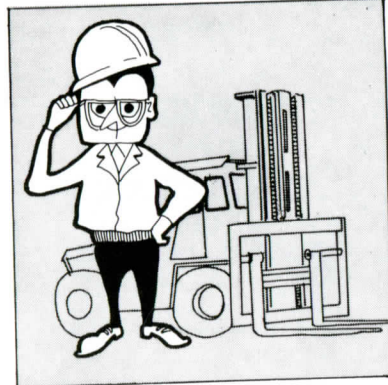
2. Prominently placed on every Clark truck is a list of basic rules for operation. These rules are for the protection of you and others in your operating area. Be familiar with them.

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



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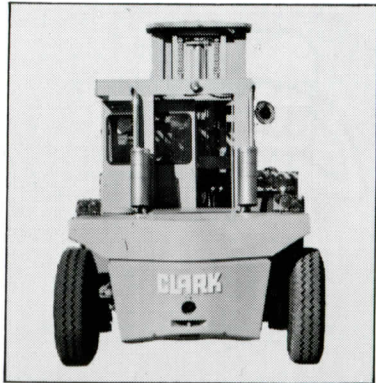
Safety

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



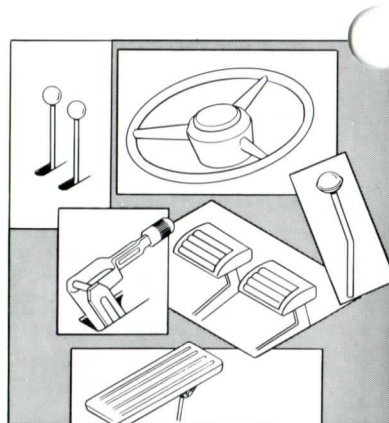
A1410

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



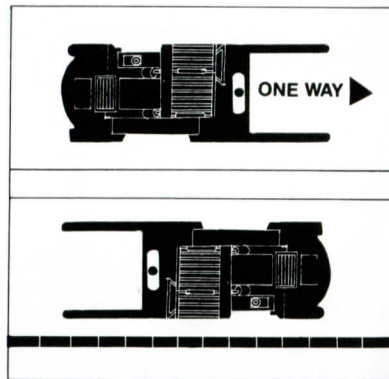
A1436

6. Before operating any lift truck test the horn, brakes, parking brake, steering, lift-tilt controls, directional controls, range controls and special devices for proper operation. Report any improper operation to the proper authority.



13318

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



19567

Safety



A1503

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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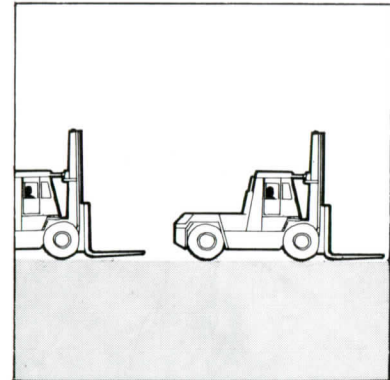


11. Obey all posted traffic rules and warning signs.

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

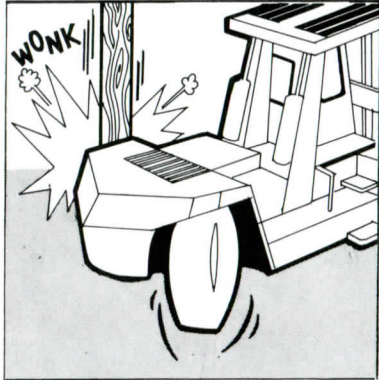
Assure ample distance to stop smoothly and safely should the need arise.

19568



Safety

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



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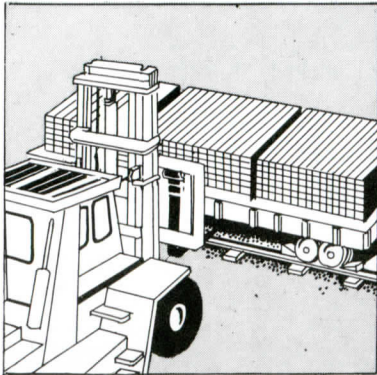
14. Be aware of the position of your fork tips when the truck is in motion. Be alert to prevent striking anything with fork tips.



A1503

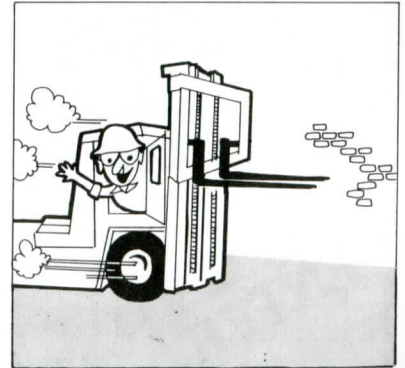
15. Make certain that vehicle being loaded or unloaded has been securely "chocked" to prevent accidental roll.

Fixed jacks will be necessary to support the front end of semi-trailers when not attached to the tractor.



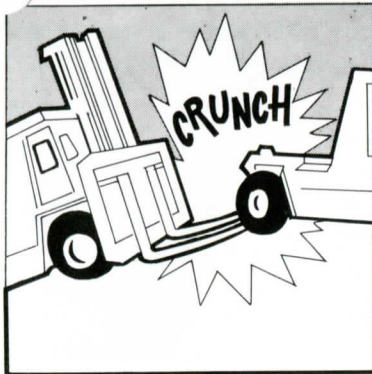
19570

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



19571

Safety



19572

17. 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.

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



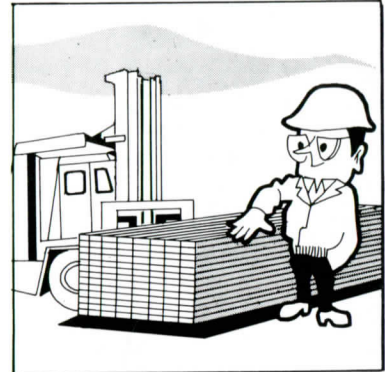
19573

13095

CLARK EQUIPMENT	
INDUSTRIAL TRUCK DIVISION	BATTLE CREEK, MICHIGAN
MODEL NO.	TYPE 3
SERIAL NO.	2
ATTACHMENTS	4
LOAD	CAPACITY WITH ATTACH. LISTED ABOVE OR WITH FORKS UPRIGHTS VERTICAL
A	5
B	
C	
FLOOR	
APPROX. WT. ALL TRUCKS	LESS BATT - ELECTRICS
APPROX. WT. ELECTRICS ONLY	WITH MAX. BATT. WT. 6
BATTERY WT.	MAX. 7
BATTERY CAPACITY	MIN. NO. 8
	LESS VOLTS
FOR OTHER CAPACITIES CONSULT MANUFACTURER AS RELEASED FROM FACTORY THIS TRUCK MEETS THE DESIGN SPECIFICATIONS ESTABLISHED IN AMERICAN NATIONAL STANDARD FOR POWERED INDUSTRIAL TRUCKS PART II, ANSI B 56.1-1969 PT NO 2315709	

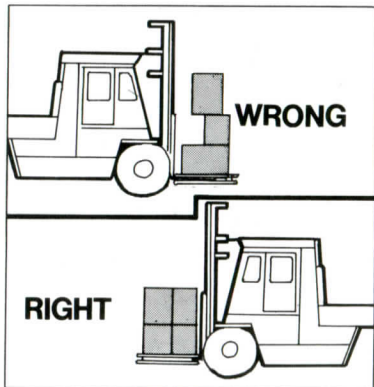
19. Know the rated capacity of your truck and its attachments (if any) and never exceed it. Study your truck data capacity plate and learn the facts stamped in areas 1 through 8. Note "type" stamped in area 3 and refer to item 42 on page 13.

20. 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.



19574

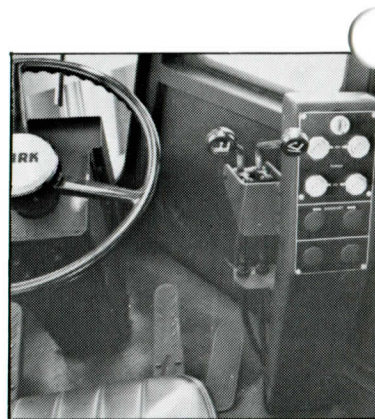
Safety



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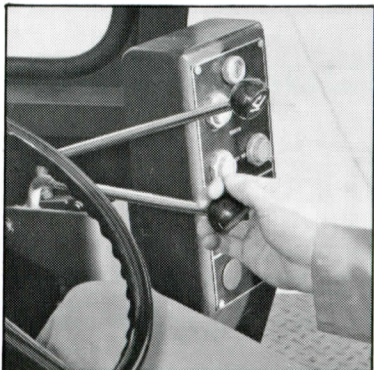
21. Unstable loads are a hazard to you and to your fellow workers. Always make certain that your load is well stacked and evenly positioned across *both* forks. Never attempt to lift a load with only one fork.

22. Check hydraulic control levers to make sure linkage is in good condition.



A1424

A1418



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

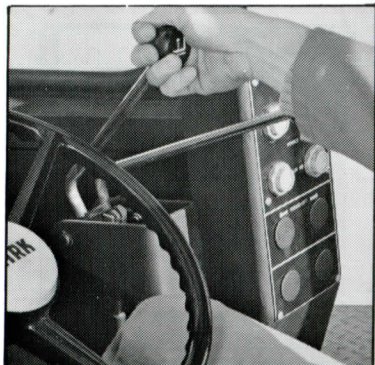
Gradually and smoothly pull back on lift control lever.

Return control lever to neutral position to stop lift at desired level.

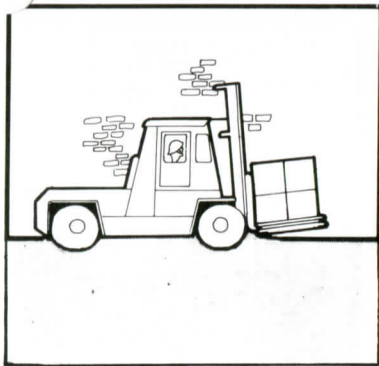
24. Push control lever forward to lower load.

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

A1419



Safety



19576

25. Travel with load near operating surface and with upright tilted back to cradle load whenever possible.

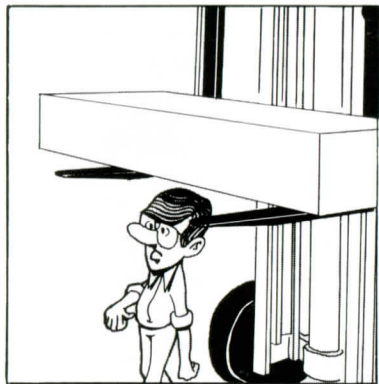
Never lift or lower load when truck is in motion.

26. When extra length of material being handled makes it necessary to travel with load elevated, do so with extreme care and be alert to load-end swing when turning.



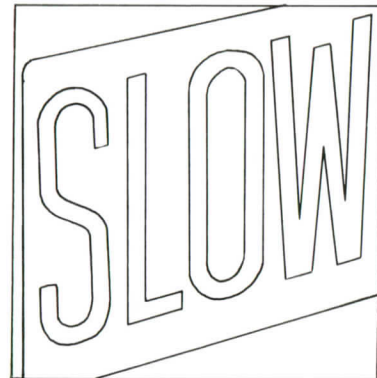
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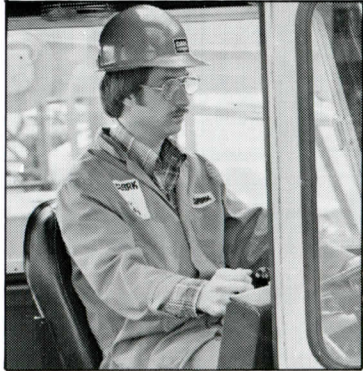
27. Never permit any one to stand or walk under elevated forks or other load engaging attachments if machine is so equipped.

28. Slow down for turns, ramps, bumps, intersections, wet or slippery operating surfaces and at all times when your visibility is restricted.



13103

Safety



A1412

29. Remain seated at all times and keep head, hands, arms, feet and legs within the confines of the operator's compartment.

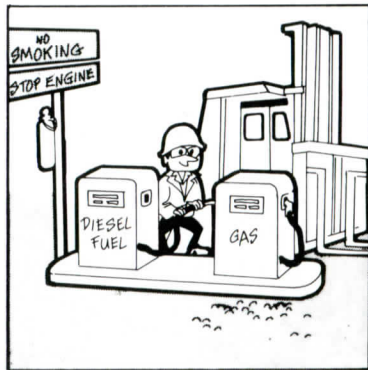
Never reach into the up-right for any reason.

30. Know and observe overhead clearances and bridge or floor load limits in your operating area.



13102

19578



31. Lift trucks must be refueled in designated areas only. Engines must be stopped and no smoking regulations strictly enforced.

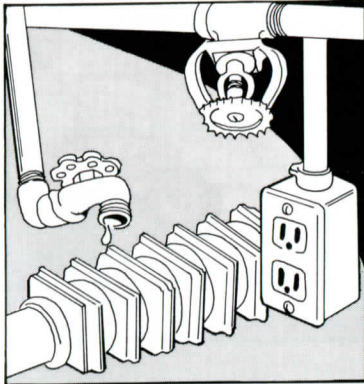
Spilled fuel must be washed away or completely evaporated and the fuel tank cap replaced before restarting the engine.

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.

13107



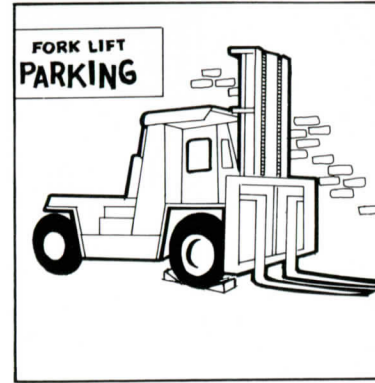
Safety



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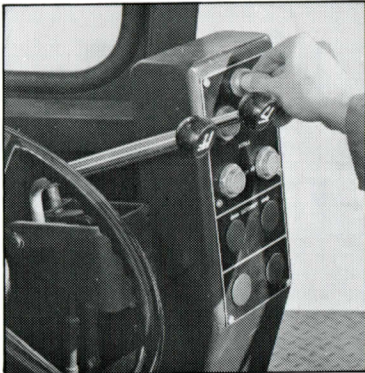
33. Use caution when placing loads or traveling near water pipes, overhead sprinklers, electrical wiring, steam pipes, heaters or other fragile or dangerous equipment or material.

34. Park lift trucks in designated areas only. Lower forks to floor, tilt upright forward, apply parking brake, place all controls in neutral. Remove switch key and securely block the drive wheels.



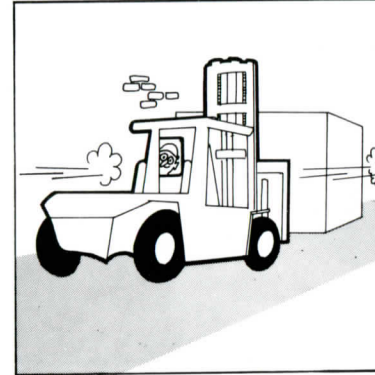
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A1413



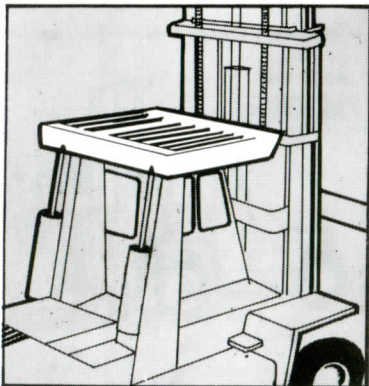
35. If truck is to be left unattended make certain that operating aisles are unobstructed and leave truck as described in item 34.

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



19580

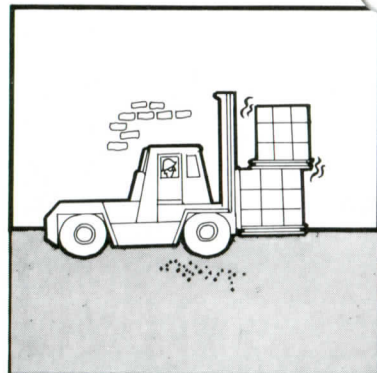
Safety



19581

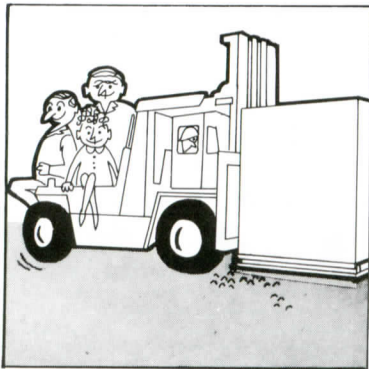
37. Overhead guards are for your protection. Make certain that they are securely mounted and undamaged before operating your truck.

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



19582

19583

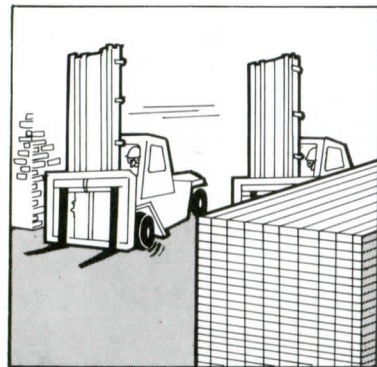


39. Overloading is extremely dangerous. You don't have complete control of your truck and you are causing unnecessary wear.

Never add to your counterweight, always break down the load.

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

19584



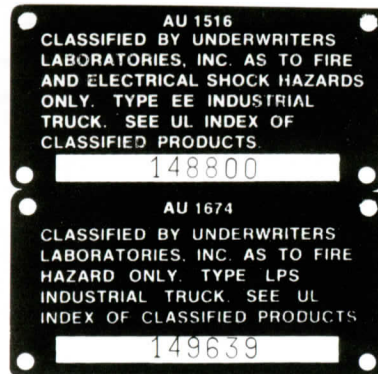
Safety



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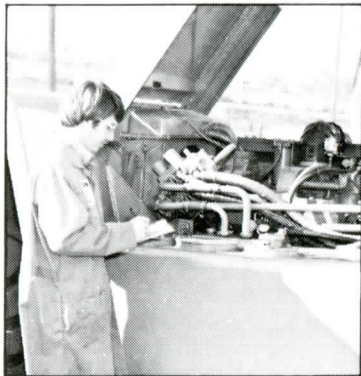
41. Never lift or transport personnel on the forks of a lift truck. Use a manlift specifically designed for this purpose.

42. Know the 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.



13178

A1414



43. Follow a scheduled planned maintenance and lubrication program.

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

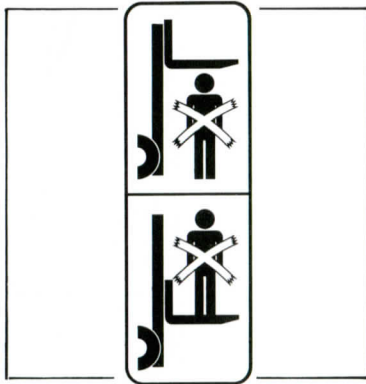
44. Remember — your safety and the safety of others depends on you.

Keep your mind on operating your lift truck.

A1503

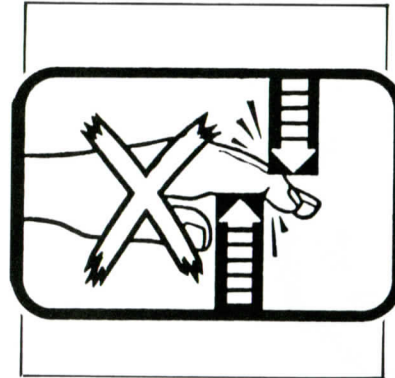


Safety



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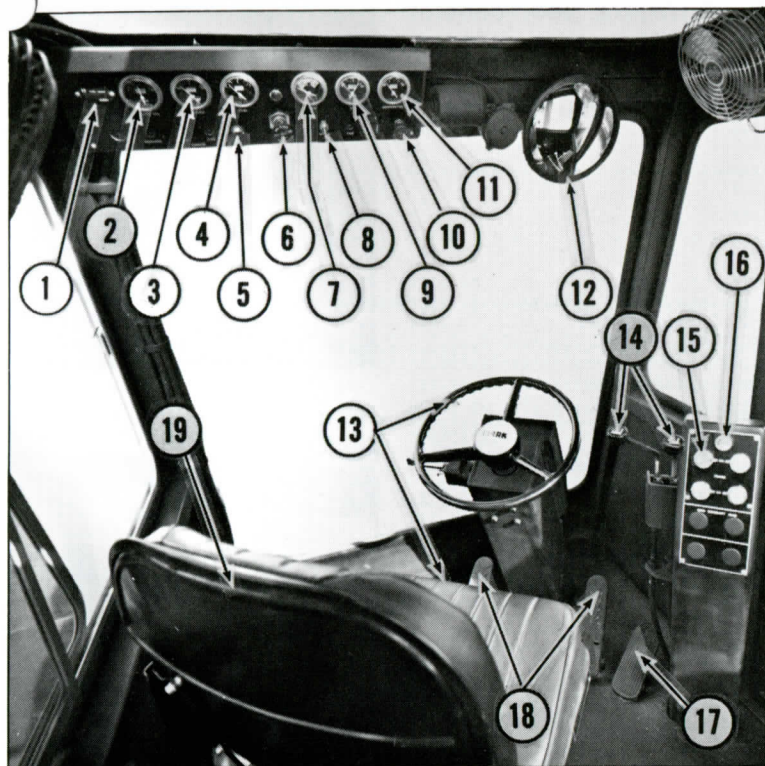
45. Located on the upright cylinder is a safety decal. This is a warning to avoid the danger of standing beneath a raised upright or riding on the forks.



19341

46. Located on the upright tie bars are safety decals. The decal found in Fig. 19341 (above) is a warning to avoid placing your hands through the upright.

Compartment & Controls

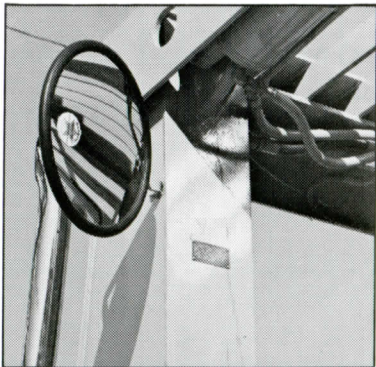


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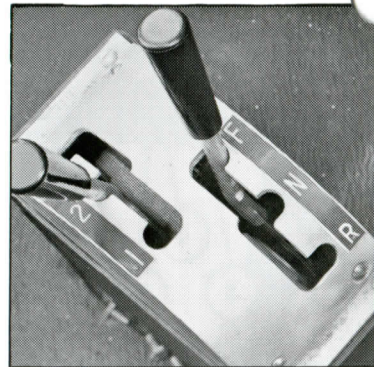
1. Hour Meter
2. Engine Oil Pressure Gauge
3. Engine Water Temperature Gauge
4. Fuel Gauge
5. Light Switch
6. Air Parking Brake
7. Voltmeter
8. Wiper Switch
9. Air Pressure Gauge
10. Heater Switch
11. Converter Temperature Gauge
12. Rear View Mirror
13. Steering Handwheel and Horn Button
14. Lift and Tilt Control Levers
15. Auxiliary Hydraulic Function: are Electric Push Button
16. Ignition Switch
17. Accelerator Pedal
18. Brake Pedals
19. Directional and Speed Control Levers

Compartment & Controls

1. Adjust the inside and outside mirrors to proper angle for unobstructed view.
2. Check gear control box to make sure levers and linkage are secure and working properly.

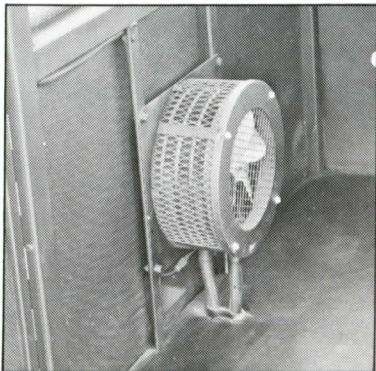


A1415



A1440

A1417



3. Check the heater to make sure the fan and all controls function properly. Also, check the windshield wipers. The control knobs are located to the right of the parking brake switch.

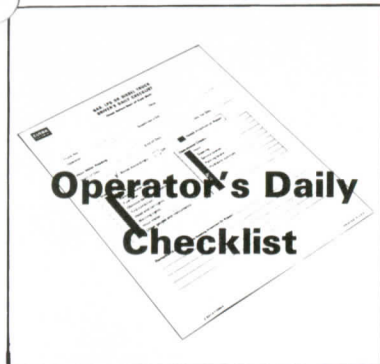
4. Check all fuses and gauges for damage. Make sure all are in good working order.

A1445



Before Operation

(On The Ground Checks)



15197

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.

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



19585

13633



3. Check condition of all drive and steer tires and wheels.

Remove foreign material such as stones, cinders, nails, etc., which have become lodged in tire treads.

Note apparent tire or wheel damage on checklist.

4. Visually check drive and steer wheel mounting nuts.

Report any apparent loose lugs or nuts to designated authority.

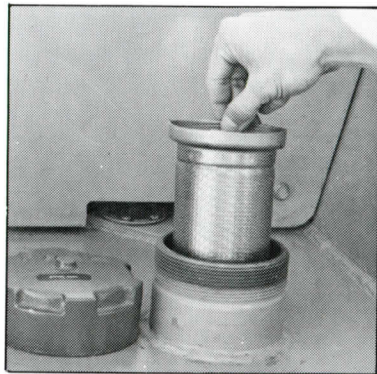
Torque specs for wheel lugs and nuts are listed in the appropriate PMA manual for your truck model.

13634



Before Operation

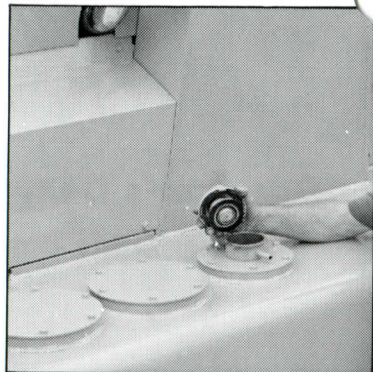
(On The Ground Checks)



A1420

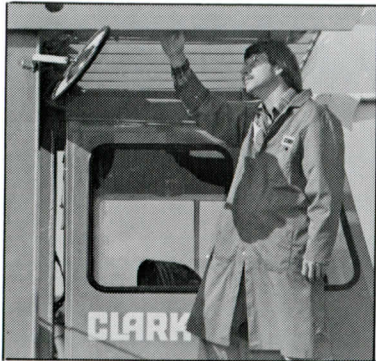
5. Your truck is diesel powered. Check fuel screen for damage and keep it clean.

6. Remove sump cap and check to make sure sump tank is filled to proper level.



A1421

A1422



7. Check condition of overhead guard.

Make certain that it is secure and undamaged prior to operating the truck.

8. Remove blocks from drive wheels and carefully climb steps into the operator's compartment.

A1423



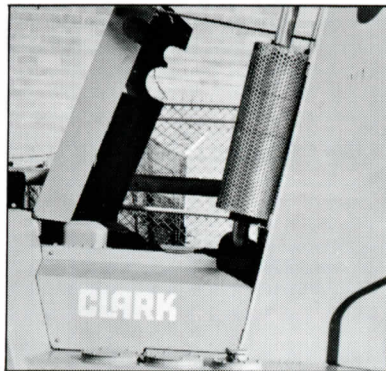
Before Operation

(Under The Hood Checks)



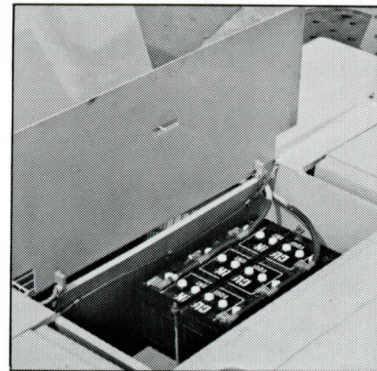
A1425

9. Open the hood by lifting up on the handle and prop open with arm extension.



A1435

10. Visually check general condition of the engine compartment. Check the condition of the wiring, fan belts, hoses, etc.

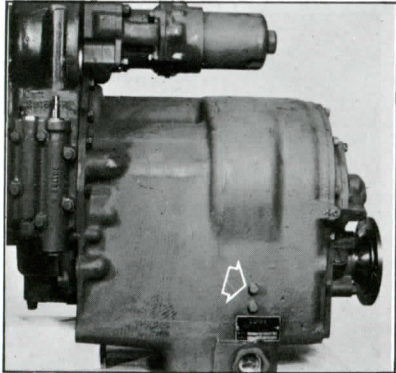


A1442

11. Check the condition of the batteries, battery terminals, cables, wiring, etc., and note anything unusual on your checklist.

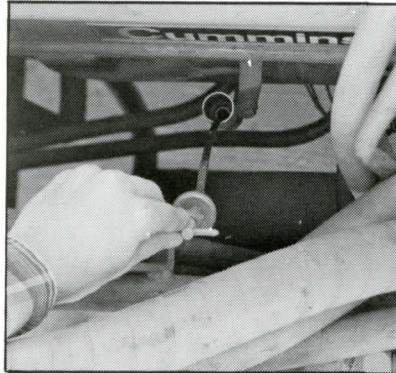
Before Operation

(Under The Hood Checks)



A1448

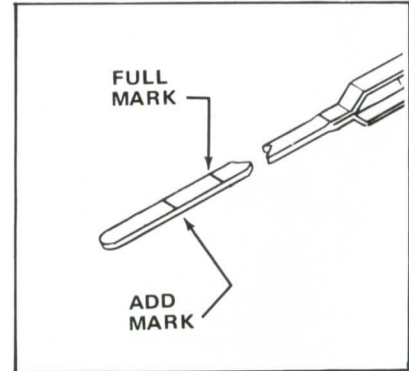
12. The transmission oil is checked by removing a level plug at the side of the transmission housing as shown above.



A1427

13. The engine oil dipstick is located as shown above.

Pull the dipstick and wipe it with a clean, lint-free cloth. Insert dipstick into support tube all the way — then pull the dipstick out again and check oil level as described in item 14. Replace the dipstick.



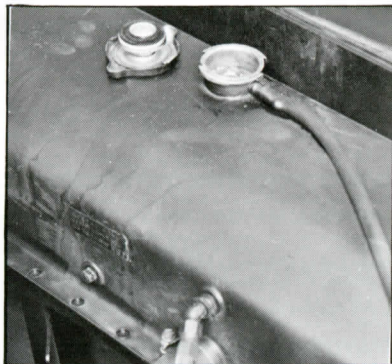
13239

14. Engine oil level must be maintained between the "add" and "full" marks on the dipstick. The best time to check oil level is before starting the engine or, as the last item on the checklist. This allows oil to drain back into the crankcase.

Remember — one quart of oil will raise the level from "add" to "full" — DO NOT OVER-FILL.

Before Operation

(Under The Hood Checks)



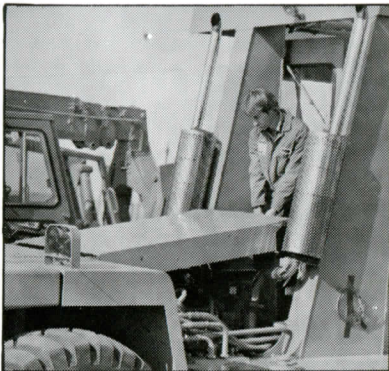
A0926

15. Always check radiator coolant level with the engine turned off and, when possible, with engine cold. Proper coolant level is one inch below the bottom of the filler neck.

CAUTION: Use extreme care when removing radiator pressure cap. The sudden release of pressure can cause a steam flash resulting in serious injury. Place a rag over cap and loosen slowly to allow gradual escape of steam.

Never add cold water or antifreeze to the radiator of an overheated engine. Always allow the engine to cool to avoid the danger of cracking the cylinder block or head(s). Keep engine running when adding water or antifreeze. A solution of 50% ethylene glycol and 50% water is recommended. NEVER USE ONLY WATER.

A1425



16. Carefully close the engine compartment hood and make certain that it is secure in the closed position. Then seat yourself in the operator's seat.

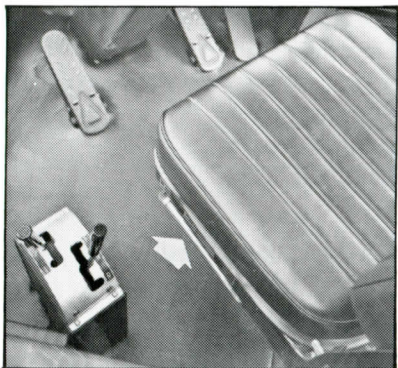
17. If your truck has been optionally equipped with an operator's cab — check condition of all glass. Clean all dirty glass and mark your checklist to indicate any cracked or broken glass.

A1428



Before Operation

(Starting The Engine)



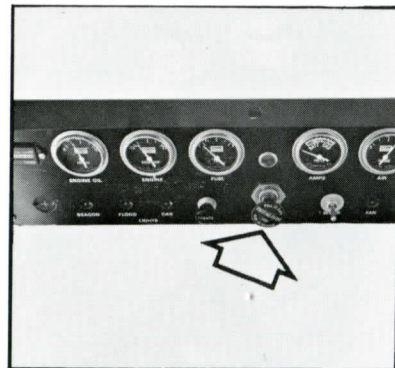
A1446

18. Seat adjustment is accomplished by releasing short lever at right side or left front of seat.

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

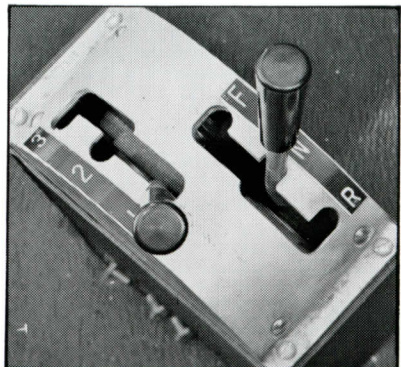
Make sure seat locks in selected position.

19. Make certain that the parking brake is in the "on" (full out) position.



A1454

A1438

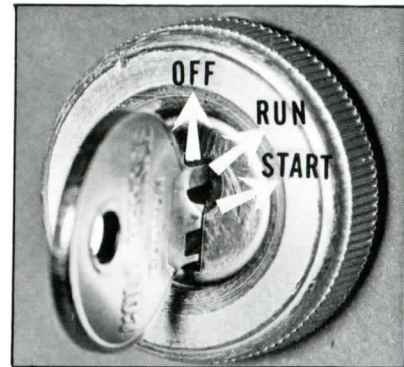


20. Make certain that transmission directional control lever is in neutral.

These trucks are all equipped with neutral start switches and cannot be started while in forward or reverse unless switch is faulty or improperly adjusted.

Report condition on your checklist.

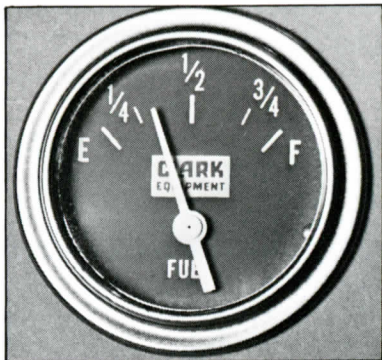
21. Insert key into ignition switch and turn key clockwise to "run" position.



13226

Before Operation

(Starting The Engine)

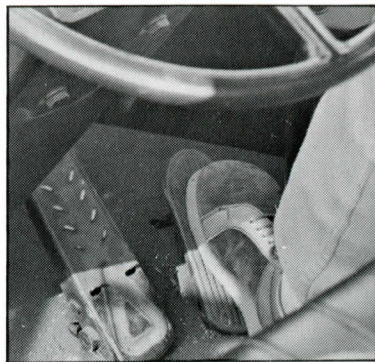


13220

22. Check the fuel gauge to determine the amount of fuel in the tank.

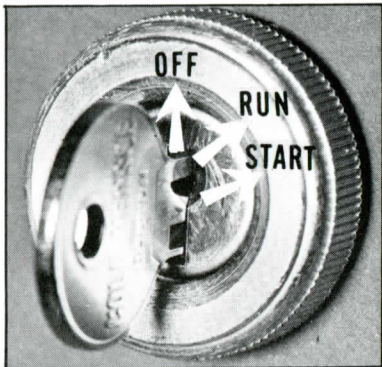
Never attempt to start a diesel engine on an empty or near empty tank. To do so may result in serious damage to the injection pump due to lack of adequate lubrication.

23. Place your right foot on the accelerator pedal and press down slightly.



A1429

13226



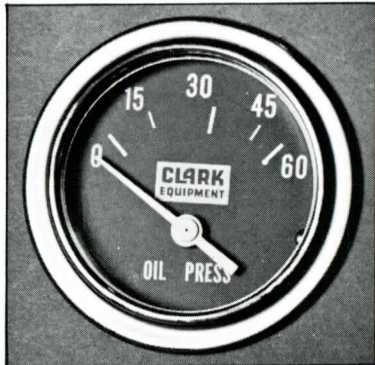
24. Turn ignition switch key clockwise to "start" position.

Release key to "run" position when engine starts.

If engine does not start on the first attempt — do not re-engage the starter until engine comes to a complete stop (approximately 5 seconds).

25. Check the engine oil pressure gauge to insure that it is undamaged and that it is functioning properly.

If engine oil pressure drops below 5 P.S.I. or becomes erratic during truck operation you should immediately shut the engine down until the cause is located and corrected.



13222

Before Operation

(Instrument Check)



A1445

26. You must learn the location and function of all your truck's gauges and instruments.

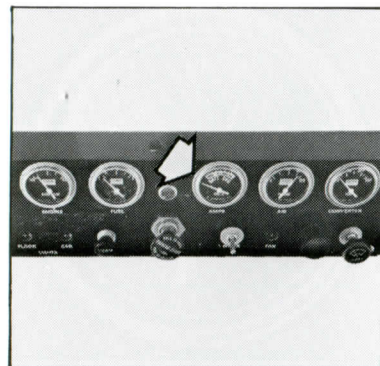
They should be checked, from time to time, during operation of your truck.



A1443

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

Record the hour meter reading on your checklist.

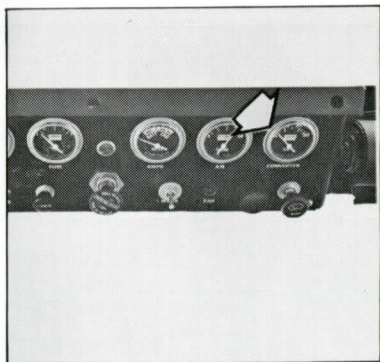


A1451

28. With engine running, the voltmeter should show a reading within the green arc. If the gauge indicates a reading other than the green arc, you should record this on your checklist.

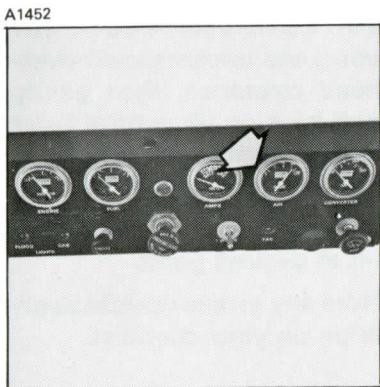
Before Operation

(Instrument Check)



A1453

29. Check converter oil temperature gauge to insure proper function. Record any improper reading on your checklist.



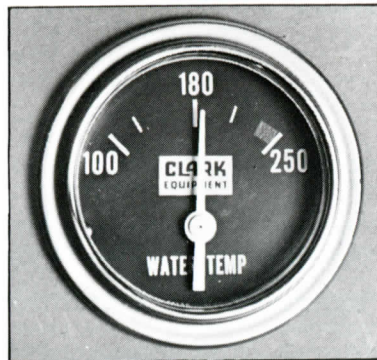
A1452

31. This vehicle is equipped with a brake system air pressure gauge on the dash and a low pressure warning "buzzer."

Do not operate your truck before the warning "buzzer" stops and the gauge indicates 65 P.S.I. If "buzzer" sounds at any time during truck operation stop the truck immediately.

30. Check the water temperature gauge to insure that it is undamaged and functioning properly.

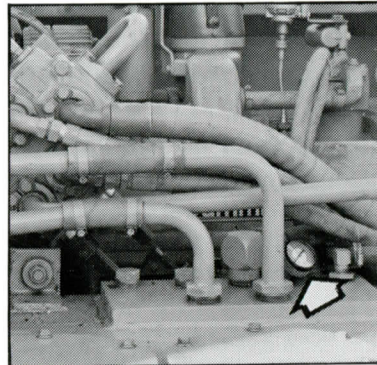
Water temperature should reach about 180°F. after 10 minutes of operation. If the indicator needle goes into red area, you should immediately shut the engine down until the cause is located and corrected.



13223

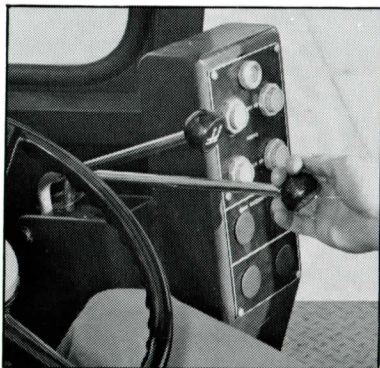
A1431

32. In order to check on hydraulic oil filters, start the engine and operate near governed RPM. If the oil filter gauge indicates pressure in the red area, the filters should be changed.



Before Operation

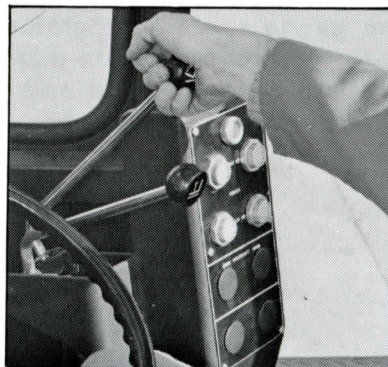
(Hydraulic Controls Check)



A1432

33. Gently pull back on the tilt control lever and hold until the upright reaches full back tilt.

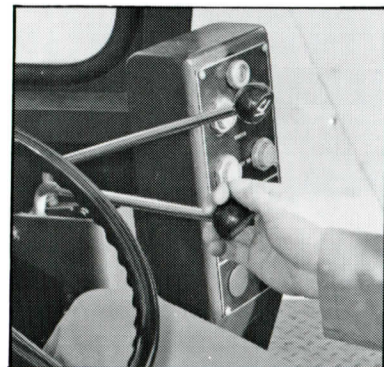
Do not hold lever back after upright has reached full back tilt — to do so will unduly heat the hydraulic fluid and could harm the hydraulic system.



A1433

34. Push tilt control lever forward and hold in position until upright tilts forward to near vertical position.

Releasing tilt control lever will halt forward tilt at desired point.



A1418

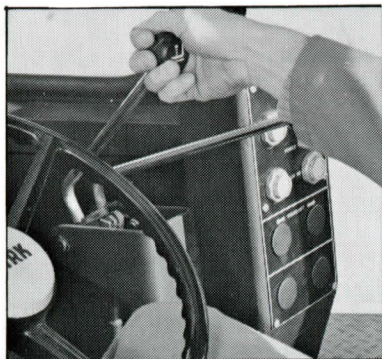
35. Carefully check for adequate unobstructed overhead clearance, then gently pull back on lift control lever and hold until upright reaches maximum lift height.

Release lever to halt upright lift at desired point.

Note any erratic upright operation on your checklist.

Before Operation

(Hydraulic Controls Check)



A1419

36. Push lift control forward. Hold while closely observing descent of upright.

Release lever to stop upright descent near (about 8 inches) ground level.

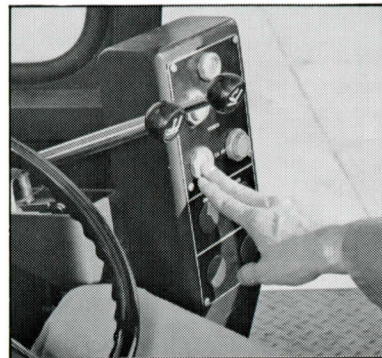
Record any erratic or unusual operation on your checklist.



A1424

37. This truck when equipped with hydraulic attachments or accessories will use the same control levers.

The function of these levers should be checked with your supervisor prior to attempting operation thereof.



A1434

38. The four push buttons are used for hydraulic function of spreading or side shifting the forks. Never perform the fork spread operation with a load on the forks.

Before Operation

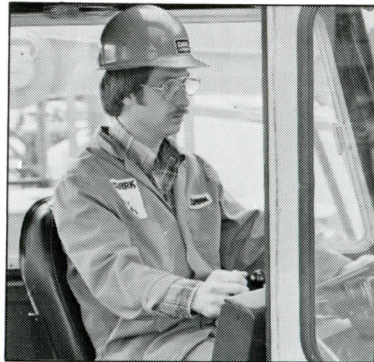
(Horn and Steering Check)



A1446

39. Press horn button located beneath the floor mat and to the left of brake pedal.

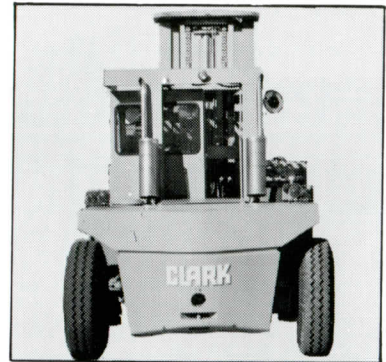
If horn does not function properly record it on your checklist and report it to the designated authority when you have completed your "before operation" checks.



A1412

40. With the engine running you should rotate the steering handwheel back and forth.

Check for excessive effort to turn the handwheel and make certain that steer wheels respond to movement of the handwheel.

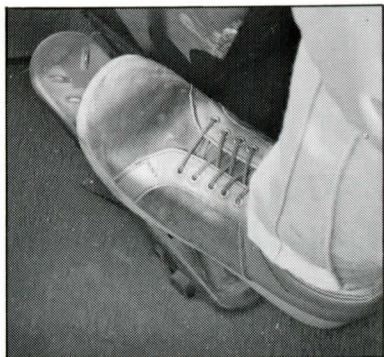


A1436

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

Before Operation

(Transmission Controls Check)

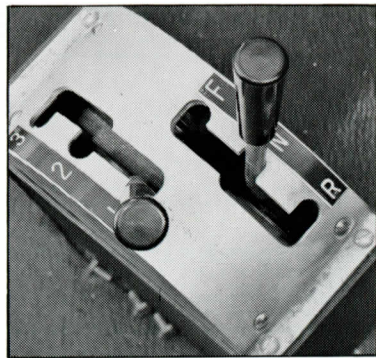


A1437

42. Place your left foot on the brake pedal and press down firmly to apply the service brakes.

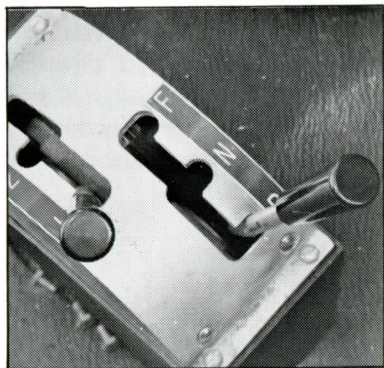
43. Your truck is equipped with a Hydratork transmission. Place the speed range selector lever in first gear.

If your operation does not require this first gear you should shift to second or third gear by shifting and pushing down on accelerator.



A1438

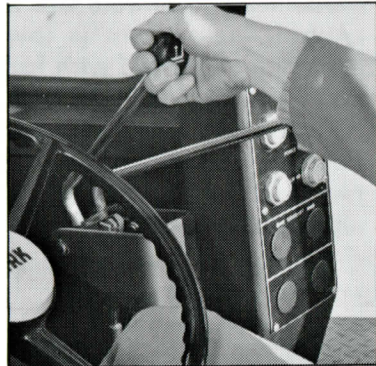
A1416



44. Shift directional selector lever into position for desired direction of travel. Pull the lever back for reverse travel (or push the lever forward for forward travel).

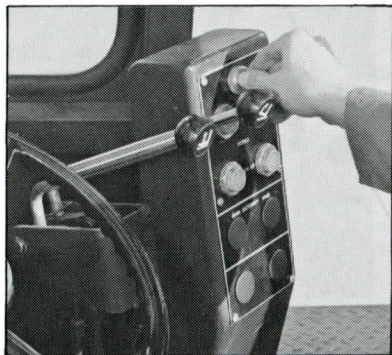
45. Place transmission directional (forward-reverse) selector lever in neutral position, apply parking brake, lower upright to place forks on (or near) the ground and push tilt control lever forward until fork tips rest on the ground.

A1419



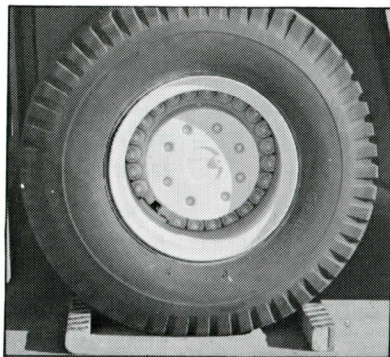
Before Operation

(Checklist Completion)



A1413

46. Make certain that all transmission controls are in neutral, the upright is lowered, tilted forward with fork tips on the ground, the parking brake in the "on" (full out) position and that you have removed the key from the ignition switch.



A1450

47. Carefully dismount from the truck.

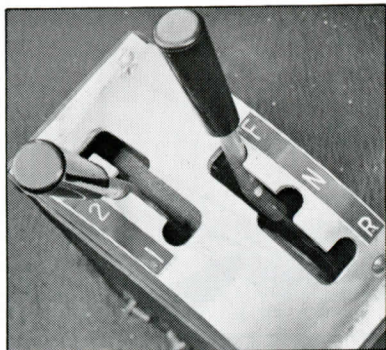
Leaving a truck on an incline is never recommended. If it becomes necessary to leave your truck in this position make certain that the drive wheels are securely blocked to prevent roll.



15197

48. Carefully review your operator's daily checklist to be certain that you have completed all required checks. Date the checklist, sign it and make certain that it is turned in to the proper authority per your supervisor.

Operating Hints



A1440

1. (A) all models must be brought to a complete stop before shifting the directional control lever from forward to reverse or from reverse to forward.

(B) Use of low gear when starting, negotiating grades or ramps, and when operating over rough or unimproved surfaces is recommended.

(C) Transmission speed ranges may be changed while traveling.

CAUTION: Always come to complete stop before shifting to low gear.

(D) Selecting the correct drive gear ratio is an important operator's function. Choosing the proper gear will result in better truck performance with longer engine and transmission life.

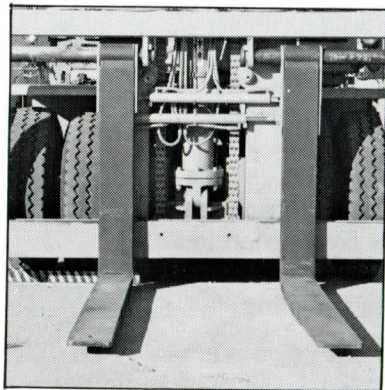
(E) If the operating surface is rough, or soft, or if grades or ramps must be negotiated, use the lowest transmission gear ratios available to you because here power is needed — speed is not.

(F) As a general rule of thumb — DO NOT lug the engine. Overworking the engine through use of a "too high" gear ratio will create excessive heat and shorten component service life. When in doubt — use next lower gear.

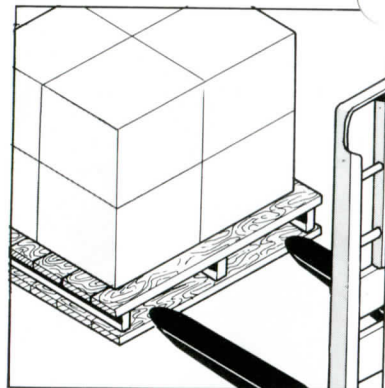
Operating Hints

2. Lift forks should be adjusted to obtain maximum support and balance of the load.

3. Remember to approach load slowly and squarely to avoid damaging the material being handled and to minimize truck maneuvering.



A1439



13203

4. Be constantly alert for abrupt changes in the operating characteristics of your truck. Unusual noises or sudden changes should be reported to your supervisor immediately.

5. Required adjustments and/or repairs should be performed by thoroughly trained and qualified personnel only.

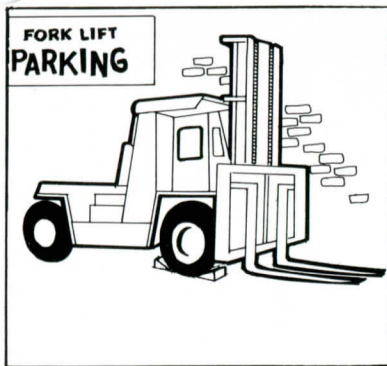


A1412



A1414

Parking

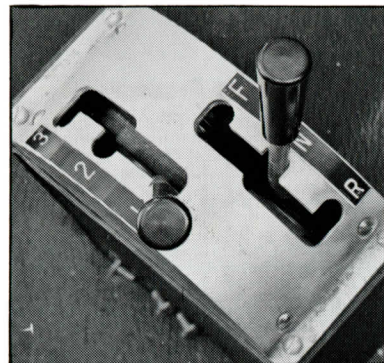


19579

1. Park lift trucks in designated parking areas only.

Do not block aisles, exits, entrances or other emergency lanes.

2. Make certain that transmission controls are in neutral and that parking brake has been properly applied.



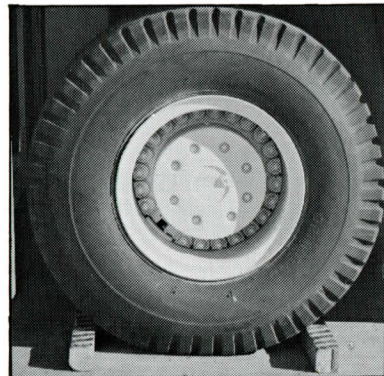
A1438

A1503



3. Lower upright to point where lift forks are on, or near, the operating surface and tilt upright forward so that fork tips touch the operating surface.

4. Stop engine and remove key, dismount carefully and securely block drive wheels.



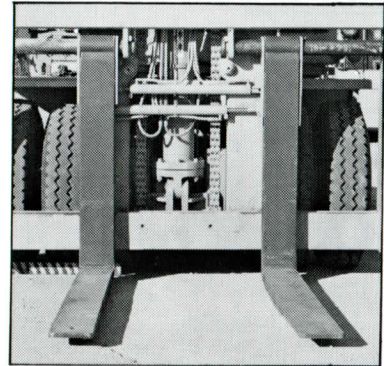
A1450

Helpful Hints

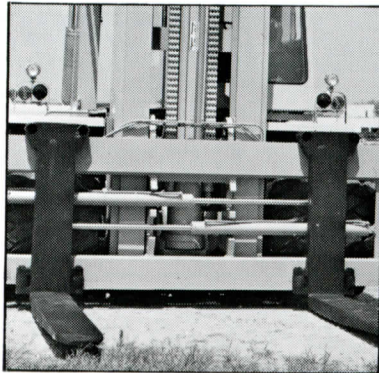
Tire Pressures

Tire Size	Ply	PSI
1400 x 24	20	110
1400 x 24	28	110
1600 x 25	24	110

When adjusting fork spread, tilt upright forward. This will reduce friction and make slide action easier.



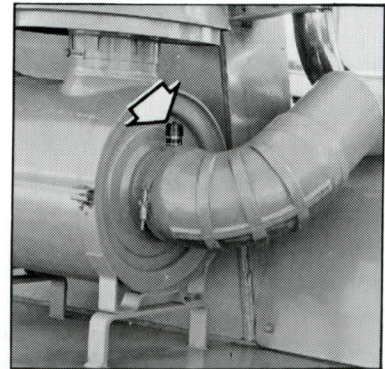
A1439



A1444

Roller type fork mounting, standard on C500Y 550/650 models, enables side shifting of forks while loaded. The low profile carriage helps improve forward visibility.

All truck models are equipped with an air cleaner condition indicator. If the indicator registers red while the engine runs at governed R.P.M., the air cleaner must be serviced. The indicator may be reset by pushing the button on the indicator.



A1430

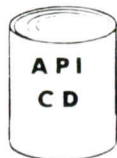
Helpful Hints

For . . . diesel engines using high sulfur content fuel (over 0.5% sulfur).

SPECIFICATION To meet API Service Classification "CD" per SAE Report J 183 and equivalent Series 3 and/or MIL-L-45199B specifications. Also MIL-L-2104C when applicable. Sulfated ash content 1.65% maximum.

TYPICAL PRODUCT RECOMMENDED BY MAJOR BRAND OIL SUPPLIERS
 Chevron DELO Super 3 Oil
 Shell Rimula Motor Oil
 Sunfleet S-3 Motor Oil
 ARCO Fleet MS-3 Motor Oil
 Gulf Super Duty Motor Oil
 AMOCO 300 Motor Oil
 Citgo C500 Motor Oil
 Texaco URSA LA-3 Motor Oil
 Mobile Delvac 1300 Series Motor Oil
 . . . or the equivalent to the above.

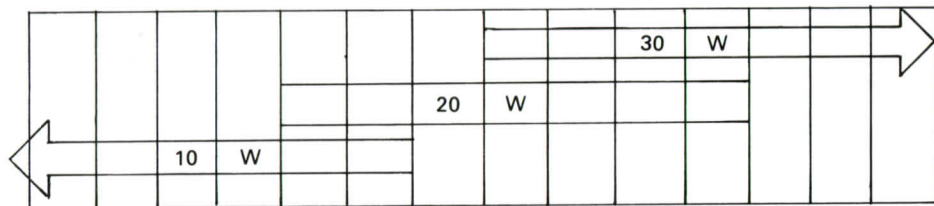
SERIES 3



MIL-L-45199B
 MIL-L-2104C

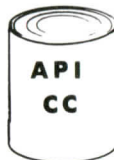
• ENGINE CRANKCASE OIL

RECOMMENDED SAE VISCOSITY NUMBER



Fahrenheit -30 -20 0 20 40 60 80 100
 Celsius -34.4 -28.9 -17.8 -6.7 4.4 15.6 26.7 37.8

MIL-B



MIL-L-2104B
 MIL-L-46152

Helpful Hints



DIESEL

SPECIFICATIONS Fuel to be Automotive Quality Diesel Fuel Oil as defined by ASTM D975, Grades No. 1-D and 2-D, and having a sulfur content of less than 0.5% weight.

Recommended Cetane
Number — 45 Minimum

Shell Premium Dieseline OR45
Sun Diesel Fuel 245-T
ARCO Premium Diesel, Diesel #1 or #2
Gulf or Citgo Diesel Fuel #1 or #2
AMOCO Diesel Fuel #1D and
American Premier Diesel Fuel #2D
Texaco Diesel Chief #1
Mobil Fuel Diesel & Diesel Fuel Special
... or the equivalent to the above.

Wheel and Tire Maintenance

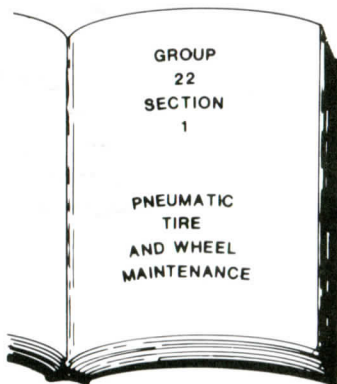


DANGER

RIM SEPARATION

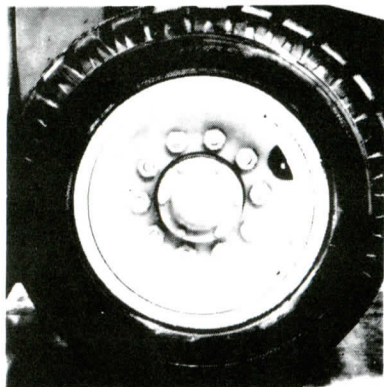
REMOVE THE AIR FROM TIRES BEFORE DOING ANY WORK ON TIRES OR RIMS. MULTI-PIECE RIMS CAN SEPARATE WITH ENOUGH FORCE TO CAUSE INJURY OR DEATH.

Federal and State laws require persons to be fully trained and qualified before doing maintenance on wheels and tires. Injury or death can result from the explosive separation of rim components if service procedures are not done correctly.



24309

1. Refer to the planned maintenance manual for complete wheel and tire servicing procedures.



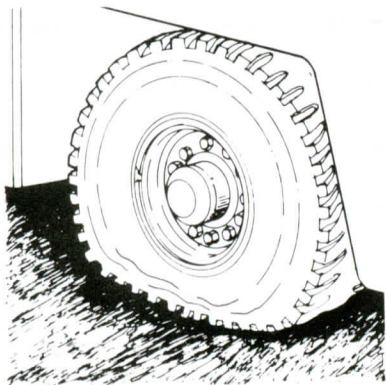
18924

2. Inspect wheels, tires and mounting parts for condition and security daily.



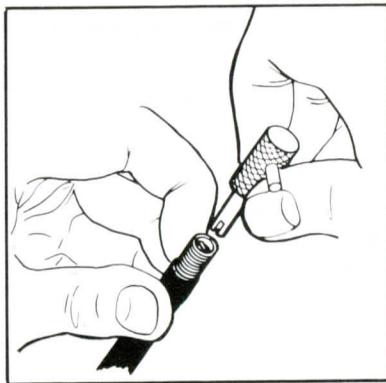
24307

3. Do not stand in front of or in the trajectory path of wheels when checking or adding air pressure. Stand to the side and use a gauge with a long handle and a self attaching air chuck on the hose.



24308

4. Do not put air into a tire which has gone flat or has less than 80 percent of recommended pressure. Check for cause of air loss and confirm that the wheel and tire are safe to use.



18631

5. Remove air from the tire before removing wheel clamping nuts (two piece wheels) or rim locking rings on multi-piece rims.



24306

6. Always use a safety cage to inflate tires after servicing.

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

CLARK Material Handling
Company

Lexington, KY 40511
Printed in USA