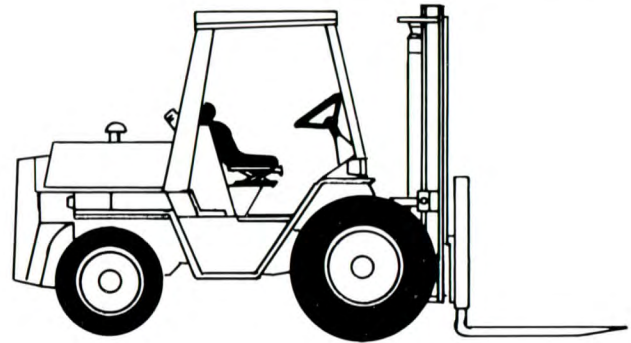

Operator's Instruction Manual



DPR 20/25/30

CLARK[®]

2340751
Book No. OI-533

 **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.**

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

IMPORTANT

Do not expose this manual to hot water or steam.

 **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.

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 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. Do not operate this truck with wet or greasy hands. 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, Controls, Lift System including forks and attachments; chains, hydraulic lift hoses, brakes, steering mechanism, and guards. Check all fluid levels and report any leaks to proper authorities.

Do not operate this truck if it is in need of repair. Tag the truck, remove the key and report the condition to the proper authorities. Stop operating truck if repairs are required.

3. Operate truck only from designated operating position and wear the seat belt (BUCKLE-UP). 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 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.

5. When attachments are used, extra care should be taken in securing, positioning and transporting the load. Operate this truck if equipped with attachments as if it is a partially loaded truck. Handle only loads within the capacity of the truck and attachment.

6. Do not overload truck. Check capacity plate for load weight information. Always pick up loads as close to load center as possible to avoid off center loading. Make certain that forks are completely under load.

7. Lift trucks will tip over if not operated correctly. 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. Operate carefully when traveling without a load as the risk of overturn is greater.

8. Elevate forks or other lifting mechanism only to pick up or stack a load. Watch out for obstructions, especially overhead. Do not tilt a load forward when elevated, and use only enough backward tilt to stabilize the load.

9. When lifting to high levels, be certain that the truck is stable with the mast near vertical and clear of trench walls and ex-

cavations.

10. Travel with load or lifting mechanism low, and where possible, 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).

11. Use special care when operating on inclines, travel slowly, and do not angle cross or turn. Operate loaded trucks with the load upgrade, unloaded trucks with forks downgrade.

12. Use caution when operating near scaffolds, trenches, and excavations. Where possible, use site roadways and choose the route that avoids steep, slippery, or loose gradings. Do not run over objects on the roadway surface, the truck stability could be affected. Drive in such a manner as to avoid bouncing, this could cause loss of control or the load.

13. If upright will not operate or becomes stuck in a raised position, operate the lift control to eliminate any slack in the lift chain. Do not go under the elevated portion of the truck to attempt repairs. Report the condition to the proper authorities.

14. Do not put any part of your body under

SUMMARY OF SAFE OPERATING PROCEDURES (Continued)

the forks or load. Do not allow anyone to stand or walk under load or lifting mechanism.

15. Before entering trucks or trailers, make sure the brakes on the truck or trailer are applied and the wheel chock(s) in place or the trailer is locked to the dock. If trailer is not coupled to a tractor, supports may be needed to prevent upending or corner from dipping.

16. Make sure dockboards or bridgeplates are secured and have adequate strength to support the truck and load. Drive carefully and slowly across the dockboard or bridge plate, and never exceed its rated capacity.

17. Know and observe all overhead clearances, floors and bridge load limits in your operating areas. Make sure floors of **railroad cars**, trucks and trailers are safe to **drive on**.

18. **Do not carry other personnel on the forks unless it has been authorized, and then, only with properly designed work platforms. Do not remove overhead guard or load backrest unless specifically authorized.**

19. Make sure that your truck is proper fire safety type for the area in which you are working.

20. Observe applicable traffic regulations. Yield right-of-way to pedestrians. Slow down and sound horn wherever vision is obstructed.

21. Lock the brake pedals together before travel on public roads or when changing job sites (if so equipped).

22. Do not apply the differential lock when driving on the road, at high speeds or when turning. If the lock is applied when turning, there could be loss of steering (if so equipped).

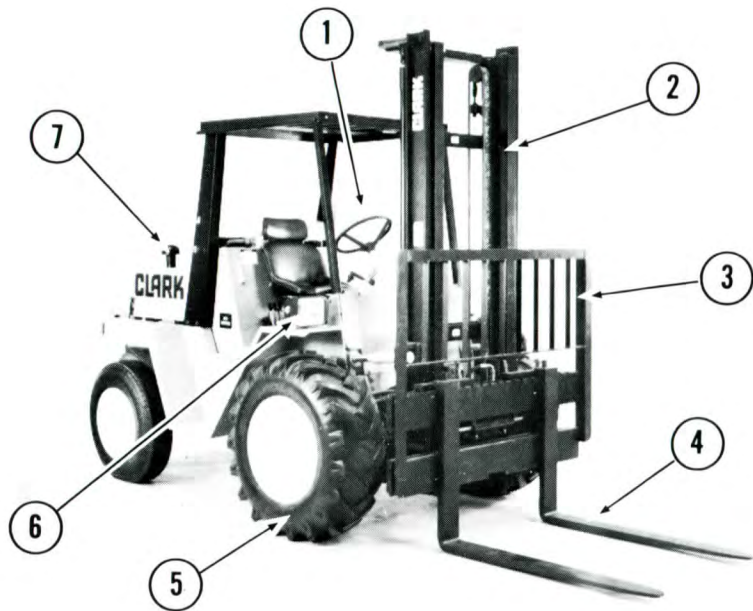
23. Turn off truck engine when not in use, fumes in a poorly ventilated area can be harmful to your health.

24. Before leaving truck make sure the lifting mechanism is lowered, controls are in neutral, parking brake applied. Turn off all power and put chocks against wheels, if on incline. Take the ignition key with you.

25. When leaving your truck unattended, the truck should be secure against operation by unauthorized personnel, and keep the truck clear of all building exits, stairways and safety/fire equipment.

26. Report all accidents involving personnel, building structures, and equipment to the proper authorities.

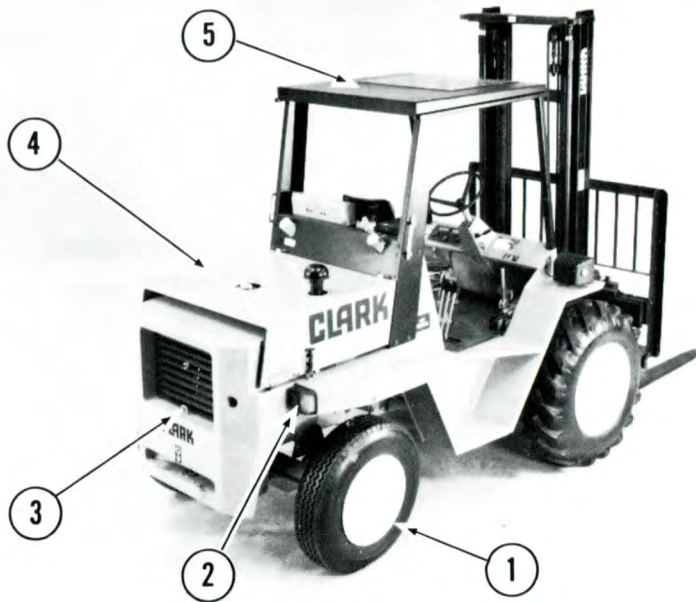
KNOW YOUR TRUCK



1. Operator's Compartment
2. Upright
3. Load Backrest Extension
4. Forks
5. Load/Drive Wheels
6. Turn Signals and Headlights
7. Air Intake

84M298

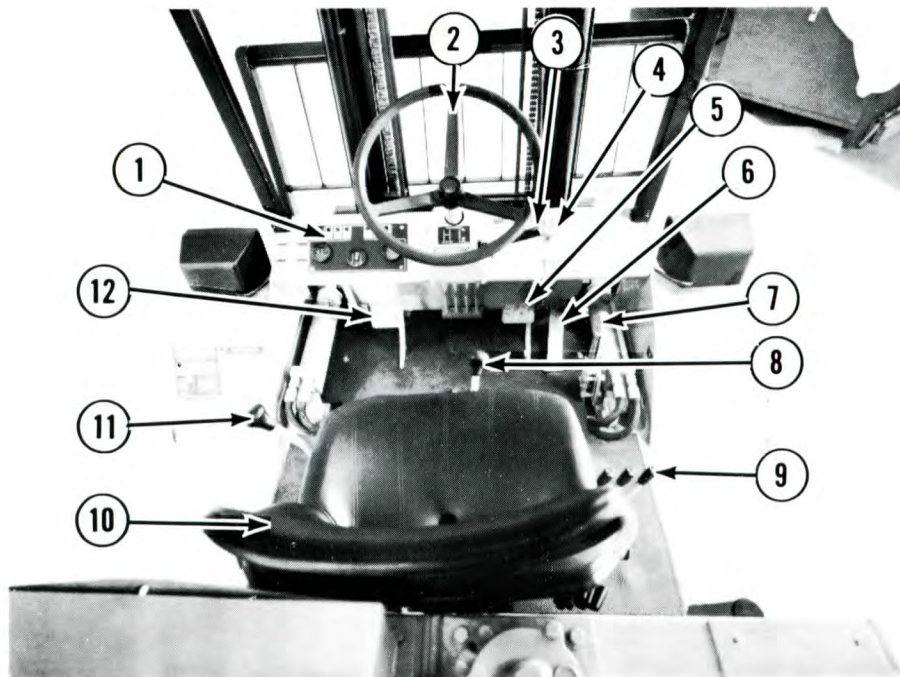
KNOW YOUR TRUCK



1. Rear/Steer Wheels
2. Rear Lights
3. Towing Pin
4. Engine Compartment
5. Overhead Guard

84M303

OPERATOR'S COMPARTMENT AND CONTROLS



84M304

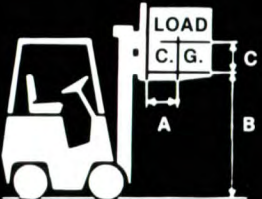
1. Instrument Panel
2. Steering Wheel
3. Headlight Turn Signal and Horn Switch
4. Engine Stop Handle
5. Service Brake Pedal
6. Accelerator Pedal
7. Parking Brake Lever
8. Gear and Range Selector Levers
9. Hydraulic Fork Control Levers
10. Seat and Safety Belt
11. Forward/Reverse Lever
12. Clutch Pedal

**Familiarize
yourself with the controls
and follow
safe operating rules.**



DATA PLATE AND DECALS

MODEL NO. 1			
SERIAL NO. 2		LOT NO. 3	
ATTACHMENTS 4			
CAPACITY WITH ATTACHMENTS LISTED ABOVE OR WITH FORKS—UPRIGHTS VERTICAL.			
LBS.	A	B	C
5			
TRUCK WEIGHT 6			



FOR OTHER CAPACITIES CONSULT CLARK EQUIPMENT CO. AS RELEASED FROM FACTORY ROUGH TERRAIN TRUCKS MEET THE DESIGN SPECIFICATIONS FOR POWERED INDUSTRIAL TRUCKS. PART 3 ANSI B56.6 1978.

CLARK

2390228

25036



84M192

Know the rated capacity of your truck and **DO NOT OVERLOAD IT.**

Read the rated capacity on the data plate and understand areas 1 thru 6 as shown in the illustration.

- | | |
|-----------------------|-----------------|
| 1. Truck Model Number | 4. Attachments |
| 2. Serial Number | 5. Capacity |
| 3. Lot Number | 6. Truck Weight |

DATA PLATE AND DECALS

WARNING

BREAKING THESE RULES WILL CAUSE SERIOUS OR FATAL INJURY TO YOURSELF AND OTHERS.

- Do not operate this lift truck unless you are trained and authorized. Read and understand operator's manual before starting lift truck.
- Do not operate damaged or faulty lift truck. Do not attempt repairs unless you are trained and authorized.
- Look where you drive. Watch out for people, obstructions and drop-offs. If load blocks your view, drive backward, except up slopes.
- Lift trucks will tip over if not properly operated. Slow down before turning. Do not turn on slopes. Drive with forks or attachments fully lowered and tilted back. Do not raise forks on soft or unlevel ground. Check tires for correct pressure.
- Forks or attachments can fall rapidly if not properly controlled or maintained. Do not use this lift truck to raise people.
- Protect against falling objects. Overhead guard and load backrest extension must be in place.
- Do not load lift truck over capacity on nameplate. Move long, high, or wide loads carefully. Do not move unstable loads.
- If equipped with left and right brake pedals, reduce speed when using individual brake pedals. Lock both brake pedals together for road travel.
- If equipped with tow bar, see operator's instruction manual for towing instructions.
- Before getting off lift truck, lower forks or attachments all the way, put drive in neutral, turn off key, and set parking brake.

Clark Equipment Co. 1982

Rough Terrain

2377061

25026



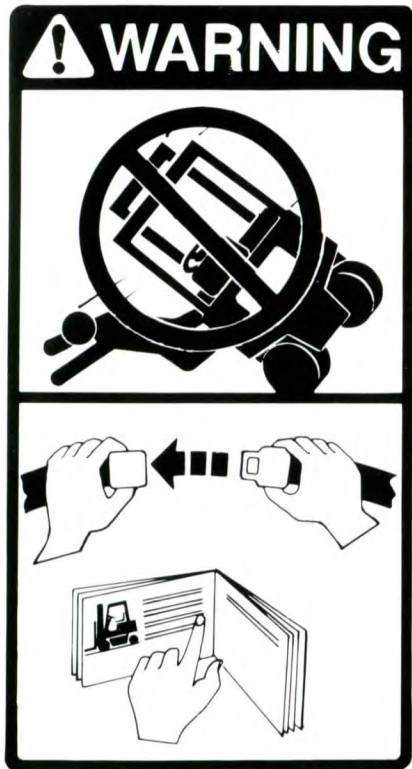
84M192

The operator's warning decal describes basic instructions for safe operation of a Rough Terrain lift truck.

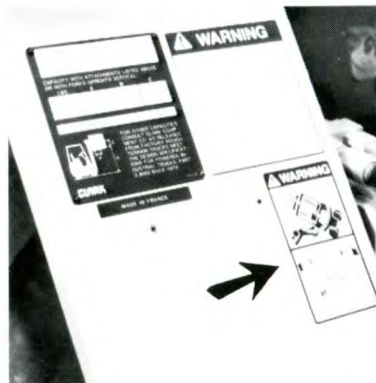
Read and understand these instructions plus the other messages in this manual and on the truck.



DATA PLATE AND DECALS



24972



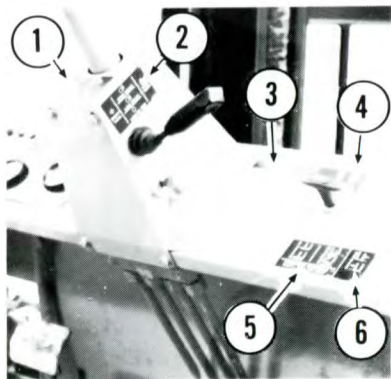
84M192

Read and understand this Operator's Manual before you operate this truck.

Do not operate this truck until you attach the seat belt securely around your waist. Buckle-up for safety.

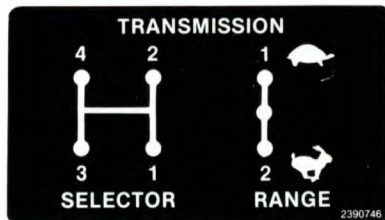
Lift trucks can be tipped over if operated improperly. Experience with lift truck accidents has shown that the driver cannot react quickly enough to jump clear of the truck and overhead guard as the truck tips. To protect operators from severe injury or death in the event of a tip-over, it is best to be held securely in the seat. Brace your feet, grip the steering wheel and stay in your seat.

DATA PLATE AND DECALS



84M193

1. Gear and range selector decal.
2. Lights and turn signal decal.
3. Engine starting and stopping instructions.
4. Pull to stop engine decal.
5. Sliding forks control decal.
6. Lifting and tilting forks control decal.

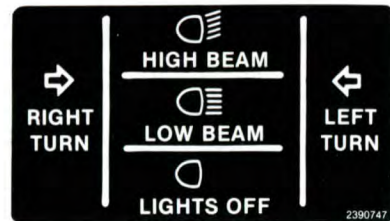


25040

The transmission decal is located on top of the steering column housing.

The decal indicates the gear and range selection lever positions.

The levers are located on the floor in front of the driver's seat.



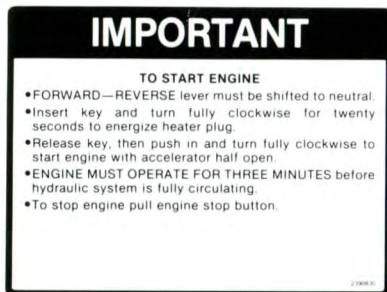
25041

The light and turn signal decal is located on the right side of the steering column housing.

This decal shows the position of the lighting and turn signal lever.

The lever is also the horn sounding lever.

DATA PLATE AND DECALS

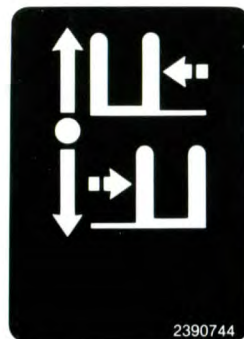


To start engine decal provides information for starting and stopping the rough terrain diesel engine.

The decal is located in the center of the right hand dashboard panel next to the stop handle.



The pull to stop engine decal is located above the engine stop handle on the right hand dashboard panel.



The fork side sliding decal shows the position of the lever to move the forks left and right.

This decal is located next to the fork lift and tilt decal.

DATA PLATE AND DECALS

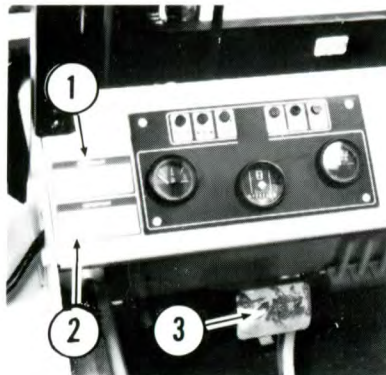


25044

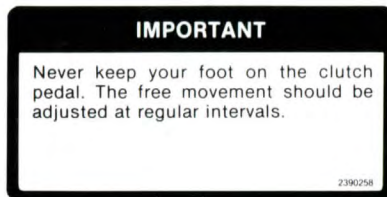
The fork lift and tilt decal is located on the right hand dashboard.

The decal indicates the positions for lifting, lowering and tilting the hydraulic control levers.

The decal also indicates that all the control levers are located to the right of the driver's seat.



84M194



25045

IMPORTANT

CLUTCH BEARING

THIS SHOULD BE GREASED ONCE MONTHLY but sparingly to prevent grease reaching clutch disc.

2390745

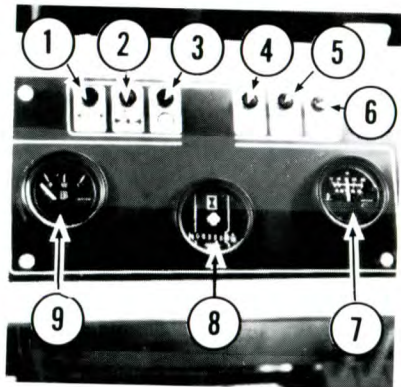
25046

1. Clutch bearing lubrication decal gives periodic maintenance information.
2. Clutch operation decal gives operation warning and adjustment information.
3. The clutch pedal is located on the floor, under the left hand instrument panel.

DATA PLATE AND DECALS

The instrument control panel is located to the left of the steering wheel.

The panel shows gauges, indicator lights and symbols to represent truck functions as follows:



1. Green warning light illuminates when directional turn signal lever is moved to left or right hand turning position.
2. Red warning engine oil pressure light illuminates when engine is being started. If this warning light comes on during operation stop engine and notify supervisor.
3. Red warning light will illuminate if air filter is clogged or damaged.
4. Not used.
5. Red warning light will illuminate when engine is being started. If this warning light comes on during operation stop engine and notify supervisor.
6. Blue warning light illuminates when the headlights are turned on.
7. This gauge indicates the engine water temperature.
8. This gauge records the hours the engine has been operating the indicator light at the top of gauge indicator. The gauge is operating properly.
9. This gauge indicates the level of the fuel in the tank.

DATA PLATE AND DECALS



84M196



25047

The forward/reverse lever decal is located on the lever support.

The decal shows the direction the truck will travel when the lever moves to the positions indicated by the arrows.



84M197



25048

The hand brake decal shows the location of the parking hand brake.

The decal is located inside the operator's compartment on the right hand inner fender wall.

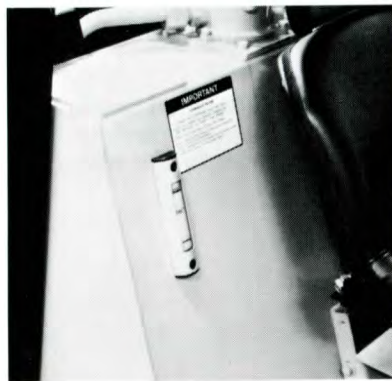
DATA PLATE AND DECALS



84M198

THIS OVERHEAD GUARD CONFORMS TO AMERICAN NATIONAL STANDARD B56.1. IT IS INTENDED TO PROTECT THE DRIVER FROM SMALL FALLING OBJECTS BUT NOT FROM FALLING CAPACITY LOADS. GUARDS OF THIS DESIGN HAVE ALSO PASSED A VERTICAL IMPACT TEST OF 16,000 FOOT POUNDS.

22270



84M199

IMPORTANT

HYDRAULIC FILTER

- CHANGE THE CARTRIDGE every 500 hours.
- CAUTION: DRAIN THE CIRCUIT COMPLETELY AND REPLACE OIL EVERY 1000 HOURS.
- Bleed the pump when starting the engine.
- According to the model of the pump, bleed the pump either by unscrewing:
 - the coupling which is nearest to the pump outlet.
 - the bleed screw on the pump itself.

25049

25049

The overhead guard plate is located on the front inside of the operator's overhead guard.

The hydraulic filter decal is located on the hydraulic fluid tank.

The decal describes the filter maintenance intervals and bleeding procedures.

DATA PLATE AND DECALS



25050



84M200

The "NO RIDING" decals are located near both steps to the operator's compartment.

Never carry passengers. They can fall off or cause you to have an accident.

DATA PLATE AND DECALS



84M201



24809



84M201

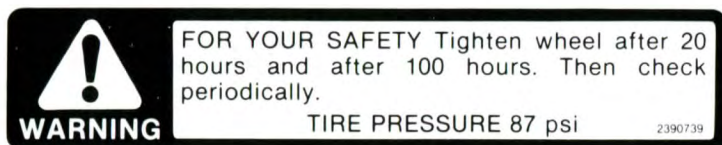
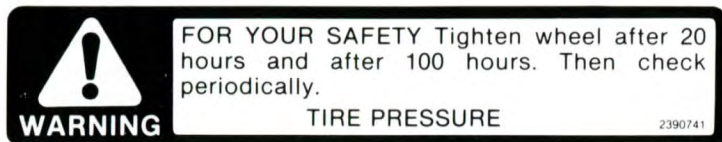


24810

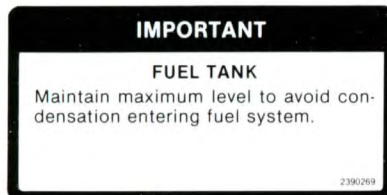
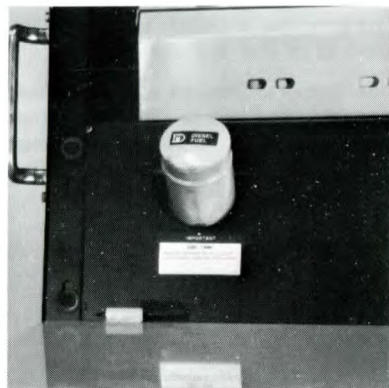
This safety decal is placed on the upright to warn of the danger of injury from movement between rails, chains, sheaves, fork carriage and other parts of the upright assembly. Do not climb on or reach into the upright. Personal injury will result if any part of your body is put between moving parts of the upright.

This safety decal is placed on the upright to warn of the danger of injury from forks when they are in the raised position. Do not ride on or stand under forks or attachments. The forks can fall and cause injury or death. Always make sure that the forks are in the fully lowered position when they are not being used to handle a load.

DATA PLATE AND DECALS



25053/25051



25055/25056

The front tire pressure decals are located on both front fenders. Check daily.

DPR 20..... 30 psi
DPR 25..... 40 psi
DPR 30..... 44 psi

The rear tire pressure decals are located on both rear (steer) fenders. Check daily to insure they have 87 psi.

Tighten wheel nuts periodically as indicated in the maintenance section of this manual.

The diesel fuel decal indicates the location for refueling and specifies that only diesel fuel may be used.

The fuel tank decal indicates refueling precautions.

DATA PLATE AND DECALS



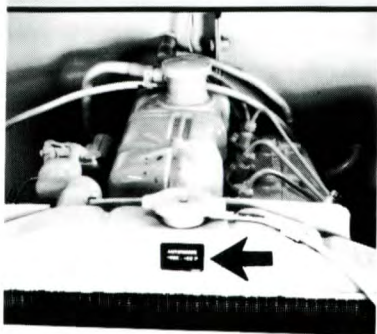
84M203



25057

The "Keep your fingers away from the fan" decals are located on the top of the fanguard.

Personal injury will result if you put your hand into the fan when the engine is running.



84M290

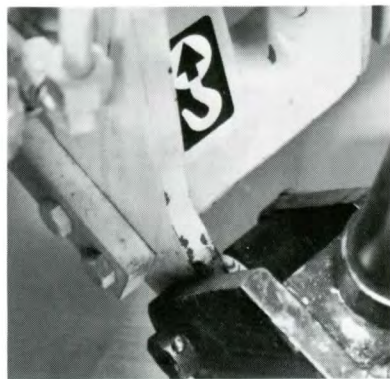


25058

The antifreeze decal is located on the top of the radiator.

The decal indicates the extreme outside (ambient) temperature the truck can operate in, with the antifreeze as shipped from your Clark dealer.

DATA PLATE AND DECALS

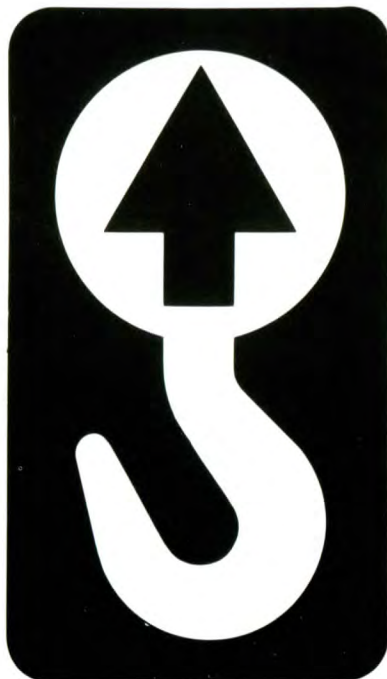


84M291



84M292

Code: OI-533



25059

The chain and hook decals are located in the front and rear of the truck.

These decals indicate the points to attach cables and hooks to lift the truck for shipping.

DATA PLATE AND DECALS

IMPORTANT

DRY AIR FILTER MAINTENANCE

- EVERY 150 HOURS (engine shut off):
 - Remove filter cartridge.
 - Blow air from inside to outside of cartridge.
 - Clean inside of filter with moist rag while protecting outlet pipe.
 - Check gaskets.
 - Replace damaged cartridge.
 - Fit cartridge in place.
 - Check screw tightness.
 - Check hose tightness.
 - Never wash cartridge.
- EVERY 450 HOURS (engine shut off):
 - Clean inside of filter with moist rag.
 - Change cartridge.

2390267

25060



84M335

The dry air filter maintenance decal is located on the inside of the counterweight under the engine compartment cover (hood).

Follow these maintenance instructions at the specified intervals.

If you operate in extreme dust conditions the filter should be maintained more frequent.

See the maintenance section of this manual.

SAFETY



24781

Only authorized personnel can operate Clark lift trucks.

Operators must be in good physical condition and have good driving skills.



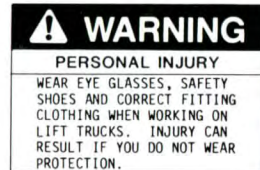
24808

Do not operate a lift truck unless you are trained and qualified. Remember to use safe driving rules.



24782

Wear a hard hat, safety glasses and safety shoes when operating a lift truck. Do not wear loose clothing.



SAFETY



24783

Never operate a lift truck with wet hands or shoes. Never hold any controls with grease on your hands. Your hands will slide off of the controls and cause an accident.

! WARNING

BREAKING THESE RULES WILL CAUSE SERIOUS OR FATAL INJURY TO YOURSELF AND OTHERS.

- Do not operate this lift truck unless you are trained and authorized. Read and understand operator's manual before starting lift truck.
- Do not operate damaged or faulty lift truck. Do not attempt repairs unless you are trained and authorized.
- Look where you drive. Watch out for people, obstructions and drop-offs. If road blocks your view, drive backward except up slopes.
- Lift trucks will tip over if not properly operated. Slow down before turning. Do not turn on slopes. Drive with forks or attachments fully lowered and tilted back. Do not raise forks on soft or uneven ground. Check tires for correct pressure.
- Forks or attachments can fall rapidly if not properly controlled or maintained. Do not use this lift truck to raise people.
- Protect against falling objects. Overhead guard and load backrest extension must be in place.
- Do not load lift truck over capacity on nameplate. Move long, high or wide loads carefully. Do not move unstable loads.
- If equipped with left and right brake pedals, reduce speed when using individual brake pedals. Lock both brake pedals together for road travel instructions.
- If equipped with tow bar, see operator's instruction manual for towing instructions.
- Before getting off lift truck, lower forks or attachments all the way, put drive in neutral, turn off key, and set parking brake.

25026

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

A black and white illustration of a man wearing a cap and glasses, pointing his finger at a capacity plate on a truck. The capacity plate is a rectangular label with various fields and text. The man is shown in profile, looking towards the plate.

MODEL NO. DUT 50	
SERIAL NO. 1 3 4 5 0	LOT NO. 0 0 4 0
ATTACHMENTS	
CAPACITY WITH ATTACHMENTS (LBS) (H) (M) OR WITH FORKS (L) (R) (T) (V) (W) (X) (Y) (Z)	
LBS	A B C
TRUCK (T) _____	
FOR OTHER CAPACITIES CONSULT CLARK EQUIPMENT CO. AS RELEASED FROM FACTORY. RIGID TIRE TRUCKS MEET THE DESIGN SPECIFICATIONS FOR POWERED INDUSTRIAL TRUCKS. 1" (H) 3 ANG 856.0 1/2" (M)	

25018

Know the 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 6.

Make sure that your truck is the correct fire safety type for the area in which you are working.

The proper type designation for the truck is on the nameplate.



84M294

Read the operator's manual to learn the location and the function of all your trucks instruments and controls. Know its safety devices, how they are operated and how the special attachments, if any, work.

Before operating your truck, check steering, horn, brake application, forward-reverse lever, lift-lower controls and travel speed and range levers for correct operation.

SAFETY



25027



Always operate your truck with the seat belt properly fastened. Buckle-up.



84M295

Do not operate a lift truck unless you are in the operator's compartment with the safety belt buckled up. Keep your hands and feet on the controls and do not extend them past the operator's area.

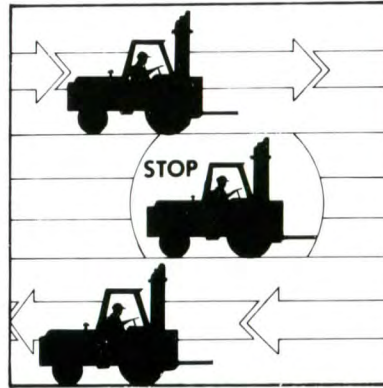
Never reach around or over the windshield to put hands or fingers on any part of the upright.

SAFETY



84M296

Look all around truck before moving it in any direction. Remember to start and stop slowly and smoothly.



25028

You must stop the truck before changing forward or reverse travel.



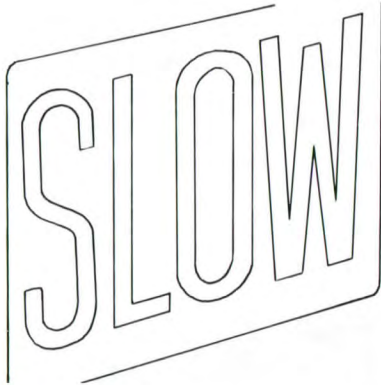
13087

Always obey all posted traffic rules and warning signs.

An operator shall give the right of way to ambulances, fire trucks or other emergency vehicles.

Do not operate your truck in unauthorized areas. Follow all safety rules and read all warning signs.

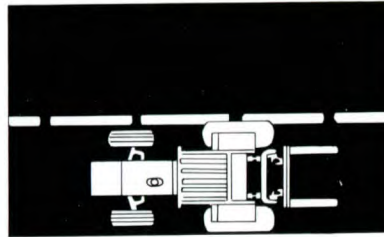
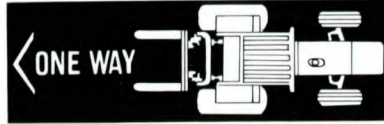
Know your operating area and always be aware of other traffic in your area.



13103

Slow down for turns, ramps, bumps, cross traffic, congested areas, wet or slippery operating areas and at all times when vision is restricted.

SAFETY



17451

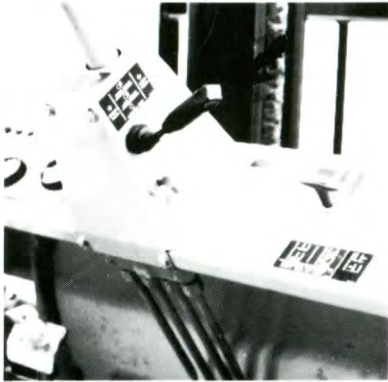
Operate the truck only in designated truck routes or roadways and keep operating routes clear. One-way traffic is recommended. If this is not practical in your operation follow highway regulations and drive to right of aisle or roadway centerline.



84M295

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

SAFETY



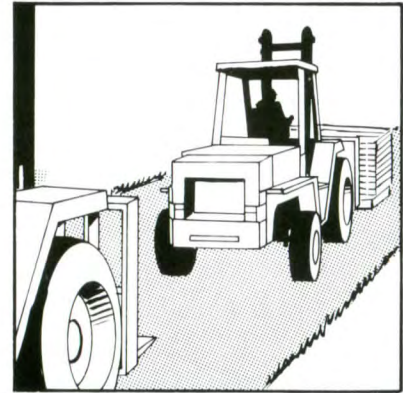
84M193

When operating your truck, remember to press the horn at all corners, exits, entrances and when nearing pedestrians.



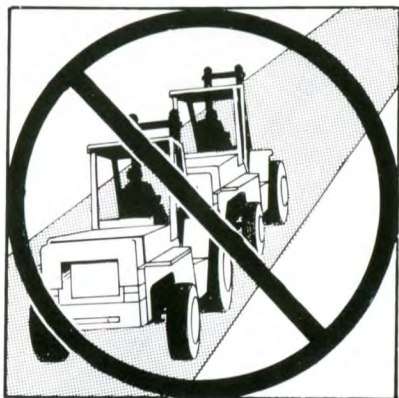
17466

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



24907

Keep a safe distance from the truck ahead of you at all times. Make sure there is enough distance to permit you to stop smoothly and safely.



24913

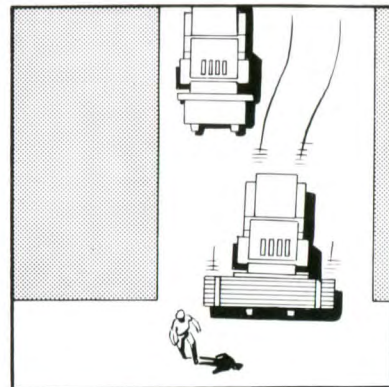
Do not use your truck to push or tow another truck. Do not let another push or tow your truck. If a truck will not move, call a service technician.

SAFETY



24912

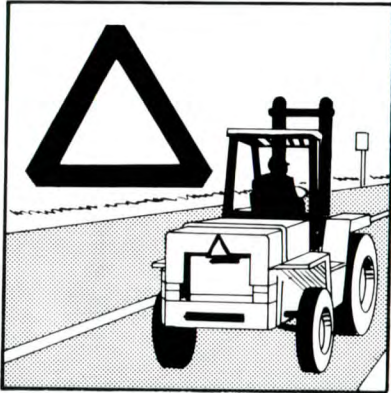
Never carry passengers. They can fall off or cause you to have an accident. Always be in full control of your lift truck and do not drive carelessly.



25011

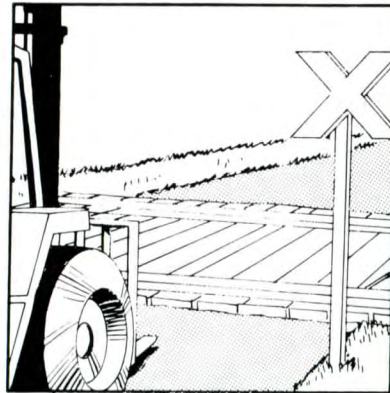
Don't pass other trucks traveling in the same direction at intersections, blind spots or other dangerous locations.

SAFETY



25015

When traveling over highways or public roads, be careful and make sure that your slow moving vehicle warning sign is visible and that all lights are undamaged and operating.



25012

When operating truck on public roads you must conform to local regulations. Cross railroad tracks at an angle wherever possible. Do not park closer than eight feet from center of tracks.

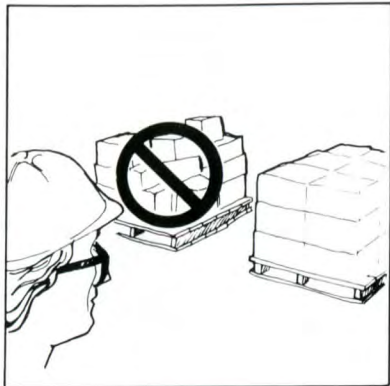


24951

Lift trucks are not designed as personnel elevators.

Use a man lift which is designed for this purpose.

SAFETY



24830

Thoroughly inspect load to be moved for overload and/or poor balance. If the load is not safe, **DON'T MOVE IT.**

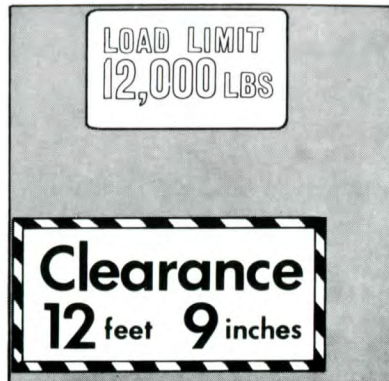
Unstable loads are a danger to you and to other personnel. Make sure that your load is well stacked and evenly positioned across both forks. Never lift a load with only one fork.



24914

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.

When attachments are used, extra care should be taken in securing, positioning and transporting the load. Operate this truck if equipped with attachments as if it is a partially loaded truck. Handle only loads within the capacity of the truck and attachment.

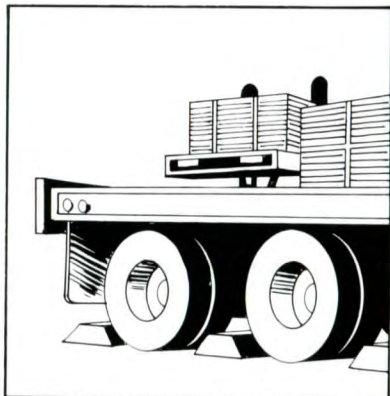


13102

Know and observe all overhead clearances, floor and bridge load limits in your operating areas.

Make sure floors of railroad cars, trucks, trailers are strong enough to hold your truck and the load.

SAFETY



24910

Make certain that vehicle being entered, loaded or unloaded has been blocked, truck or trailer brakes applied or locked to the dock to prevent accidental roll.

If trailer is not coupled to a tractor, supports may be needed to prevent upending or corner from dipping.



84M299

Always check to insure that you have adequate unobstructed overhead clearance before attempting to lift. Then gradually and smoothly pull back on lift control lever. Return the lever to neutral to stop lift at desired level.



24915

Do not permit anyone to stand or walk under elevated forks or other load engaging attachments if machine is so equipped.



SAFETY



84M300

Make certain the area under the load or forks is clear. Push forward on control lever to lower the load.

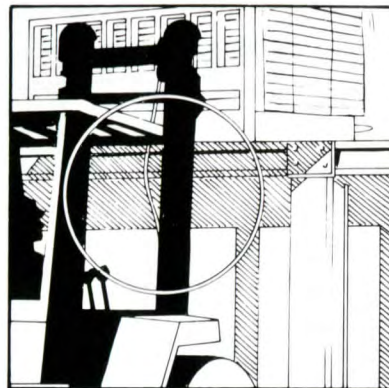
Lowering of the load may be stopped as desired by returning lever to neutral position.



25013

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

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



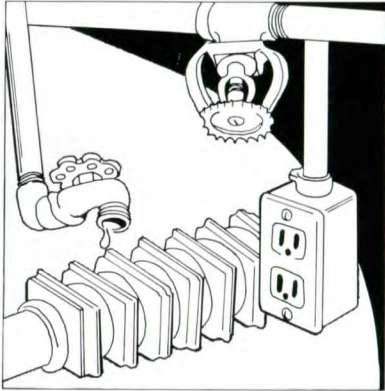
25019

When stacking or lowering loads watch the lift chains; if they go slack, stop, raise the load and lower again.

Slack chains mean rail or carriage hang-up. Raise the upright before you move.

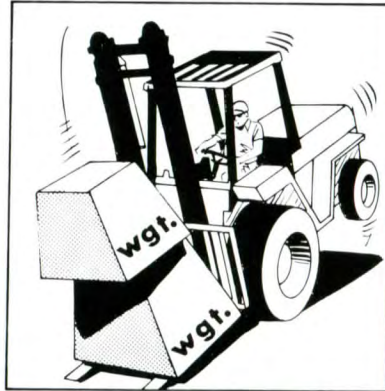
Do not go under the elevated portion of the truck to inspect or attempt repairs.

SAFETY



13104

Use caution when placing loads, or traveling, near water pipes, electrical wire, steam pipes, heaters or any other fragile or dangerous equipment or material.

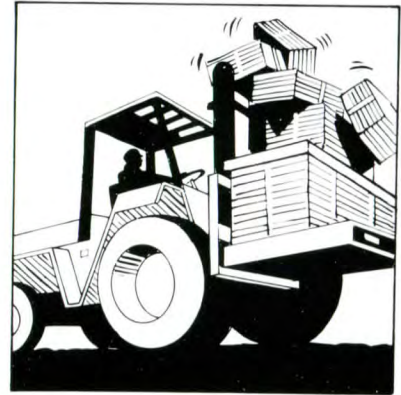


24950

Overloading is extremely dangerous. Do not overload.

You can lose steering control with an overload.

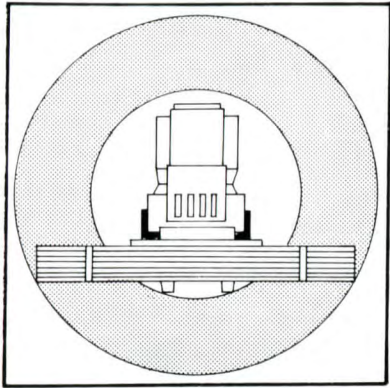
Never add more weight to the counterweight, always reduce the weight of the load.



24952

Never handle double loads. They are unstable and can fall and cause injury to the operator or other personnel.

SAFETY



25014

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

Allow enough clearance when passing other trucks, stationary objects, and people at work.

Seek assistance if your vision is not clear.



84M064

Always travel with load NEAR the operating surface and upright tilted back to cradle your load.

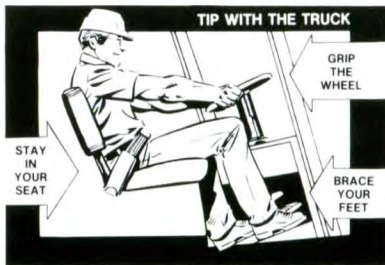
Never lift or lower the load while your truck is in motion.



17431

Don't drive down a ramp or grade load first. Your truck can tip up if the grade is steep. Always drive up or down grades with the load upgrade and never turn side ways on an incline. A lift truck can tip over if turned on a grade.

SAFETY



25029

WARNING

Always operate your truck in a safe manner.

If your truck starts to tip over brace your feet, grip the steering wheel and stay in your seat.

DON'T JUMP!



25023

WARNING

ROUGH TERRAIN

On rough or uneven surfaces like construction sites... use a truck designed for the job... A rough terrain truck **only**.

SAFETY



25024

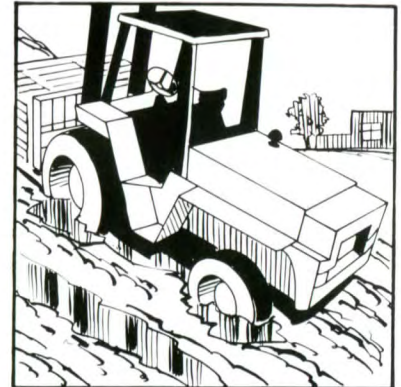
Use caution when maneuvering near scaffolding, trenches, and excavations.



24909

Be extremely cautious when operating truck near edge of loading dock, embankment, ditch or ramp.

The truck can fall over the edge and cause injury or death.



25022

When possible operate the truck using site roadways and choose routes that avoid steep, slippery, loose gradings or unsettled back filled trenches.

SAFETY



25025

When operating on rough terrain, avoid bouncing as this can cause loss of control and loads to fall off.



25016

Do not drive a truck close to anyone who is standing in front of a fixed object, stacked material, other vehicles or equipment. The person can be injured between the truck and the object.



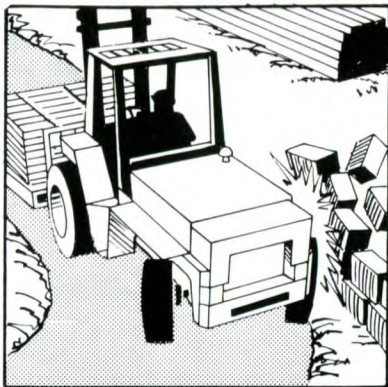
25017

Do not make a fast start or stop. Sudden stopping is dangerous and may cause your load to shift or fall off.

Do not travel, turn or change direction suddenly. Decrease speed for turns or when vision is not clear.

Remember, operate your truck safely and avoid accidents.

SAFETY



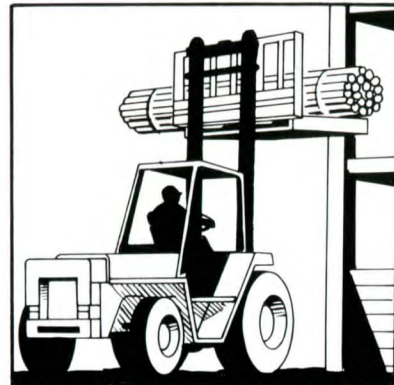
24908

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



84M296

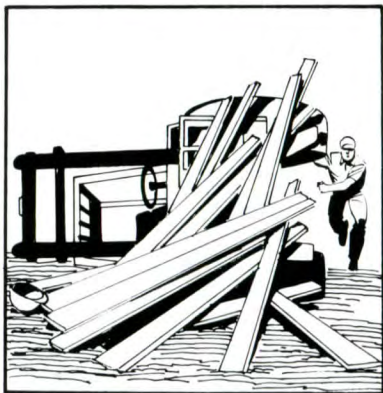
When handling large loads which restrict your vision, operate your truck in reverse or seek help to improve visibility.



25021

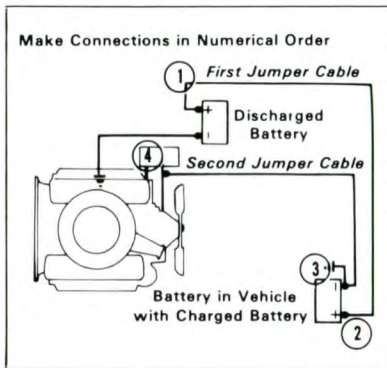
When lifting to high levels put the upright near vertical. Make sure truck is on stable ground and clear of trenches, walls and excavations.

SAFETY



24911

Never allow stunt riding or indulge in horseplay while operating a fork lift truck. This is dangerous and could result in serious injury to you and to other persons in your operating area.



24871

Use caution when using a booster battery and cables to aid in starting the truck. Only authorized trained personnel should "jump batteries". (See Emergency Starting Procedures section). The truck's battery is negative grounded. If the battery cables are attached wrong (reverse), electrical system damage and personal injury can occur.



25020

Fumes from operation of internal combustion powered trucks can be harmful to the health of personnel.

Make sure there is enough ventilation.

Turn off engine when not in use.

SAFETY



24949

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

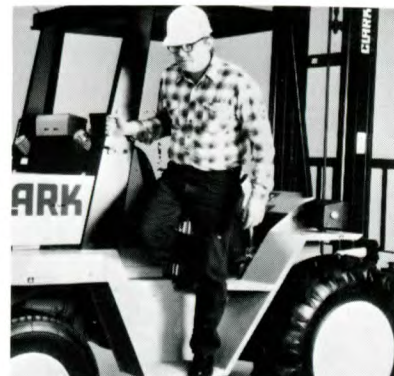
Spilled fuel must be washed away or completely evaporated and the fuel tank cap properly replaced before restarting the engine.



84M302

Follow a scheduled planned maintenance and lubrication program.

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



84M297

If you must leave your truck unattended, make sure your truck is not in a traffic lane.

Leave the truck as described in the "PARKING" section of this operator's manual.

SAFETY



17426

Park lift trucks in designated areas only. Lower forks to floor, tilt upright forward, place gear shift lever in any gear, remove switch key and block the drive tires.



24798

Report all accidents to your supervisor.



84M295

Remember — your safety and the safety of others depends upon you.

Keep your mind on operating your lift truck at all times.

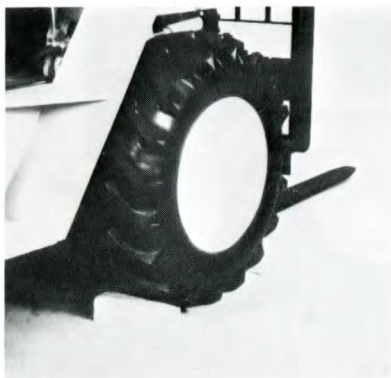
OPERATOR'S DAILY CHECK



84M285

OPERATOR'S DAILY CHECK

Each operator must complete a machine daily checklist. Do all of the checks and write your findings on the checklist. Give the completed form to the person responsible for lift truck maintenance. Do not operate the truck if repairs are needed. See your Clark dealer for copies of checklist sheets.



84M305

Put blocks around the drive wheel tires before making inspections under or around the truck.

Engage the parking brake.

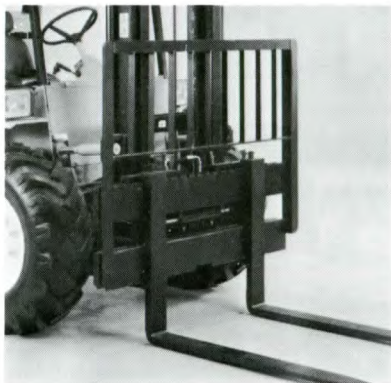
See "PARKING" section of this manual for instructions.



84M306

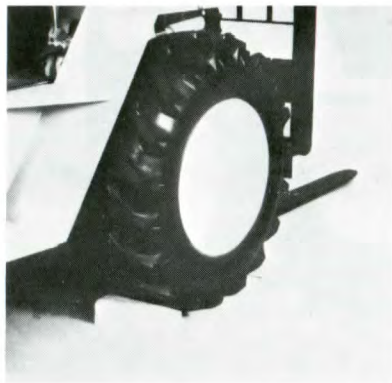
Check condition and mounting of the overhead guard.

OPERATOR'S DAILY CHECK



84M298

Check the load backrest extension for damage and security of mounting. Do not operate a lift truck without a load back rest extension.



84M305

Check condition of drive wheels and tires.

Note any drive wheel or tire damage on the checklist.

Check drive tire pressure and adjust if necessary. (See Page 89)

Check for loose or missing wheel nuts.



84M307

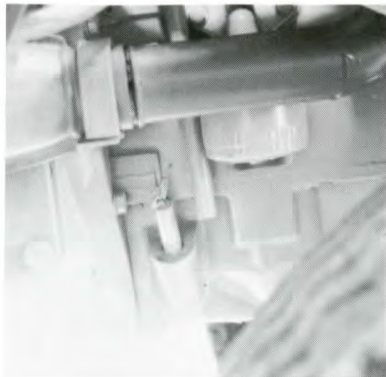
Check condition of steer wheels and tires.

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

Check steer tire pressure and adjust if necessary.

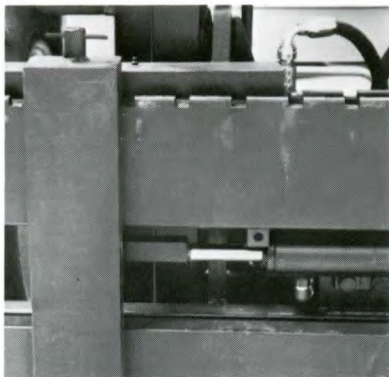
Tire pressure is 87 psi. Check for loose or missing wheel nuts.

OPERATOR'S DAILY CHECK



84M308

Inspect under the engine, transmission, drive unit and on the ground for antifreeze, engine oil, transmission fluid or hydraulic fluid leakage.



84M309

Inspect the fork slide cylinder, connections, piping and hoses for fluid leakage.

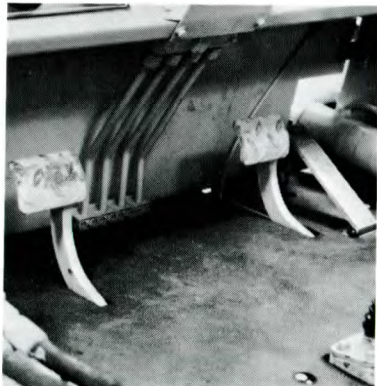


84M201

Inspect the upright lift cylinder hydraulic hose for leakage and the lift chain for any damage or wear.

Examine the sliding sections of the mast slide rails. Look at the wear strips closely for wear.

OPERATOR'S DAILY CHECK



84M310

Look under the instrument panel for hydraulic fluid leakage.

Check the mast tilt cylinders, connections, piping and hoses for fluid leakage.

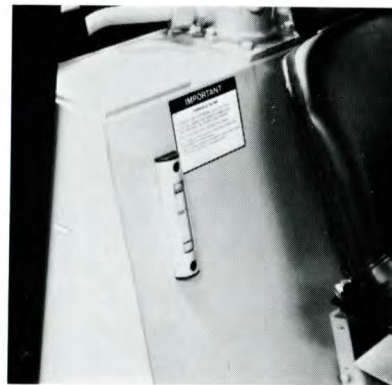


84M199

Check hydraulic oil level with truck on level ground, engine stopped and the upright lowered and tilted back.

Fluid level is correct when oil is at the maximum mark.

It is necessary to keep the hydraulic fluid at maximum level at all times.



84M317

OPERATOR'S DAILY CHECK



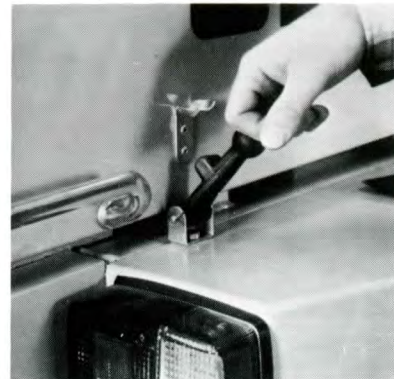
84M311

Inspect the steer axle hydraulic cylinders, connections, pipes and hoses for leakage.



84M312

Remove the air intake stack by pulling it up, and out of the mounting base.



84M313

Remove the front engine compartment cover hold-downs by pulling up and towards you.

If any hold-downs are missing report it on the daily check list.

OPERATOR'S DAILY CHECK

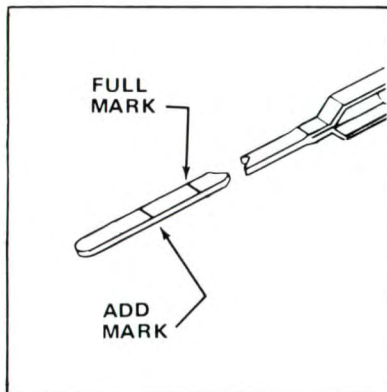


84M314

Lift the engine compartment cover (hood) all the way to a vertical position.

Hood should lift easily with assistance from the gas cylinder.

If gas cylinders do not seem to be assisting in the lifting write it on your daily check list.

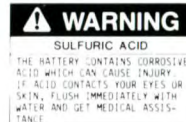
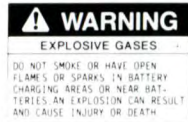
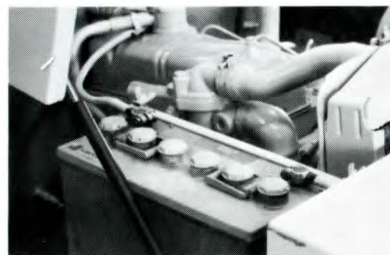


13239

Pull dipstick from support tube and check engine oil level.

Engine oil level must be maintained between the "add" and "full" marks on the dipstick.

Remember that one quart of oil will raise the level from "add" to "full". DO NOT OVERFILL.



84M301

Weekly, remove fluid level plugs from all battery cells and check fluid level in each. Add distilled water to cells as required and replace plugs. Check battery cables and connectors for corrosion and loose contact.

Check engine belts for cracks and excessive wear. Report any faulty conditions on the daily check list.

OPERATOR'S DAILY CHECK

FREEZING POINT AT DIFFERENT S.G.'s.		
S.G. OF ELECTROLYTE	TEMPERATURE	
1,100	- 7,2°C	19° F
1,150	- 17,2°C	1° F
1,160	- 20,6°C	- 5° F
1,200	- 26,6°C	- 15° F
1,250	- 51,0°C	- 59° F
1,280	- 68,0°C	- 90° F

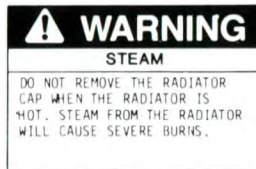
25030

The efficiency of the battery is reduced as the temperature falls.

Do not attempt to use the starter if the battery is exposed to temperatures below - 29°C, - 20°F, in this case, the battery will need warming.

When operating in extreme temperatures, remove battery and store in a warm place.

Keep battery fully charged.



FREEZING POINT AT DIFFERENT ANTIFREEZE %'s			
ANTIFREEZE		TEMPERATURE	
25	%	- 12° C	10° F
33,3	%	- 18° C	0° F
40	%	- 23° C	- 10° F
45	%	- 29° C	- 20° F
50	%	- 34° C	- 30° F
54	%	- 40° C	- 40° F
58	%	- 46° C	- 50° F
60	%	- 50° C	- 58° F

25031

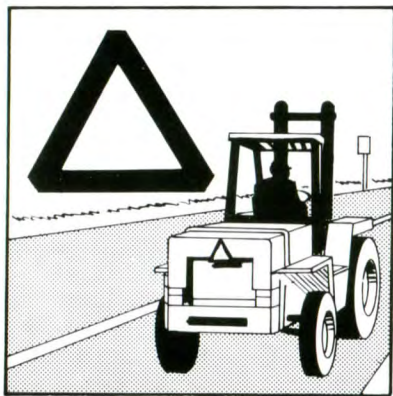
Always check radiator coolant level with engine turned off and cold, if possible. Correct coolant level is midway between the top of the radiator core and the bottom of the filler neck.

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 cloth over the radiator cap and loosen slowly to allow gradual escape of steam.

Never add cold water or cold antifreeze into the radiator of an overheated engine. Allow the engine to cool and avoid the danger of cracking the cylinder head block. Keep engine running while adding water or antifreeze. A solution of 50% ethylene glycol and 50% water is recommended — never use water only.

Remember to replace radiator cap and make sure that it is properly secured after check of radiator coolant level has been completed.

OPERATOR'S DAILY CHECK



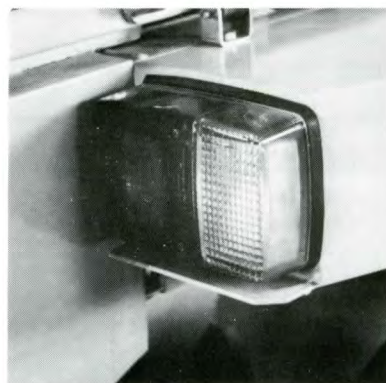
24957

If truck is to be operated on public highways at any time, make certain slow moving vehicle safety triangle is properly secured.



84M315

Check condition of both headlight lamps and turn signal lenses.

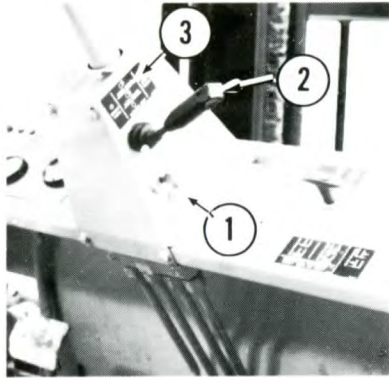


84M316

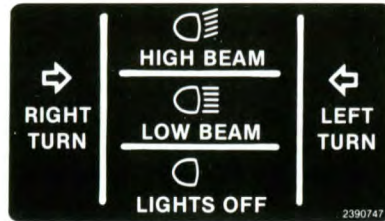
Check condition of both rear lamp lenses.

If damaged, report condition on the daily check list.

OPERATOR'S DAILY CHECK



84M193



25041

Make a visual check of all lights to be sure they are operating correctly.

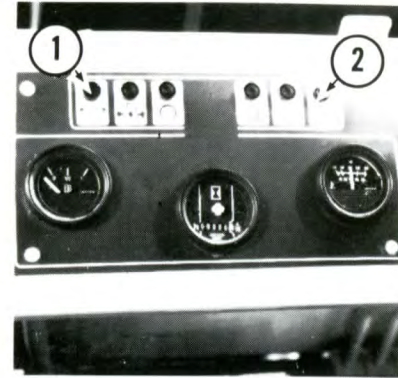
Carefully enter operator's compartment and insert the key into the key switch (1), turn key to "on", the first position only. Do not start truck.

Check the operation of lights by moving lever (2) to all the positions indicated on decal (3).

Step on the service brake pedal to make sure rear brake lights are operating properly.

Check to make sure the horn sounds when you push lever (2) towards steering column.

If any of the lights or horn do not operate, note problem on the daily checklist and report the condition to your supervisor before you operate the truck.



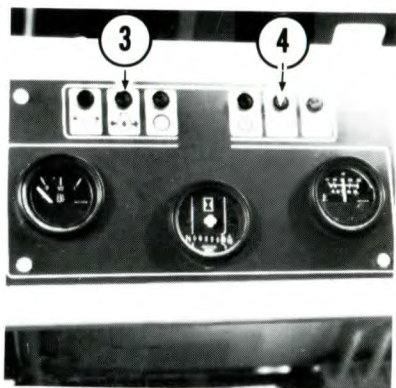
184M195

Look at the large instrument panel to the left of the steering hand wheel.

The green turn signal indicator (1) must flash when the turn signals are activated.

The blue headlight indicator lamp (2) must come on when the headlight switch is activated.

OPERATOR'S DAILY CHECK

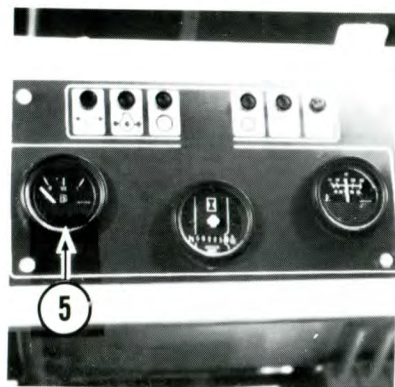


84M195

Check the operation of the engine oil pressure indicator (3). The red light should go out after engine is started.

If it does not go out, stop the engine, note the condition on the daily checklist and notify your supervisor. **DO NOT OPERATE THE TRUCK.**

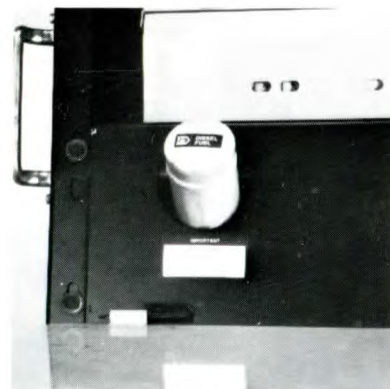
Check the red electrical contact indicator (4). This lamp should go out when the engine is started.



84M195

Check the fuel gauge (5).

Never try to start a diesel engine on an empty tank as serious pump damage can result.



84M202

The fuel tank filler is located behind the operator's compartment.

Recommended fuel is automotive quality diesel fuel as defined by ASTM D975 grades 1D and 2D, with sulfur content of less than 0.5% (weight) and a cetane rating of 45 or more.

Start your shift with a full tank. Add fuel in designated areas only.

OPERATOR'S DAILY CHECK



25034

Wipe all spilled fuels before starting engine. Do not smoke, have open flames or ignite any sparks while fueling the truck. Fill the fuel tank at the end of each shift.



Code: OI-533



84M197/84M297

Make sure the parking brake lever is in the applied (up) position, then carefully leave the operator's compartment.



84M293

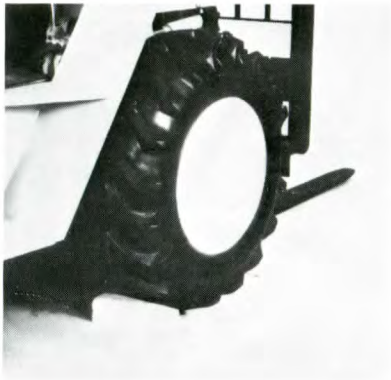
Attach a "WARNING" tag to the steering wheel if the truck has damage, missing decals or unsafe to operate.

Report this information to your supervisor.

Do not operate the machine until repairs have been correctly done.

END OF OPERATOR'S DAILY CHECK SECTION.

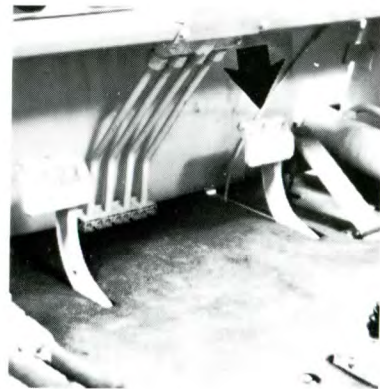
BEFORE OPERATION



84M305



25027



84M310

BEFORE OPERATION CHECKS.

Remove the wheel blocks. Carefully enter the operator's compartment and position yourself in the driver's seat.

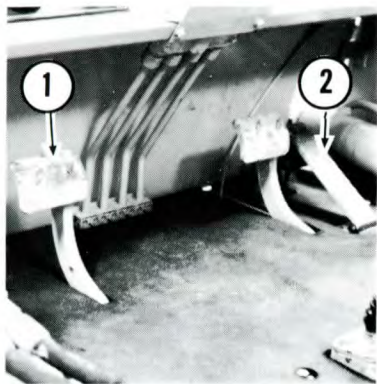


Always operate your truck with the seat belt properly fastened.

BUCKLE-UP.

Press down firmly on the brake pedal. The pedal should be "firm". If the pedal feels "spongy" or "fades" under foot pressure **DO NOT OPERATE THE TRUCK.** Report the problem immediately.

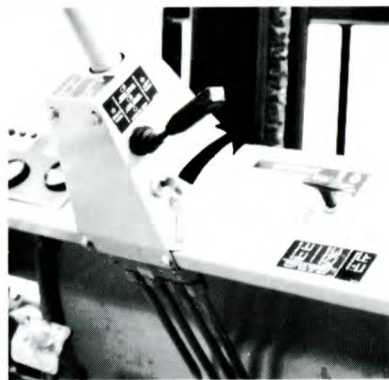
BEFORE OPERATION



84M310

Place your left foot on the clutch pedal (1) and push down to disengage the transmission.

Place your right foot on (2) the accelerator pedal and apply slight pressure to partially open the throttle.



84M193

Push in and turn the switch key clockwise to engage the starter. Release the key as soon as the engine starts and it will automatically return to the normal "run" position.

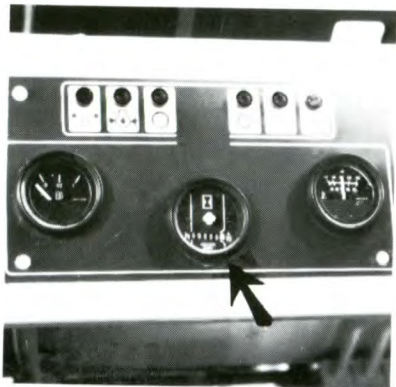
Do not hold starter in the "engaged" position for more than 20 seconds at a time. If the engine fails to start during the first 20 seconds, release the key and wait at least two minutes before attempting restart. This will allow starter to cool.

If engine starts — then stops — wait a few seconds for starter and engine spin down before restarting.

Continue with gauge readings and lever operation checks after engine starts.



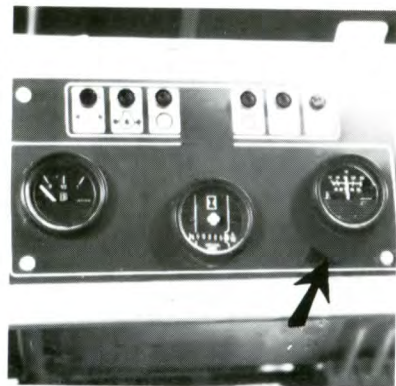
BEFORE OPERATION



84M195

Check the operation of the engine hour meter. Record the total hours and minutes on your daily checklist.

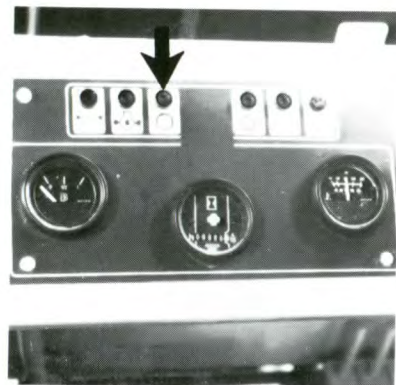
The blinker in the upper window indicates that the instrument is operating correctly.



84M195

After truck has been operating, check the engine coolant temperature gauge. The needle of the gauge should be in the 176°F to 194°F area.

If the needle registers higher than 194°F stop engine and notify your supervisor.

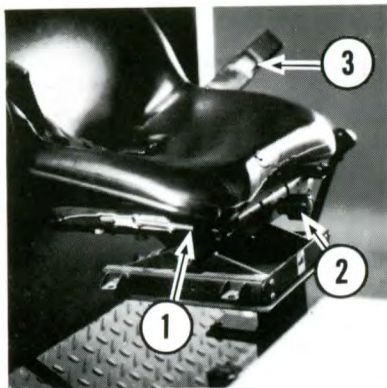


84M195

Check to make sure the red air filter indicator light does not light.

If this lamp lights it indicates that the air filter is clogged.

Note the condition on your daily checklist and notify your supervisor.



84M071

Before operating the truck make certain you have adjusted the seat, so that you can comfortably reach all controls, steering and all pedals and BUCKLE-UP.

1. Pull up on right hand side lever and move seat forward or reverse to the desired position.
2. Turn hand knob until you have reached comfortable dumping (stiffness).
3. Do not operate truck until you buckle-up the seat belt and secure yourself.

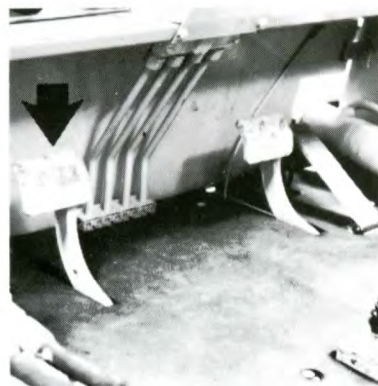
Code: OI-533

BEFORE OPERATION



84M197

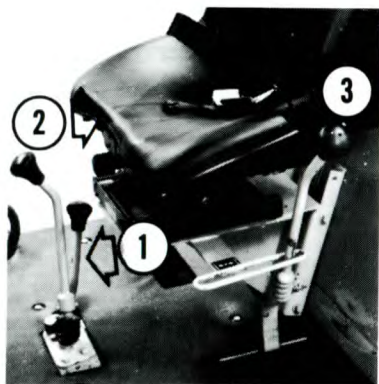
Release the parking brake lever and prepare to check travel operation.



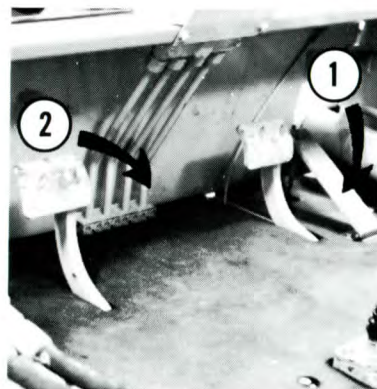
84M310

Clutch must be pressed down with your left foot, if not already, to select forward/reverse travel, 1st through 4th gear and high or low range.

BEFORE OPERATION



84M196



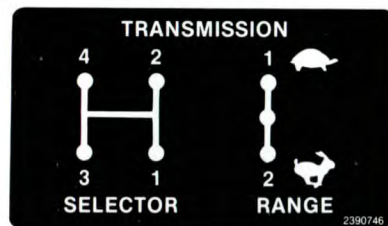
84M310

1. Push the range selector lever forward to low speed, this is indicated by a turtle symbol
2. Pull the gear selector lever toward you to 1st gear indicated on the decal by the number 1.
3. Push the forward/reverse lever forward to travel forward.

Make sure the path of travel is clear of pedestrians or objects.

1. Slightly push down on the accelerator pedal with your right foot.
2. Lift your left foot gently up and off the clutch pedal.

The truck should travel forward in a smooth motion.

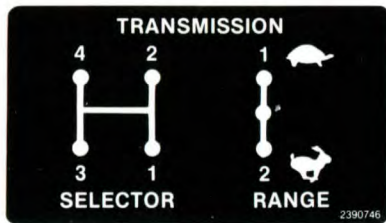


25040

While traveling forward alternately operate the accelerator, the clutch and shift to 2nd, 3rd and 4th gear using the gear shift lever.

Make sure the shifting was positive and not jerky.

BEFORE OPERATION



25040

Also, while traveling forward, alternately operate the accelerator, clutch and shift the range selector lever to the higher range. This is indicated by a rabbit symbol

Then shift through 1st, 2nd, 3rd and 4th gears as previously mentioned.

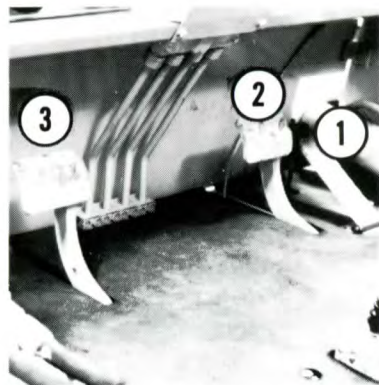
Changing from low to high range should be smooth and positive.



84M295

While traveling forward check to make sure all turning with the hand steer wheel is smooth and easy.

If steering is jerky or binding, note the condition on the daily checklist.



84M310

To stop the truck, lift your foot from the accelerator pedal (1) and press down on the brake pedal (2).

Before the truck comes to a complete stop, press down on the clutch pedal (3) with your left foot to prevent the engine from stalling. Braking should be smooth and positive.



25047

After truck is stopped move the forward/reverse travel lever to reverse and check travel operations in reverse, the same as described in forward travel.

Make sure the travel path is unobstructed.

BEFORE OPERATION



84M197

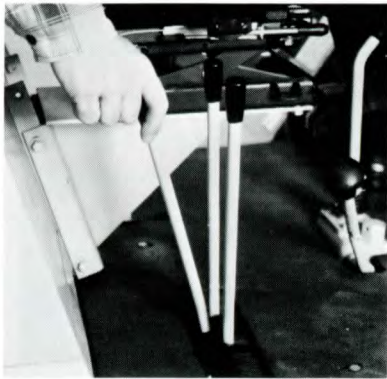
Upon completion of reverse operation checks, stop the truck and move the forward/reverse travel lever to neutral (center), and pull the parking brake lever to apply the brake.



84M064

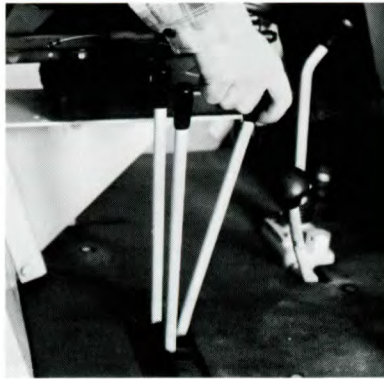
Gently pull back on the tilt control lever and hold until upright reaches full back tilt.

BEFORE OPERATION



84M319

Do not hold lever back after upright has reached full back tilt — to do so will heat the hydraulic fluid which can damage the hydraulic system components.



84M320

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

Return tilt lever to neutral position when upright reaches vertical.

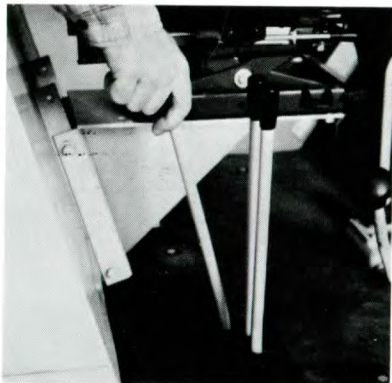
Record any erratic or unusual operation on your checklist.



84M299

Carefully check for adequate unobstructed overhead clearance.

BEFORE OPERATION

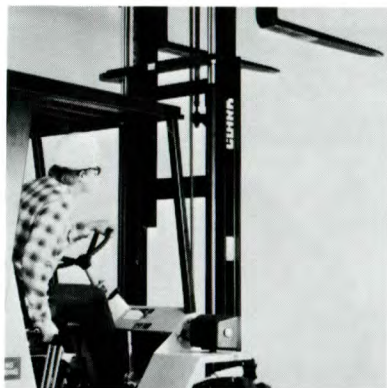


84M321

Gently pull back on lift control lever and hold until upright reaches maximum lift height.

Return lift lever to neutral position when desired level is reached.

Note any erratic upright operation on your checklist.



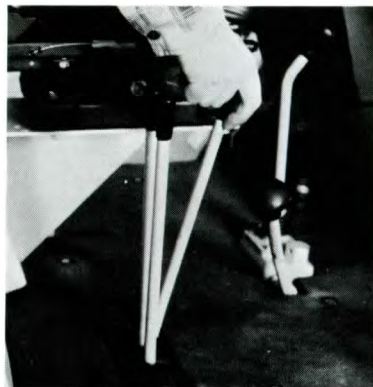
84M300

Make sure no personnel are standing under the forks.

Gently push forward on lift control lever and closely observe lowering of upright carriage.

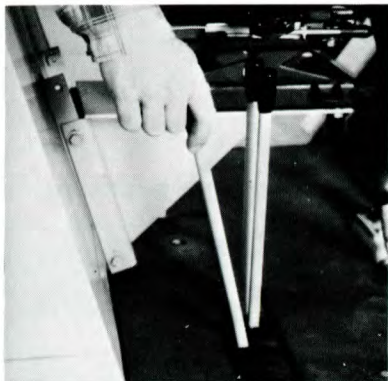
Return lift control lever to neutral position when upright is (about 4-6 inches) above floor level.

Record any erratic or unusual operation on your checklist.



84M322

BEFORE OPERATION



84M323

Gently pull back on the side shift lever. The forks should move sideways to your right.

Return side shift lever to neutral position to stop side movement at desired position.



84M324

Push side shift lever forward to slide the forks back to center or left of center as desired.

Do not hold the lever back after forks reach the full right or left position.

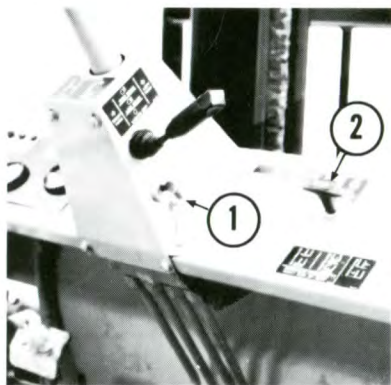
Note any erratic side movement operation on your checklist.



84M325

Put the operator's manual in the manual holder before leaving truck.

BEFORE OPERATION



84M193



84M310

84M197

Before stopping a hot engine, allow it to run at a high idle speed for a few minutes in an unloaded condition. This will allow the oil and coolant to circulate and reduce the temperatures in the engine and transmission. Ignoring this procedure can cause overheating and shorten the life of the engine.

Before leaving the operator's compartment; (1) remove the key from the key switch; (2) pull the stop engine handle until engine stops; (3) press down on the brake pedal and (4) pull the parking brake handle up.



15197

Review the operator's daily checklist to make sure that it has been completed. Give the checklist to the person responsible for lift truck maintenance.

BEFORE OPERATION



84M293

If your daily checklist review shows the truck is damaged or not safe to operate, attach a "WARNING" tag to the hand wheel.

Information on the warning tag should describe the problem.

Notify your supervisor or maintenance personnel.

! WARNING

THIS TRUCK IS IN NEED OF REPAIR (SEE REVERSE SIDE).
OPERATION OF THIS VEHICLE MAY CAUSE INJURY TO YOU OR THE MACHINE. FOR FURTHER INFORMATION CALL _____
PHONE _____

DATE _____
REMOVE THIS SIGN ONLY AFTER REPAIRS ARE MADE.

! AVISO

ESTA MAQUINA NECESITA REPARARSE.
(VER OTRO LADO)

LA OPERACIÓN DE ESTE VEHÍCULO LE PUEDE OCASIONAR DAÑOS PERSONALES A UD. O PODRÍA DAÑAR LA MAQUINA. PARA MAYOR INFORMACION LLAMAR A _____
NO. TELEFONO _____

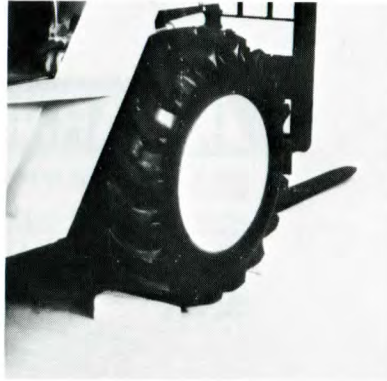
FECHA _____
QUITAR ESTE AVISO SOLAMENTE DESPUÉS DE QUE SE HAYA TERMINADO LA REPARACION.

59 886 0587 MARI 82

24805

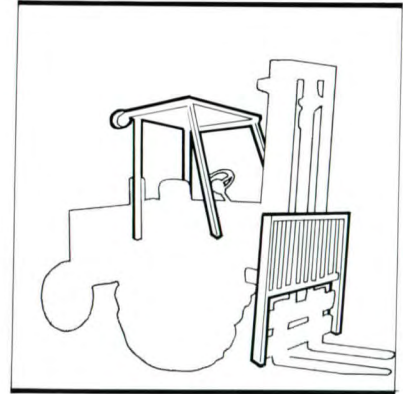
**END OF
BEFORE
OPERATION
CHECKS SECTION.**

OPERATION



84M305

Remove blocks from the wheels.



17435

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

**OPERATION
OF
TRUCK**

OPERATION



84M326

Carefully enter the operator's compartment.

Read the operator's manual to learn the location and the function of all your truck instruments and controls. Know its safety devices, how they are operated and how the special attachments, if any, work.



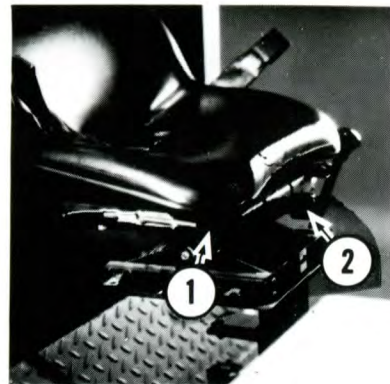
24969



WARNING

Always operate your truck with the seat belt properly fastened.

BUCKLE-UP.

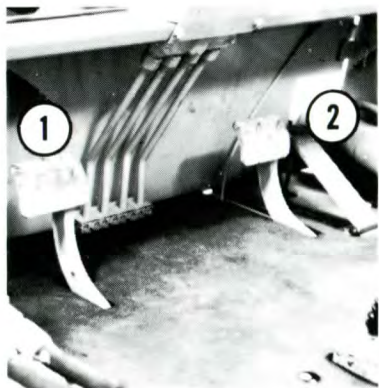


84M071

Before operating the truck make certain you have adjusted the seat, so that you can comfortably reach all controls and pedals.

1. Pull up on right hand side lever and move seat forward or reverse to the desired position.
2. Turn hand knob and adjust seat for your comfort.

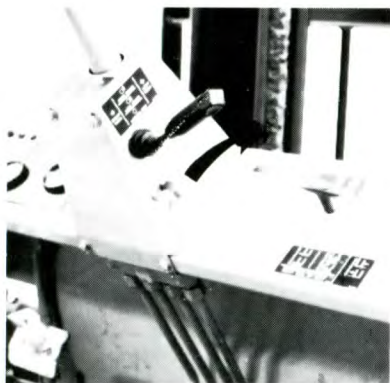
OPERATION



84M310

Place your left foot on the clutch pedal (1) and push down to disengage the transmission.

Place your right foot on the accelerator pedal (2) and apply slight pressure to partially open the throttle.



84M193

Push in and turn the switch key clockwise to engage the starter. Release the key as soon as the engine starts and it will automatically return to the normal "run" position.

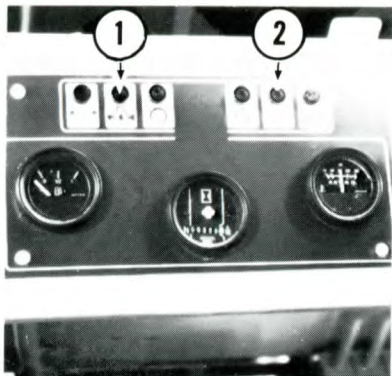
Do not hold starter in the "engaged" position for more than 20 seconds at a time. If the engine fails to start during the first 20 seconds, release the key and wait at least two minutes before attempting restart. This will allow starter to cool.

If engine starts — then stops — wait a few seconds for starter and engine spin-down before restarting.



13226

OPERATION



84M195

Make sure the engine oil pressure red indicator light (1) and the alternator red warning light (2) go out when the engine starts.



84M321

Lift the forks 4"-6" off the ground.



84M064

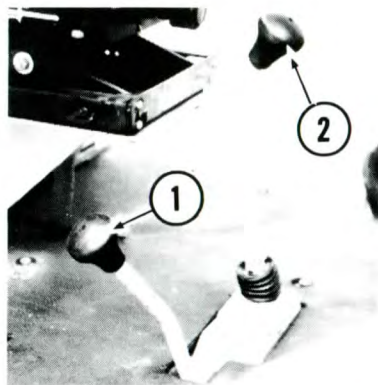
OPERATION




84M296


Check all around to make sure that the desired path of travel is clear of obstructions and personnel.

Forward direction of the truck is with operator end leading.

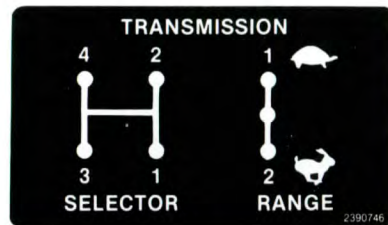


84M318

Push the range selector lever (1) forward to low speed. This is indicated by a  turtle symbol.

Higher speeds can be obtained by pulling the range selector lever rearward. This range is indicated by a  rabbit symbol.

Pull the gear selector lever (2) to 1st gear, indicated by the number 1. Move lever as shown to select faster speeds 2, 3 or 4, while truck is traveling. Always depress the clutch pedal when changing range or selecting gear speeds.



25040

OPERATION



84M197

Release the parking brake lever by pushing it toward the floor.

NOTE: The parking brake will release with less effort if you step on the service brakes first.



84M196

Move the forward/reverse lever to the desired direction of travel as indicated by the arrows.

The center position is neutral.

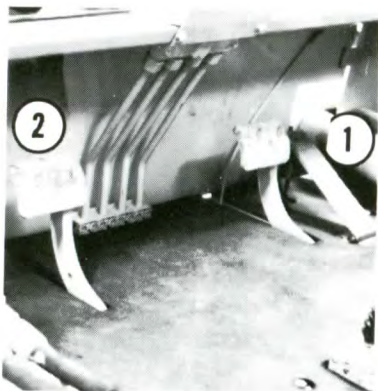
Never move this lever unless the truck is stopped and the clutch pedal is depressed.



2390749

25047

OPERATION



84M310

Gently press down on the accelerator pedal (1) and at the same time smoothly release the clutch pedal (2).

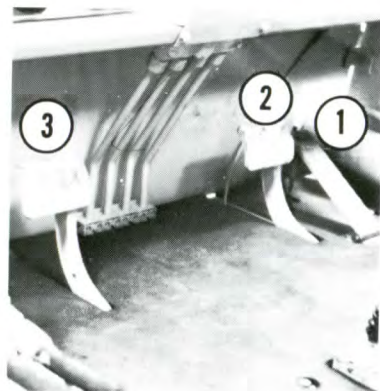
Move the truck at a safe speed for conditions in your operating area.



84M295

Turn steer hand wheel in the desired direction of travel.

Always remember that the power steering system is sensitive to movement of the steer hand wheel. Do not turn the wheel abruptly.

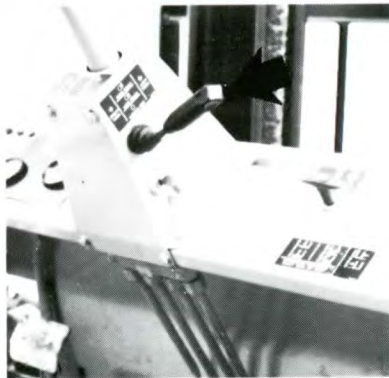


84M310

To stop the truck, lift your foot from the accelerator pedal (1) and press down on the brake pedal (2).

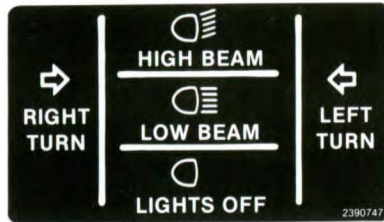
Before the truck comes to a complete stop press down on the clutch pedal (3) with your left foot to prevent the engine from stalling.

OPERATION



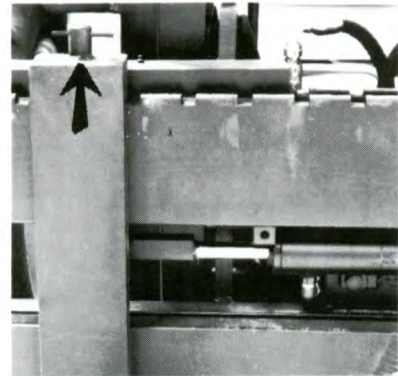
84M193

Push the turn signal and headlight lever toward the steering column to sound the horn when operating close to personnel and when approaching a blind crossway.



25041

Use lights and turn signals when required in your working area.



84M309

Lift the fork lock pins and slide the forks to get the correct width for the load.

Move forks safely and keep your fingers away from pinch points.

Don't forget to lock the pins in the forks to secure them.

OPERATION



84M299

Removing load from rack.

Before raising the forks, carefully check for adequate unobstructed overhead clearance.



84M321

Gently pull back on lift control lever and hold until forks reach desired height.

Return lift lever to neutral position to stop forks.



84M323

Centering Forks

Use the side shifter to move the forks as close to center as possible.

Pull back on lever to move forks sideways to the right.

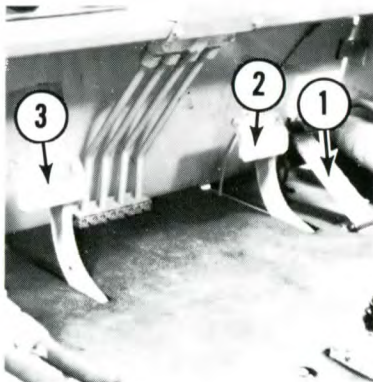
Return lever to middle (neutral) position to stop the side movement.

OPERATION



84M324

Push side shift lever forward to move the forks to the left.

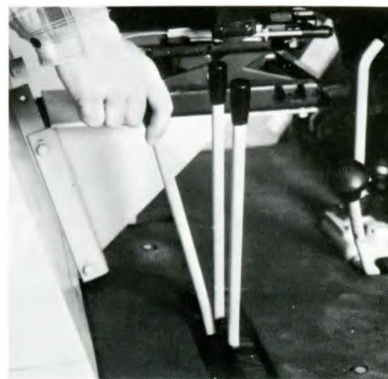


84M310

Inching

Use the following procedures when moving forks into a load:

Slowly press down on the accelerator pedal (1) and stop with brake pedal (2) to gently put the forks under the load. Press down on the clutch pedal (3) to keep the engine from stalling.



84M319

Tilting Forks

Gently pull back on the tilt lever and tilt the load slightly back before lifting.

OPERATION



84M321

Lifting Load.

Pull back on the lift lever to raise the load.

Make sure the load clears any obstructions.

Look behind you before you travel in reverse. Make sure load is clear of the rack before lowering.



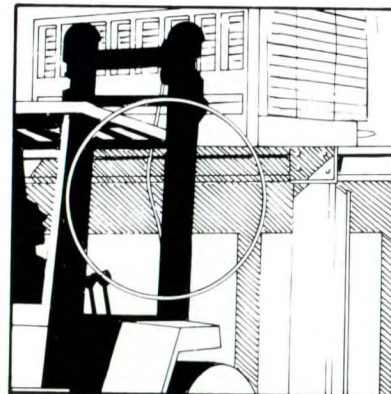
84M322

Lowering Load.

Make sure no personnel are standing near the truck.

Gently push forward on lift control lever to lower the forks.

Return lift control lever to the neutral position to stop at desired height.



25019

Slack Carriage Chains.



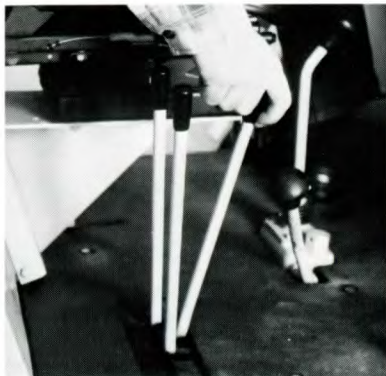
WARNING

When stacking or lowering loads watch the lift chains. If they go slack, stop, raise the load and lower again.

Slack chains mean rail or carriage hang-up. Raise the upright before you move.

Do not go under the elevated portion of the truck to inspect or attempt repairs.

OPERATION



84M320

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

Return tilt lever to neutral position to halt forward tilting action at desired point.



84M322

Continue to lower the load where desired.

Continue to lower until the forks have no load on them, but, not resting on any surface.

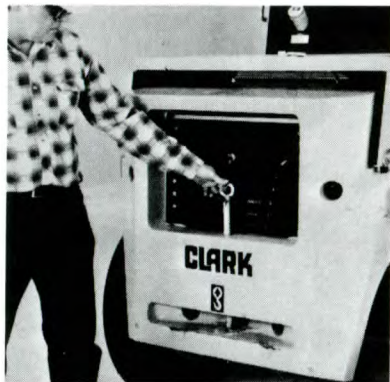


84M196

Move the forward/reverse travel lever to reverse and travel away from the load.

Make certain the forks clear the load.

OPERATION



84M327

Make sure the towing pin is properly secured when towing equipment.

The unloaded draw bar pull is 3,307 lbs.

**End of
Operation
Section**

PARKING



17426

Park lift trucks in designated parking areas only.

Do not block site routes, building exits, entrances or access to fire or emergency equipment.



84M196

Place the forward/reverse lever in the neutral (center) position.



84M197

Step on the service brake pedal and pull up the parking brake lever to activate the brake.

Lower the forks to the ground.

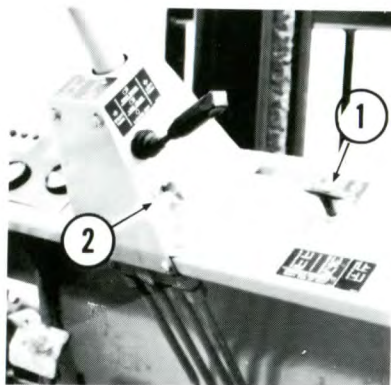
PARKING



84M194

Before stopping a hot engine, allow it to run at a high idle speed for a few minutes in an unloaded condition. This will allow the oil and coolant to circulate and reduce the temperature.

Ignoring this procedure can cause overheating and shorten the life of the engine.



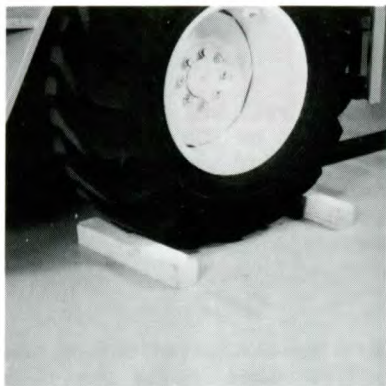
84M193

Pull the engine stop handle (1) and hold until the engine stops. Then turn the key switch (2) to "off" position. Remove the key.



13226

PARKING



84M054

Carefully dismount from the truck, firmly block the drive wheels to prevent accidental roll and turn the key into the designated authority.

EMERGENCY STARTING (How To Use Battery Jumper Cables)

These instructions apply to the use of a similar-model lift truck with a fully-charged "booster" battery to start the engine of a lift truck with a discharged battery.

To avoid damage to your lift truck and your battery or the possibility of harm to yourself follow these instructions and warnings. If you have any doubts, ask for help from an experienced mechanic.

IMPORTANT

Use only a 12-volt jumper system. You can permanently damage a 12-volt starting motor and ignition system by connecting it to a 24-volt power supply (two 12-volt batteries in series, or a 24-volt generating set).

1. This truck has a 12-volt battery and a negative ground electrical system. Make sure that the other truck also has a 12-volt battery and negative ground system. If not sure of the voltage, or if the ground is different, do not try to jump start, as personal injury or damage to the electrical system can result.

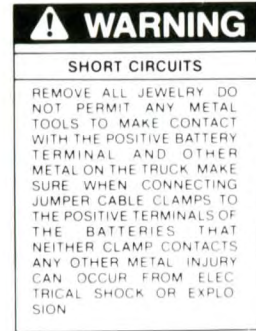
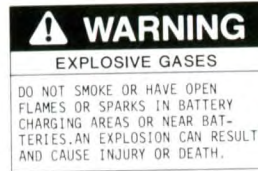
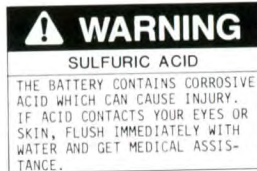
NOTICE

If your truck has a battery with terminals on the side, you will need a set of jumper cables with matching connector clamps, or cable adapters for side-mounted battery terminals.

2. If the discharged battery has filler caps, check the fluid level. **DO NOT USE AN OPEN FLAME TO CHECK AND DO NOT SMOKE.** If low, add distilled water to the correct level. Be sure to install the caps before jump starting.

DO NOT JUMP START, CHARGE OR TEST A SEALED-TYPE BATTERY IF THE TEST INDICATOR LOOKS ILLUMINATED OR HAS A BRIGHT COLOR. INSTALL A NEW BATTERY.

EMERGENCY STARTING (How To Use Battery Jumper Cables)



3. Put the truck with the booster battery as near to the other truck as necessary for the jumper cables to reach both batteries. CHECK AND MAKE SURE THAT THE TRUCKS DO NOT TOUCH EACH OTHER.

USE PARTICULAR CARE WHEN CONNECTING A BOOSTER BATTERY TO PREVENT SPARKS.

4. On both trucks:
- Turn all accessories to the "OFF" position and leave them off until after the engine has been started and the jumper cables removed.
 - Turn the ignition key switch to the "OFF" position.
 - Apply the parking brake.
 - Put the directional control lever in the "N" (NEUTRAL) position.

5. Connect the jumper cables in the following sequence:

(Also refer to Figure 24871)

- a. Connect the first jumper cable from the positive (+) (Red) terminal on one battery to the positive (+) (Red) terminal on the other battery. NEVER connect (+) (Red) to (-) (Black), or (-) to (+).
- b. Next, connect one end of the second cable to the grounded (-) (Black) terminal of the booster battery.

EMERGENCY STARTING (How To Use Battery Jumper Cables)

- c. Last, connect the other end of the second jumper cable to a stationary solid metallic point on the engine of the truck with the discharged battery. (NOT TO NEGATIVE (-) TERMINAL OF THE BATTERY.) Make this connection at a point at least [450 mm] 18 inches away from the battery, if possible. Do not connect it to pulleys, fans, or other parts that move. Be sure not to touch hot manifolds which can cause severe burns.
6. Start the engine on the truck with the booster battery, and run the engine at a moderate speed.

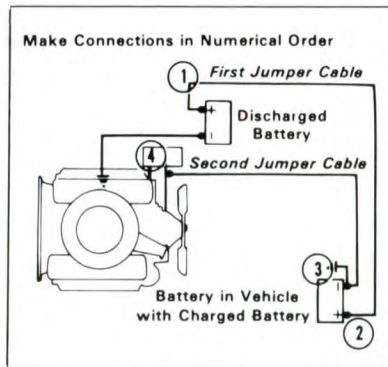
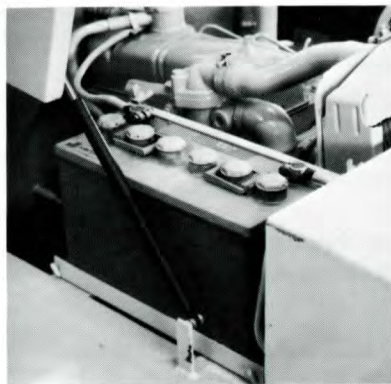


Fig. 24871

7. Start the engine of the truck with the discharged battery. Follow the starting instructions in the "Before Operation" section of this manual. Make sure that the engine is at idle speed before disconnecting the jumper cables.

8. Remove the jumper cables by reversing the above sequence exactly. Start by removing the last jumper cable, from the truck with the discharged battery, first. Remove the cable end from the engine block first, then the other end of the negative (-) cable.
9. Remove both ends of the positive (+) cable.

BATTERY RETAINMENT/CARE



84M301

⚠ WARNING
BATTERY SERVICE
BATTERY SERVICE MUST BE DONE BY TRAINED PERSONNEL. BATTERY ACID CAN CAUSE SEVERE BURNS AND INJURY.

⚠ WARNING
SULFURIC ACID
THE BATTERY CONTAINS CORROSIVE ACID WHICH CAN CAUSE INJURY. IF ACID CONTACTS YOUR EYES OR SKIN, FLUSH IMMEDIATELY WITH WATER AND GET MEDICAL ASSISTANCE.

⚠ WARNING
EXPLOSIVE GASES
DO NOT SMOKE OR HAVE OPEN FLAMES OR SPARKS IN BATTERY CHARGING AREAS OR NEAR BATTERIES. AN EXPLOSION CAN RESULT AND CAUSE INJURY OR DEATH.

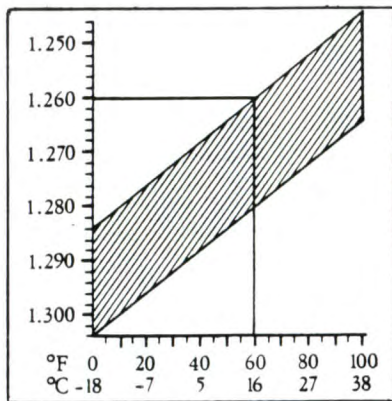
Use only batteries that meet the electrical requirements for use with diesel powered vehicles.

12 volt — 96 Amp. Hrs.

Make certain the battery is properly clamped and secured in the battery support.

Maximum battery size should not exceed the size of the battery support tray.

BATTERY RETAINMENT/CARE



25033

FREEZING POINT AT DIFFERENT S.G.'s.		
S.G. OF ELECTROLYTE	TEMPERATURE	
1,100	- 7,2°C	19° F
1,150	- 17,2°C	1° F
1,160	- 20,6°C	- 5° F
1,200	- 26,6°C	- 15° F
1,250	- 51,0°C	- 59° F
1,280	- 68,0°C	- 90° F

25030

Check the specific gravity (S.G.) of the electrolyte in each battery cell using a hydrometer; this check will also provide a good indication of the alternator condition.

The S.G. will vary in accordance with the outside temperature but a minimum of 1.260 should be maintained at 16°C (60°F). Refer to chart Figure 25033, if the S.G. is within the shaded area, the battery is charged normally. If the reading is above the shaded area, then recharging is necessary. The S.G. should not vary more than 0.025 units between the cells.

Do not carry out this check immediately after topping up with distilled water, always recharge for at least one hour before taking a reading.

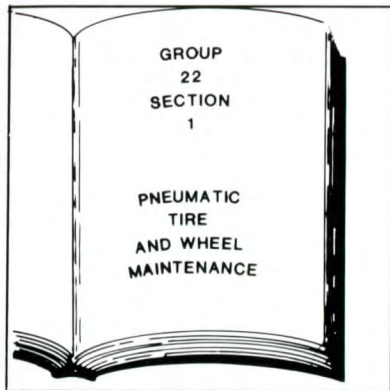
The efficiency of the battery is progressively reduced as the outside (ambient) temperature falls until it is practically useless at -40°C, -40°F.

The Table, Figure 25030, indicates the freezing point of the electrolyte at different temperatures. It is therefore important that the battery is kept fully charged at all times.

Do not attempt to use the starter if the battery is exposed to temperatures below -29°C, -20°F, in this case, the battery will need warming; this should be done by immersing it in warm water.

When operating in extremely cold temperatures, remove the battery from the truck and store in a warm area until just before it is required for use.

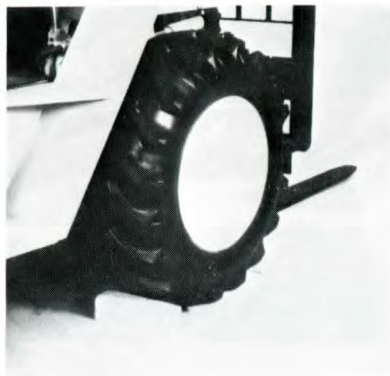
WHEEL AND TIRE INSPECTION



24309

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

Federal and State laws require persons to be fully trained and qualified before doing maintenance on wheels and tires.



84M305

Check condition of drive wheels and tires.

Note any apparent drive wheel or tire damage on the checklist.

Check drive tire pressure and adjust, if necessary.

DPR 20	30 psi
DPR 25	40 psi
DPR 30	44 psi

Check for loose or missing wheel nuts.



84M307

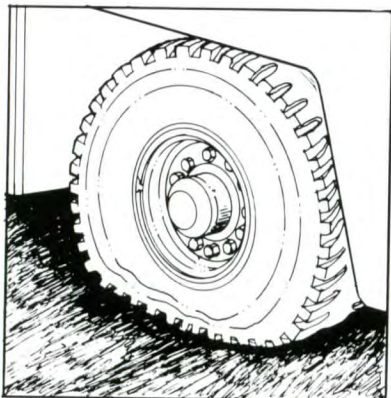
Check condition of steer wheels and tires.

Note any apparent steer wheel or tire damage on the checklist.

Check steer tire pressure and adjust, if necessary. Tire pressure is 87 psi.

Check for loose or missing wheel nut.

WHEEL AND TIRE INSPECTION



24308

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.



21521

Check tires for cuts or breaks and remove all debris. Check surface of wheels for bent flanges.

Check for loose, missing or damaged nuts.

Replace parts with the correct sizes and types. See your parts manual.

It is not recommended that tires with breaks be used again.



24306

Always use a safety cage to inflate tires after servicing.

WHEEL AND TIRE INSPECTION



84M328

The wheel nut wrench is located behind the rear grille.

MAINTENANCE AND LUBRICATION

! WARNING

LIFT TRUCK MAINTENANCE

DO NOT WORK ON THIS TRUCK UNLESS YOU ARE TRAINED AND AUTHORIZED AND KNOW THE CORRECT MAINTENANCE PROCEDURES.



84M298

Lubrication Chart

Description	Shell/Mobil	Or Equivalent Spec.
Engine oil Pedal lube Mast chain lube	RIMULAX 15 W40 DELVAC SUPER OIL	MIL-L-2104 C API CD
Transmission Sump	DONAX TT oil MOBILFLUID 423 Oil	M.2.C 86 A
All grease points	AVANANIA EP2 Grease MOBILUX EP2 Grease	MIL.G-24 139
Side shift and Mast grease	RETINAX AM Grease MOBILGREASE SUPER	FORD ESW MIC 87A
Coolant		ANTIFREEZE AND WATER % depends upon operation minimum temperature
Battery		DISTILLED WATER
Fuel		DIESEL FUEL — ASTM D975 grades 1D or 2D Cetane rating 45 or more
Engine oil filter Transmission hyd. filter Air filter Fuel filter		Clark Dealer

MAINTENANCE AND LUBRICATION



84M303

Before Operating a New Truck
(Do not attempt to start a new truck before
the following checks have been carried out.)

Checks	Description
Lubrication	Check that all correct grades of oils and greases are available.
Storage oils	The truck is delivered with storage oil in the engine sump. This oil and the engine oil filter, should be changed during the first 50 hours service by a Clark dealer.
Air cleaner	Make certain the air cleaner is not damaged and all connections secure.
Cooling system	Do not start the engine unless the radiator cooling is at the proper level.
Hydraulic system	Check the hydraulic oil level and hoses, connections, pipes and cylinders.
Wheels & Tires	Insure that all wheel nuts are secure and that the tire pressures are correct.
Fuel system	Check that all fuel lines are secure. If necessary, drain the fuel filters and bleed the fuel system of air.
Battery	Check the level and the specific gravity of the electrolyte in the battery. Connect the battery terminals if disconnected.

MAINTENANCE AND LUBRICATION

Lubrication and Maintenance Chart (See Photographs for Part Location)

A = Daily 8 to 10 Hours
 B = Weekly 40 to 50 Hours
 C = Monthly 150 Hours
 D = Quarterly 450 to 500 Hours
 E = Semi-Annually 900 Hours
 F = Before Winter



- ★ = (See Maintenance Manual)
1. Check that all requirements on the daily checklist are in good working condition. Report any damage.
 2. Check and top-off engine oil.
 - ★ Drain and replace engine oil.
 3. Replace engine oil filter.
 4. Check engine coolant level — top-off if necessary.
 - ★ Clean the radiator.
 - ★ Replace the coolant.
 5. Check the fuel level — top-off after every shift.
 - ★ Check if fuel system requires bleeding.
 6. Clean the fuel filters.
 Replace the fuel filter element.
 - ★ 7. Clean the fuel tank.
 8. Check and top-off transmission oil level.
 - ★ 9. Check hydraulic level/replace hydraulic oil filter and seals.
 Clean hydraulic tank strainer.
 - ★ Drain and replace transmission and hydraulic oil.
 10. Check battery electrolyte level — add only distilled water.
 - ★ Prepare battery for winter (see battery maintenance).
 - ★ Check and adjust fan belt tension.
 11. Check tire pressure and wheel nut torques.
 12. Clean air filter element.
 Replace air filter element.
 - ★ Check and adjust service brake and clutch — bleed if necessary.
 - ★ Check and adjust parking brake.
 - ★ Check and adjust mast chain alignment and tension.
 13. Check, clean and lubricate mast chain and clean and lubricate mast and side shift sliding surfaces
 - ★ Check and adjust valve clearance and injectors. (see your Clark dealer).
 - ★ Check, clean, grease and adjust rear wheel hubs.

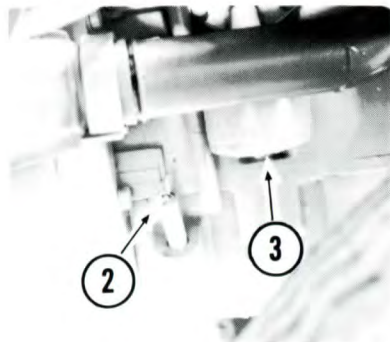
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MAINTENANCE AND LUBRICATION

Lubrication and Maintenance Chart (Continued)

14. Clean and grease mast pivot pins.
15. Clean and grease head tilt cylinder pin.
16. Clean and grease side shifter.
17. Clean and grease bottom tilt cylinder pin.
18. Clean and grease steering cylinder pin.
19. Clean and grease rear axle oscillating pin.
20. Clean and grease king pin pivots.
21. Lubricate pedals and control rods (remove floor plates).
22. Clean and grease chain roller pin.
23. Clean and grease brake relay lever.

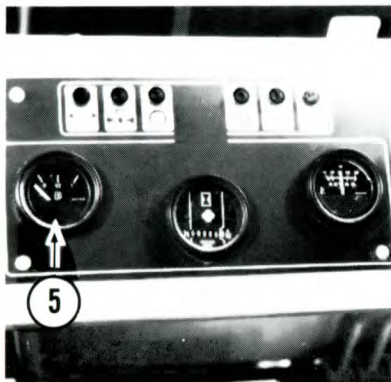
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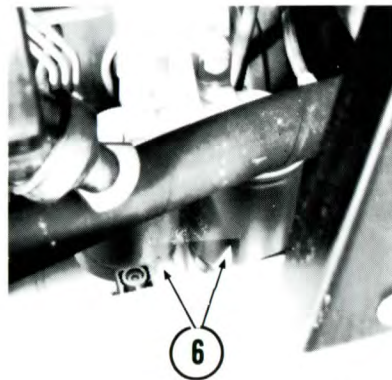
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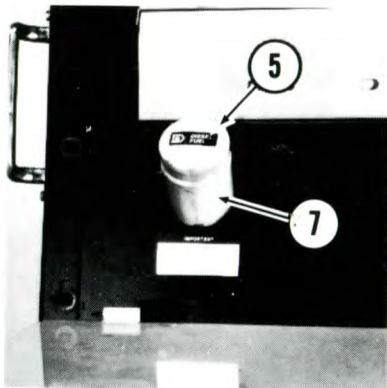


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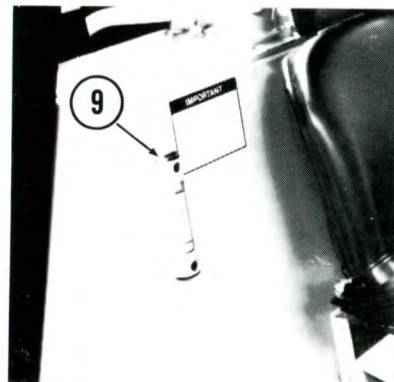
MAINTENANCE AND LUBRICATION



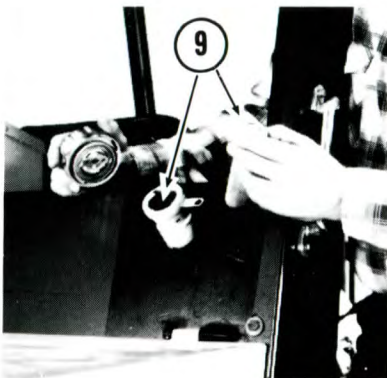
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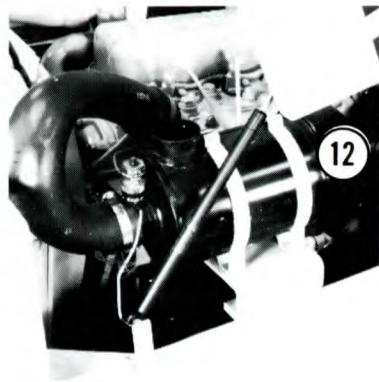


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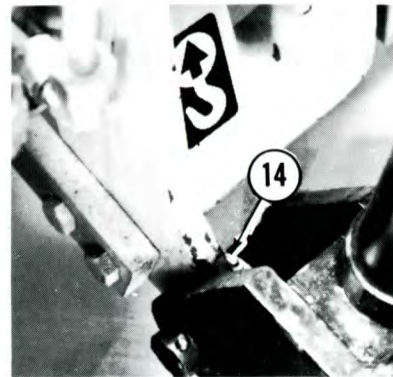
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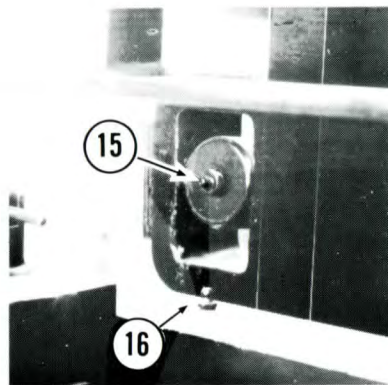
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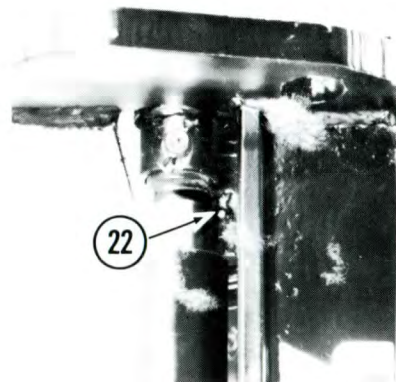
MAINTENANCE AND LUBRICATION



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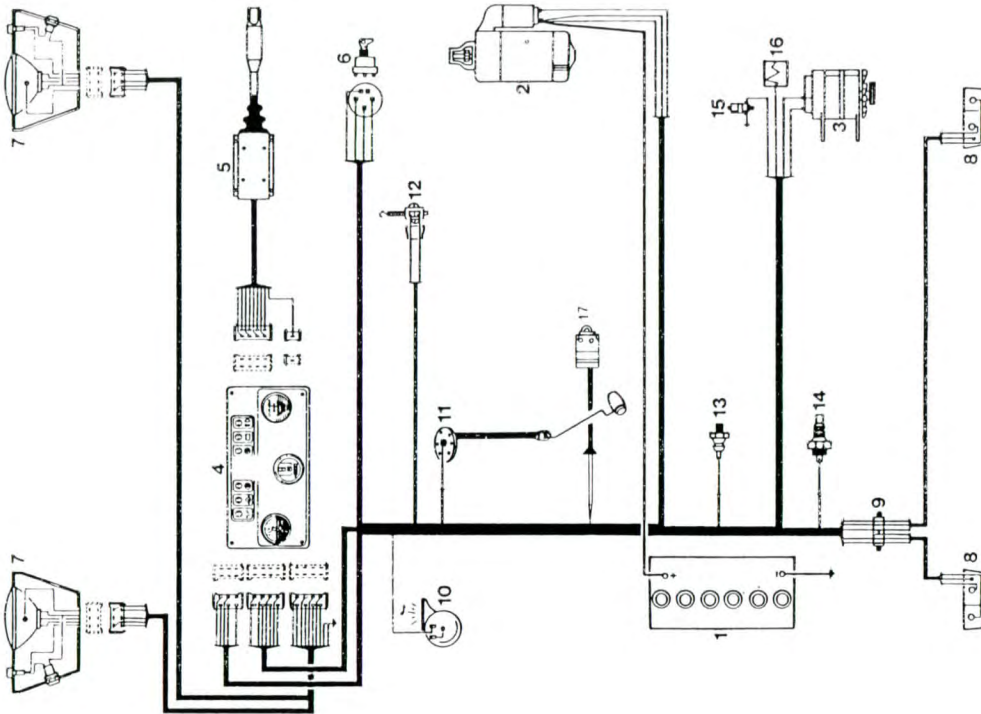


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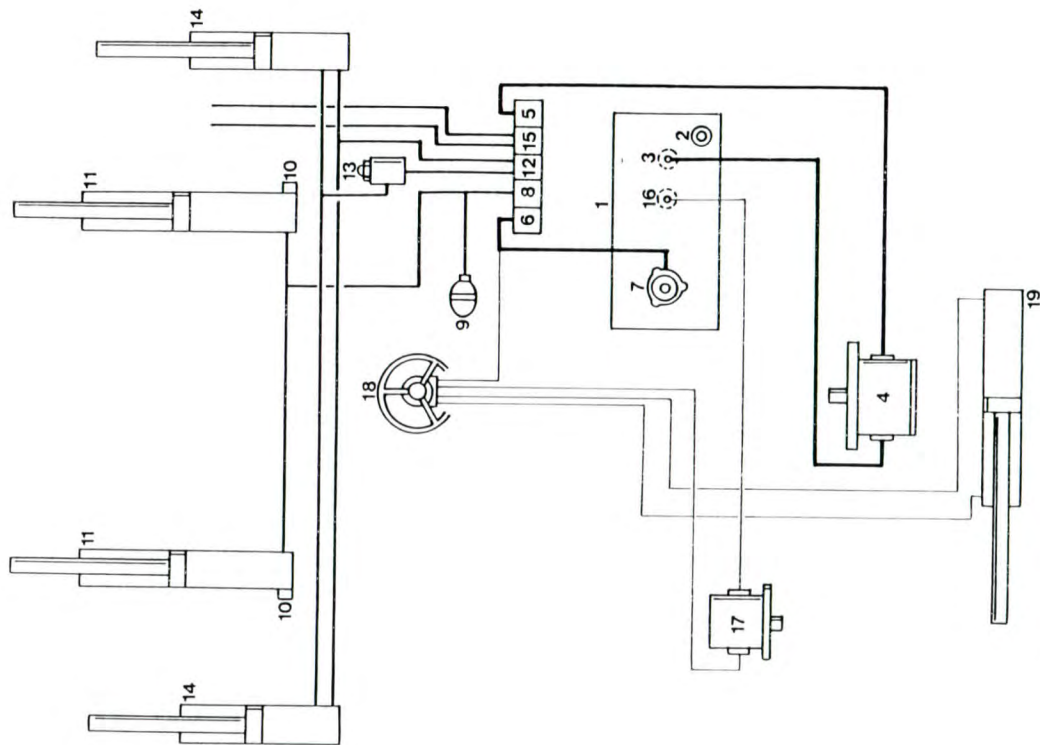
84M334

ELECTRICAL DIAGRAM



1. Battery
2. Starter
3. Alternator
4. Instrument panel
5. Light, direction indicator and horn switch
6. Ignition key
7. Front light
8. Rear light
9. Rear contact strip
10. Horn
11. Fuel gauge
12. Stop switch
13. Oil pressure switch
14. Water temperature switch
15. Air filter clogging indicator
16. Preheating resistor
17. Safe start switch

HYDRAULIC DIAGRAM



1. Hydraulic oil tank
2. Hydraulic oil tank cap
3. Main intake strainer
4. Main pump
5. Valve bank in-flow plate
6. Valve bank return plate
7. Return line filter
8. Single acting element
9. Load accumulator
10. Flow restrictor
11. Hoist cylinder
12. Double acting element
13. Flow restrictor
14. Tilt cylinder
15. Double acting element
16. Steering circuit oil strainer
17. Steering pump
18. Manual steering pump
19. Steering cylinder

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

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