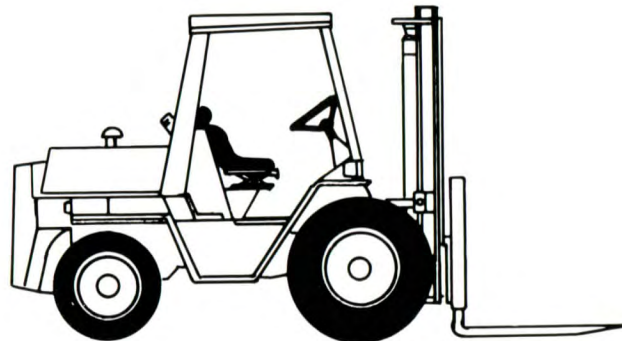


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# Operator's Instruction Manual



DRT-30

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**CLARK**

2390227  
Book No. OI-532

DRT



## **WARNING**

**FOR YOUR SAFETY AND THE  
SAFETY OF OTHERS**

**BEFORE YOU OPERATE THIS TRUCK!**

**READ ALL WARNINGS AND INSTRUCTIONS IN THE  
OPERATOR'S MANUAL AND ON THE TRUCK.**

**CHECK THE TRUCK FOR CORRECT OPERATION.**

**DO NOT OPERATE THIS TRUCK UNLESS YOU ARE  
TRAINED AND AUTHORIZED TO DO SO.**

# FOREWORD

Federal and state laws require that operators be completely trained in the safe operation of lift trucks.

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

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

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

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

Do not make any repairs to this 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).

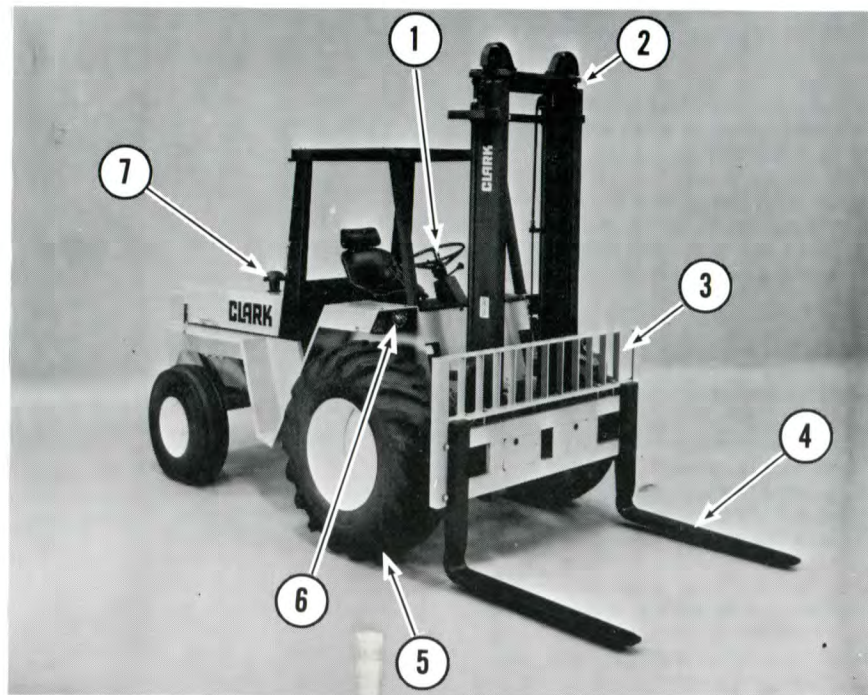
23. Turn off truck engine when not in use, fumes in a poorly ventilated area can be harmful to your health.

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

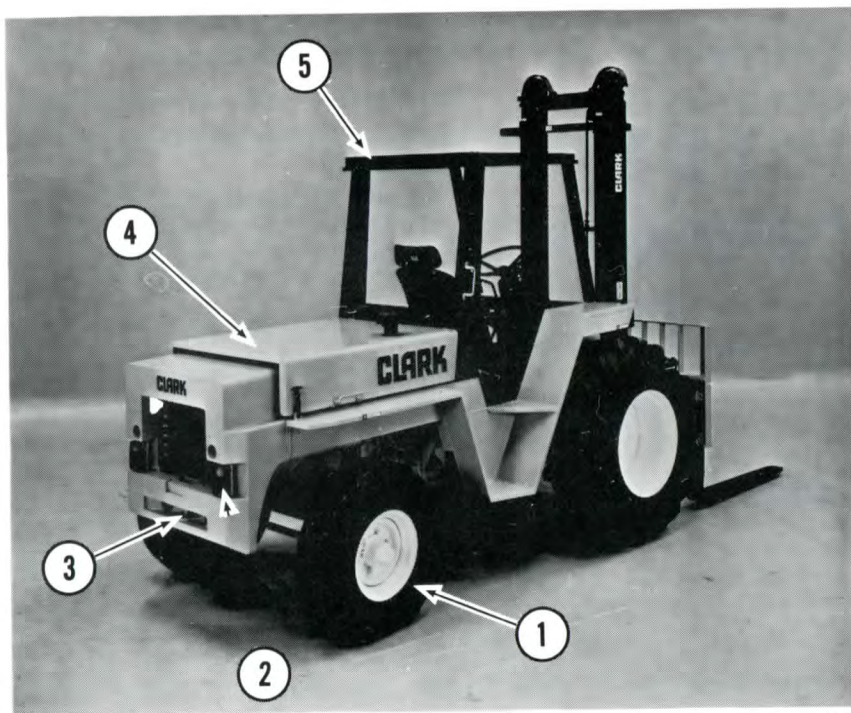


1. Operator's Compartment
2. Upright
3. Load Backrest Extension
4. Forks
5. Load/Drive Wheels
6. Turn Signals and Headlights
7. Air Intake

84M180



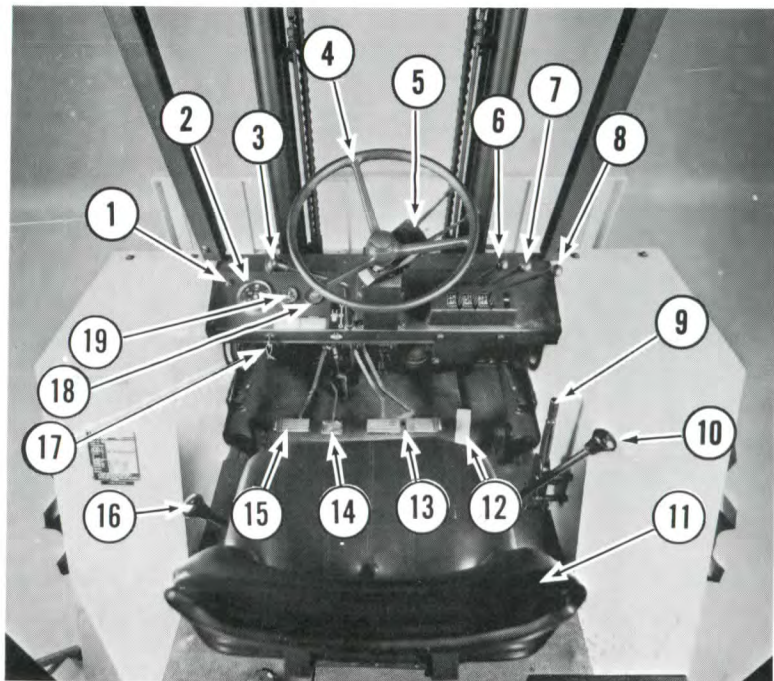
## KNOW YOUR TRUCK



84M181

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

# OPERATOR'S COMPARTMENT AND CONTROLS



84M185

1. Torque Converter Warning Light
2. Combined Instrument Cluster
3. Forward/Reverse Lever
4. Steering Wheel
5. Headlight/Turn Signal and Horn Switch
6. Lift/Lower Control Lever
7. Tilt Lever
8. Fork Side Slide Lever
9. Parking Brake Lever
10. Gear Selector Lever
11. Seat and Safety Belt
12. Accelerator Pedal
13. Service Brake Pedals
14. Differential Lock Pedal
15. Incline/Brake Pedal
16. High/Low Range Selector Lever
17. Key Switch
18. Forward/Reverse Pressure Gauge
19. Hourmeter



# DATA PLATE AND DECALS

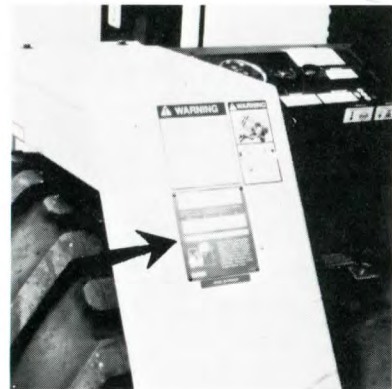
MODEL NO. <span style="float: right;">1</span>			
SERIAL NO. <span style="float: right;">2</span>		LOT NO. <span style="float: right;">3</span>	
ATTACHMENTS <span style="float: right;">4</span>			
CAPACITY WITH ATTACHMENTS LISTED ABOVE OR WITH FORKS—UPRIGHTS VERTICAL.			
LBS.	A	B	C
5			
TRUCK WEIGHT <span style="float: right;">6</span>			

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



25026

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



84M183

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.

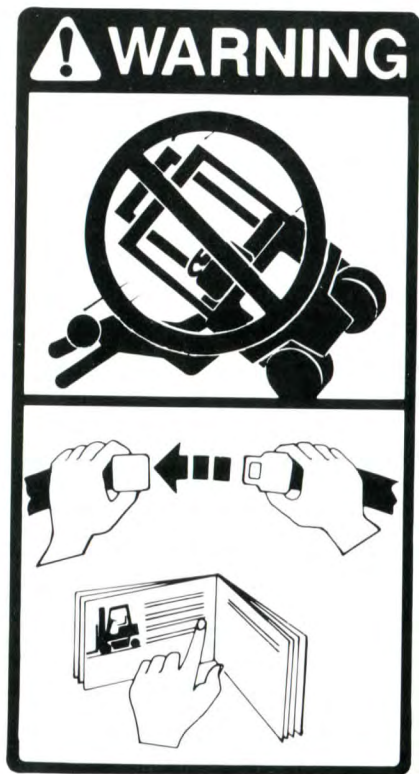
### WARNING

#### NAMEPLATES & DECALS

DO NOT OPERATE A LIFT TRUCK WITH DAMAGED OR LOST DECALS AND NAMEPLATES. REPLACE THEM IMMEDIATELY. THEY CONTAIN IMPORTANT INFORMATION.

25026

## DATA PLATE AND DECALS



24972



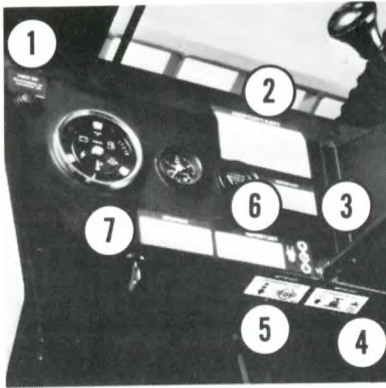
24972

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.

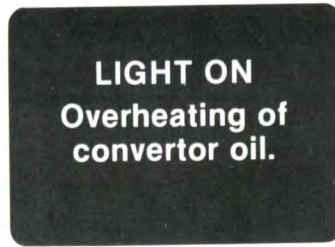
Lift trucks can be tipped over if operated improperly. Experience with lift truck accidents has shown that the driver cannot react quickly enough to jump clear of the truck and overhead guard as the truck tips. To protect operators from severe injury or death in the event of a tip-over, it is best to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

## DATA PLATE AND DECALS



84M049

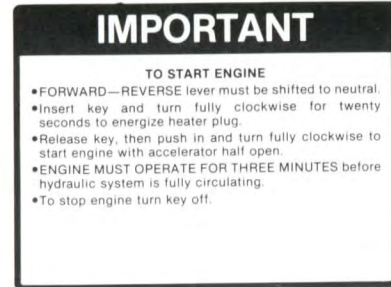
1. Converter oil overheat decal
2. Engine starting instructions
3. Transmission oil pressure decal
4. Hydraulic oil fill decal
5. Differential lock decal
6. Forward/Reverse lever decal
7. Clutch pedal decal



25037

The torque converter warning light decal is located on the top left hand portion of the instrument panel above the warning light.

Should the warning light illuminate, run the engine a few minutes at a high idle r.p.m. with the forward/reverse lever in neutral. This should eliminate the overheating condition. If the light remains on, shut off the engine and investigate the cause.

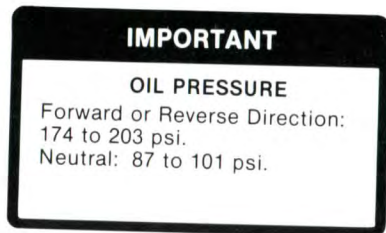


25038

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

The decal is located on the upper right hand portion of the instrument panel above the oil pressure gauge.

## DATA PLATE AND DECALS



25061

The transmission oil pressure decal is located to the right of the oil pressure gauge.

The decal indicates the normal operating oil pressure ranges of the transmission.

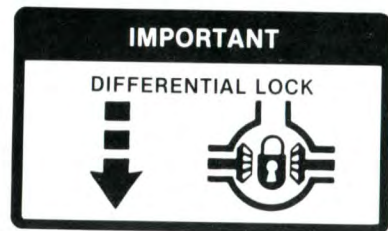
If your truck does not operate within these pressures, notify your supervisor.



25062

The hydraulic oil fill decal is located under the forward/reverse lever.

The decal indicates the location of the hydraulic oil fill level gauge and opening.

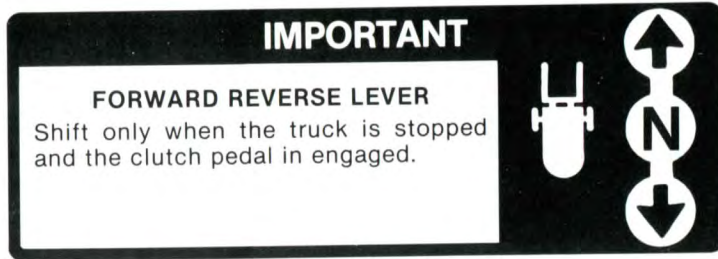


25063

The differential lock decal is located to the left and below the forward/reverse lever, and indicates the location of the differential lock pedal.



## DATA PLATE AND DECALS

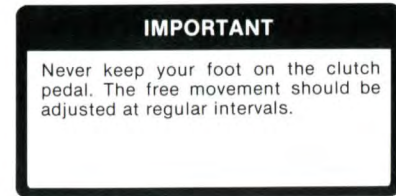


25064

The forward/reverse lever decal is located directly to the left of the forward/reverse travel direction lever.

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

Start the engine when the lever is in the "N" neutral position and only change the direction of travel when the truck is stopped.



25045

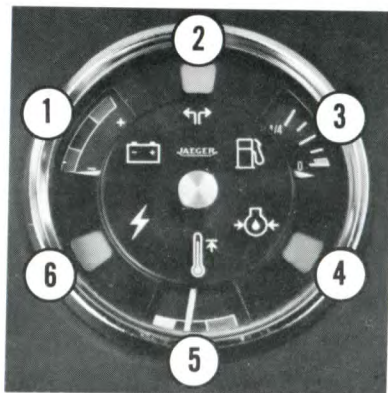
The clutch pedal decal is located under the hour meter on the instrument panel.

The clutch pedal decal gives instructions for use and adjustment of the clutch (inching/brake) pedal located near the floor.

## DATA PLATE AND DECALS



84M049

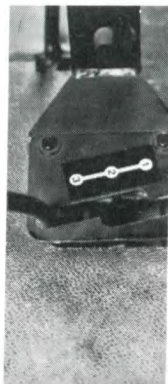


84M055

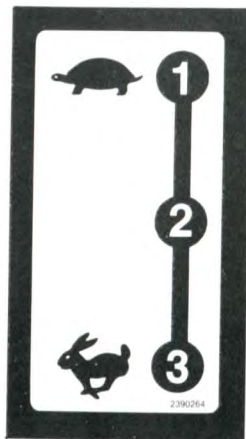
The combination instrument gauge uses symbols to represent indicator functions as follows.

1. State of battery charge
2. Turn indicator flasher light
3. Fuel level indicator
4. Engine oil pressure light
5. Engine coolant temp indicator
6. Electrical contact light.

Check this gauge daily and report any unusual readings on the daily checklist.



85M073/84M074



25065

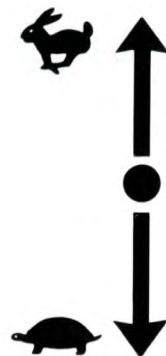
The gear selector decal shows the three (3) gear speeds that can be selected.

The gear selector decal is located on the gear shift lever floor plate to the right of the driver's seat.



## DATA PLATE AND DECALS



84M072



25066

The range selector decal indicates low  and high  ranges that can be selected.

The range selector decal is located on the range selector lever support plate to the left of the driver's seat.



84M053

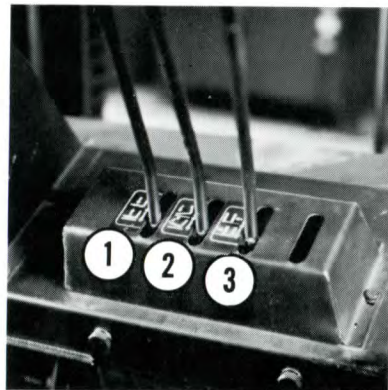


25048

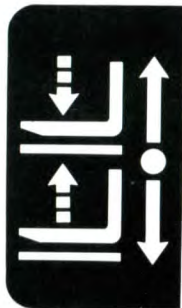
The hand brake decal shows the location of the parking hand brake.

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

## DATA PLATE AND DECALS



84M184



25067



25068



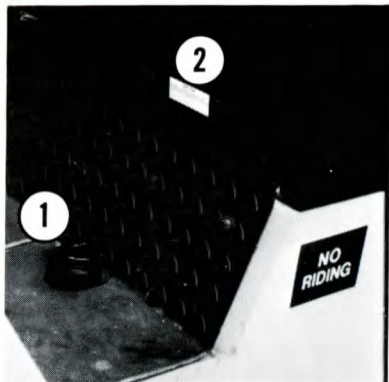
25069

These decals show the lever positions to control the operation of the forks.

These decals are located on the operator's control lever assembly to the right of the steering wheel.

1. Lift/lower forks
2. Tilt forks
3. Sliding forks left or right

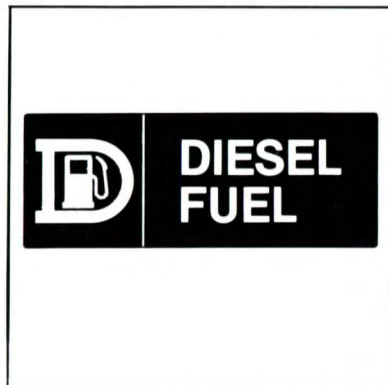
## DATA PLATE AND DECALS



84M186

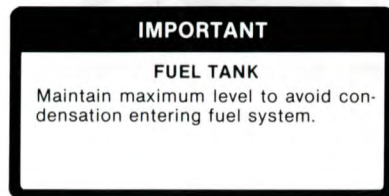
The diesel fuel decal (1) is located on the fuel cap under the driver's seat.

The fuel tank decal (2) is located on the operator's compartment back-wall above the fuel tank cap.



25055

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



25056

The fuel tank decal indicates refueling precautions.

## DATA PLATE AND DECALS



84M187

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.

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



84M182

22270



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.

24810

## DATA PLATE AND DECALS

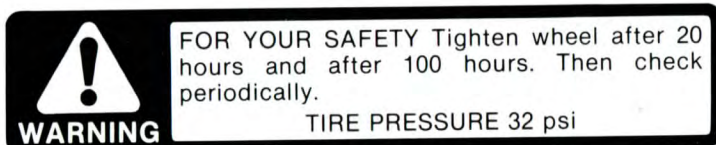


84M063

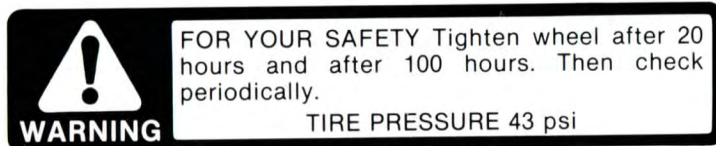


24809

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.



The front tire pressure decals are located on both front fenders. Check daily to insure they have 32 psi.



The rear tire pressure decals are located on both rear (steer) fenders. Check daily to insure they have 43 psi.

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

## DATA PLATE AND DECALS



25050



84M186

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.



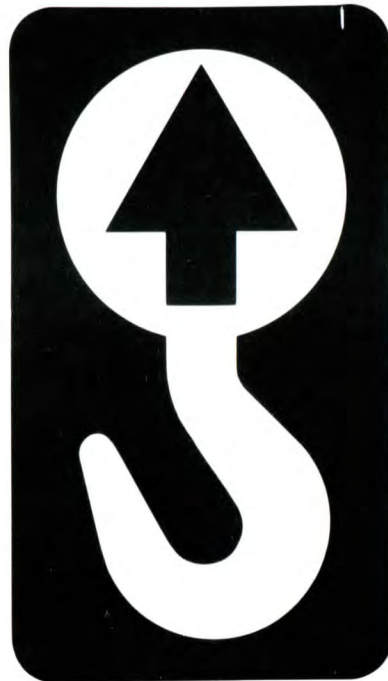
## DATA PLATE AND DECALS



84M188



84M189

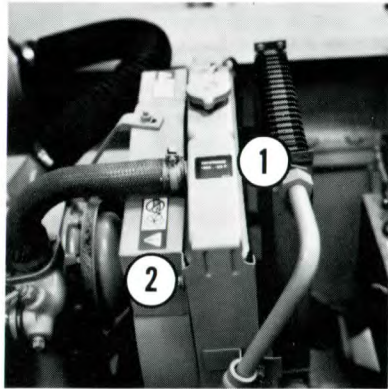


25059

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 the truck for shipping.

## DATA PLATE AND DECALS



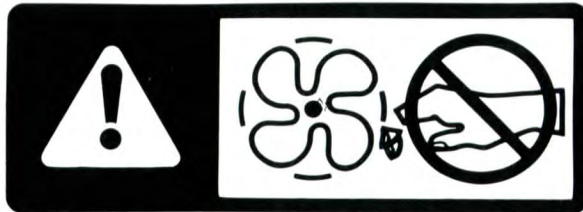
84M190



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.



25057

The “Keep your fingers away from the fan” decals are located on the top of the fan guard.

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

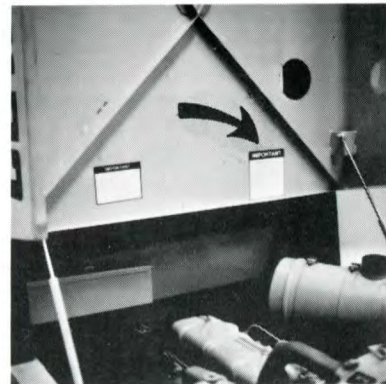
# IMPORTANT

### 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



84M191

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.

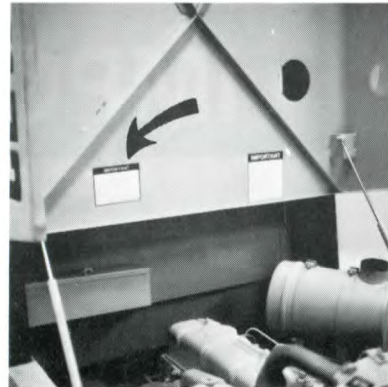
If you operate in extreme dust conditions the filter should be maintained more frequent.

See the maintenance section of this manual.

# 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.



84M191

The hydraulic oil filter maintenance decal is located on the underside of the engine compartment cover (hood).

Follow these maintenance instructions at the specified intervals.

## 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 dropoffs. 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.
- 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.



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.

## SAFETY



84M030

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.



25027

### **WARNING**

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



84M034

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.

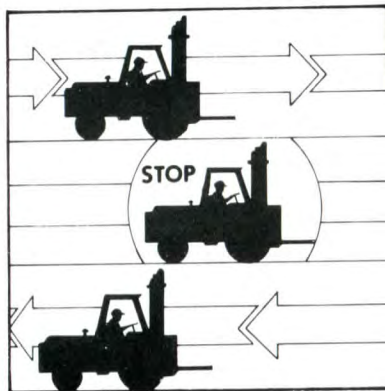
Never reach around or over the windshield to put hands or fingers on any part of the upright.

## SAFETY



84M033

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.

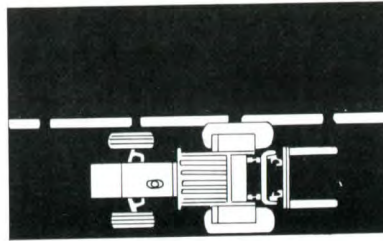
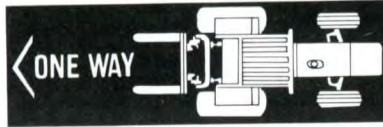




13103

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

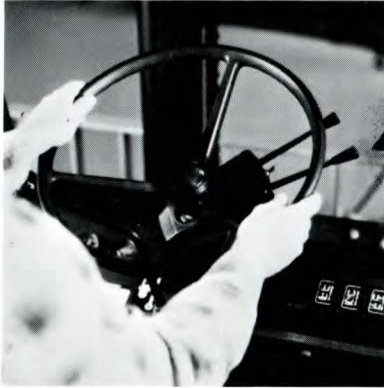
Operate the truck only in designated truck routes or roadways and keep operating routes clear. One-way traffic is recommended. If this is not practical in your operation follow highway regulations and drive to right of aisle or roadway centerline.



84M034

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

## SAFETY



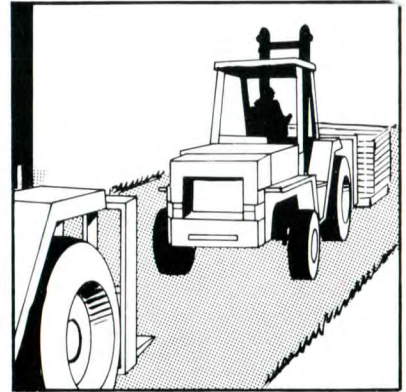
84M035

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.

## SAFETY



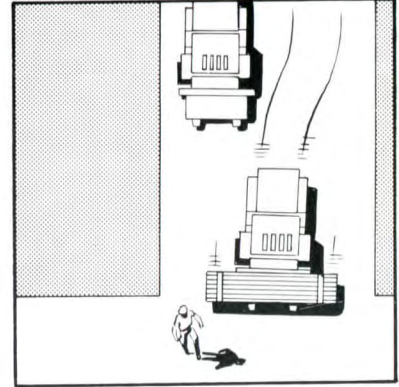
24913

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.



24912

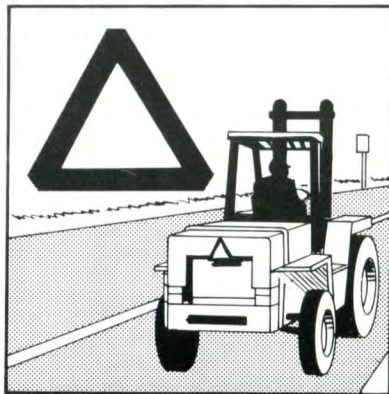
Never carry passengers. They can fall off or cause you to have an accident. Always be in full control of your lift truck and do not drive carelessly.



25011

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

## SAFETY



25015

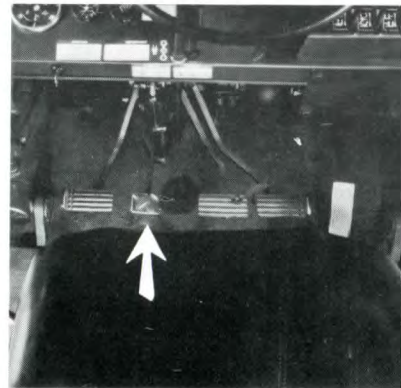
When traveling over highways or smooth roads, be careful and remember to lock brake pedals together.

Make sure that your slow moving vehicle warning sign is visible and that all lights are undamaged and operating.



84M040

Make sure that the brake pedals are not locked together before placing the truck in normal operation. The brakes may be used independently to assist in turns during normal operation.

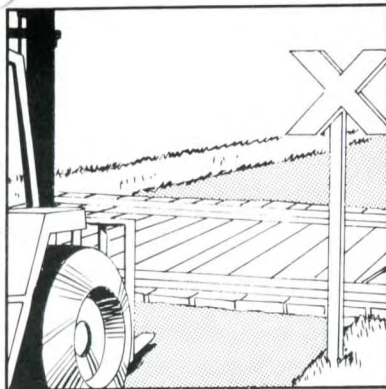


84M041

The differential lock pedal should *not* be pushed down when driving on the road at high speeds or when turning.

You can lose steering control and cause an accident.

## SAFETY



25015

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.

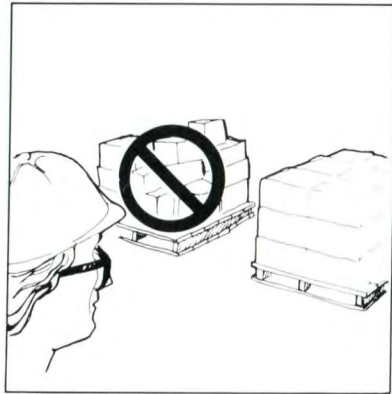


84M034

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

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

## 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.

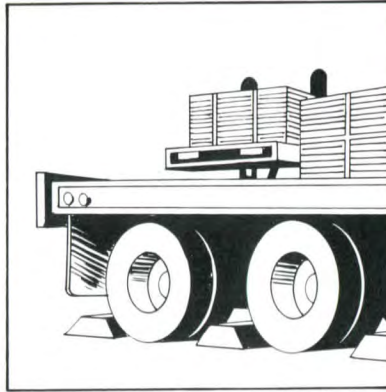


13102

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.



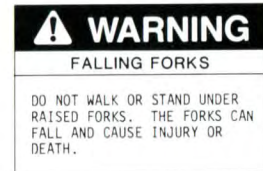
84M037

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



84M038

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

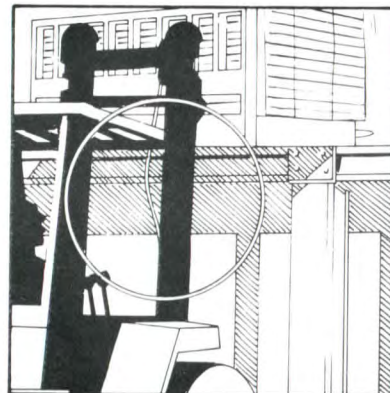
Lowering of the load may be stopped as desired by returning lever to neutral position.



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

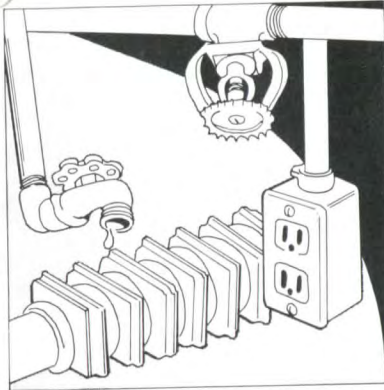
When stacking or lowering loads watch the lift chains; if they go slack, stop, raise the load and lower again.

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.

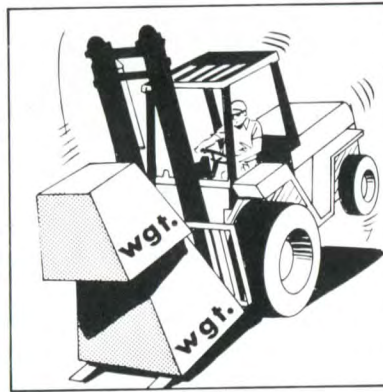


## SAFETY



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.

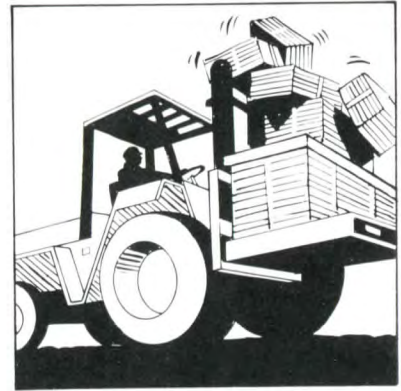


24950

Overloading is extremely dangerous. Do not overload.

You can lose steering control with an overload.

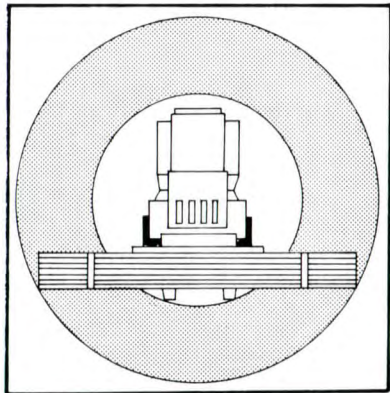
Never add more weight to the counterweight, always reduce the weight of the load.



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.

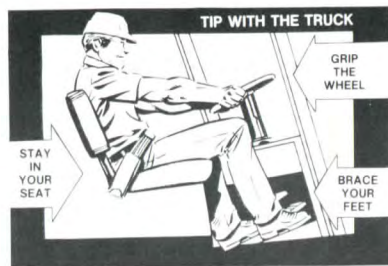
Never lift or lower the load while your truck is in motion.



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



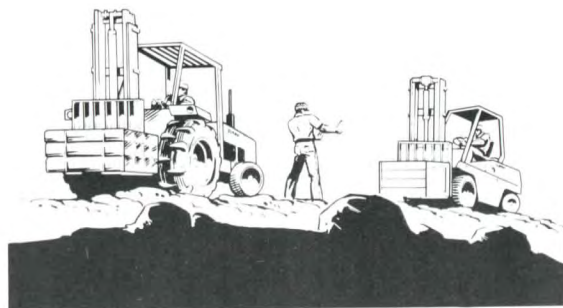
24979

## 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

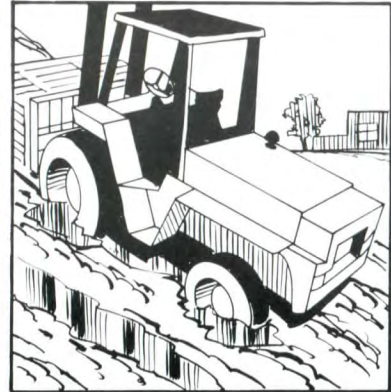
Use caution when maneuvering near scaffolding, trenches, and excavations.



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.



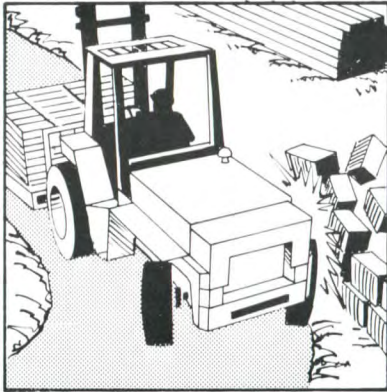
25017

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



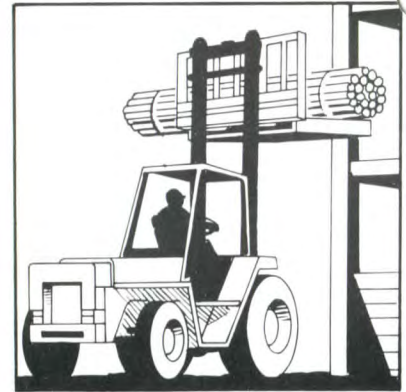
24908

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



84M033

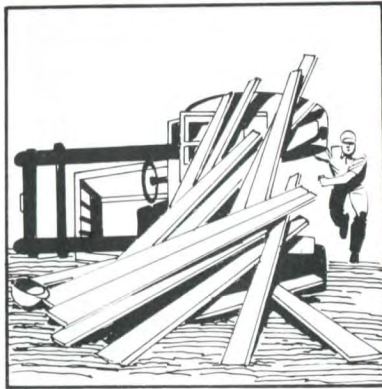
When handling large loads which restrict your vision, operate your truck in reverse or seek help to improve visibility.



25021

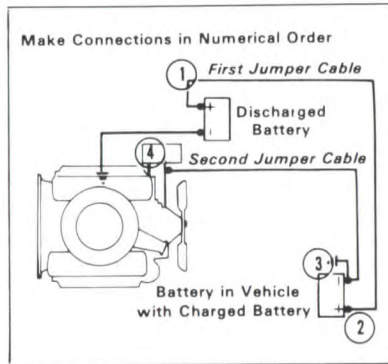
When lifting to high levels put the upright near vertical. Make sure truck is on stable ground and clear of trenches, walls and excavations.

## 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 trucks 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.



84M039

Follow a scheduled planned maintenance and lubrication program.

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



84M182

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.

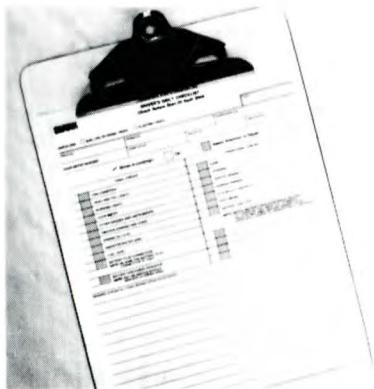


84M295

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

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

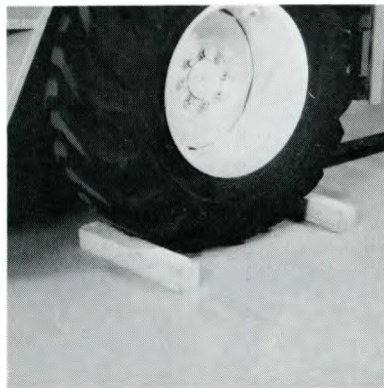
## OPERATOR'S DAILY CHECK



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.



84M054

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.



84M045

Check condition and mounting of the overhead guard.

## OPERATOR'S DAILY CHECK



84M046

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



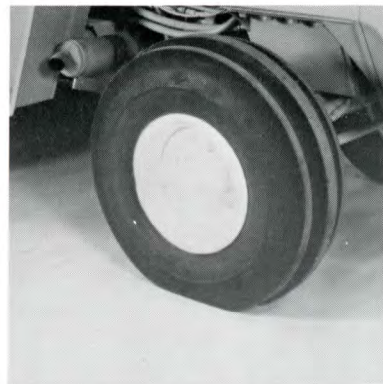
84M043

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.

Tire pressure is 32 psi. Check for loose or missing wheel nuts.



84M044

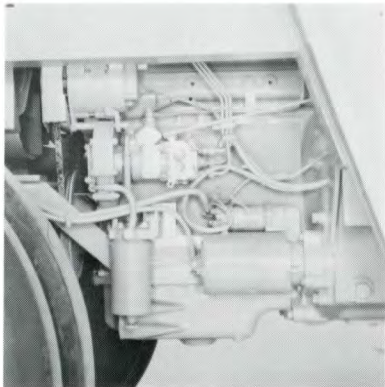
Check condition of steer wheels and tires.

Note any steer wheel or tire damage on the checklist.

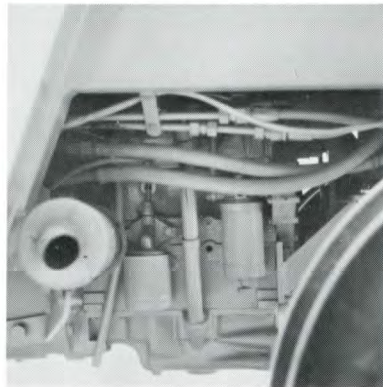
Check steer tire pressure and adjust if necessary.

Tire pressure is 43 psi. Check for loose or missing wheel nut.

## OPERATOR'S DAILY CHECK



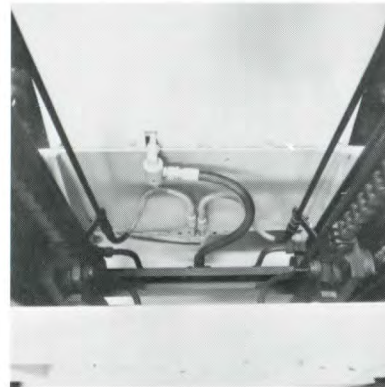
84M058



84M059

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

Write any leaks on the daily checklist.



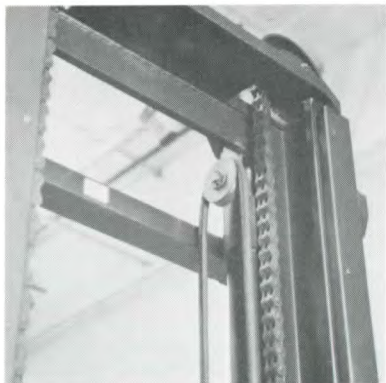
84M060

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

Check all cylinders, connections, piping and hoses.

Write any leakage on the daily checklist.

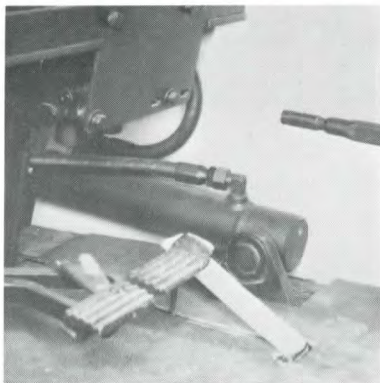
## OPERATOR'S DAILY CHECK



84M063

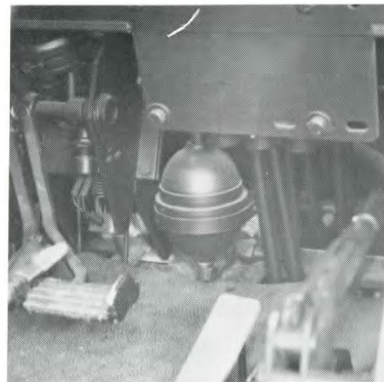
Inspect the upright lift cylinder hydraulic hose for leakage and the lift chain for any damage or wear.

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



84M061

Look under the instrument panel for hydraulic fluid leakage.



84M062

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

## OPERATOR'S DAILY CHECK

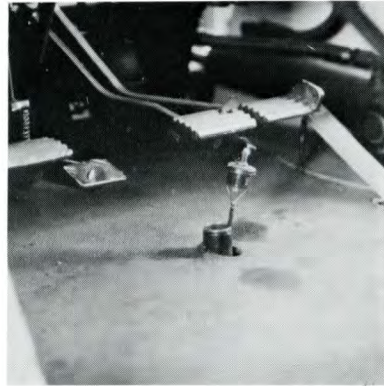


84M064

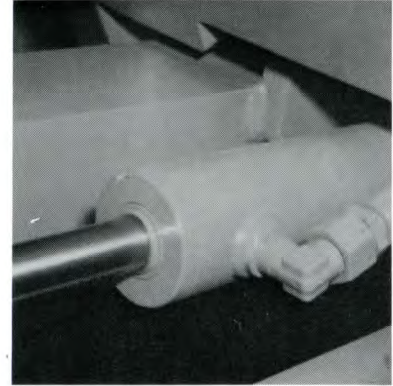
Check hydraulic oil level with truck on level ground, engine stopped and the upright lowered and tilted rearward.

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.



84M065



84M075

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

## OPERATOR'S DAILY CHECK



84M066

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



84M067

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 checklist.



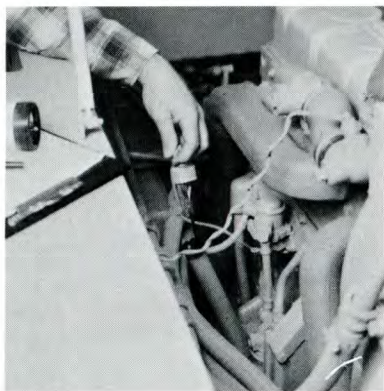
84M068

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

Hood should lift easily with assistance from the gas cylinder.

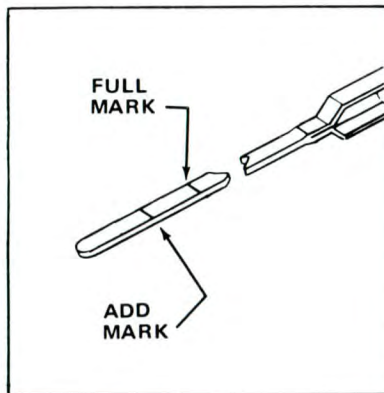
If gas cylinders do not seem to be assisting in the lifting write it on your daily checklist.

## OPERATOR'S DAILY CHECK



84M069

Turn the hand knob until the cap loosens, then pull the engine oil dipstick from its support tube. Wipe it with a clean, lint free cloth and reinsert it fully into its support tube.

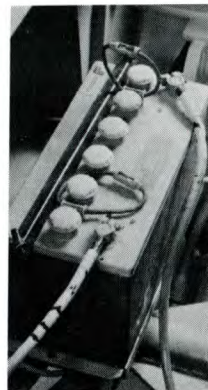
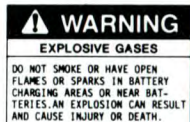
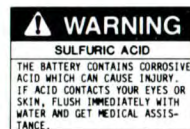


13239

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.



84M036

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 checklist.



## 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

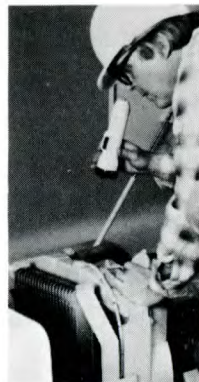
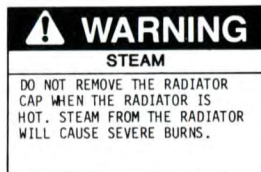
25030

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.



84M039

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 or block. Keep engine running while adding water or antifreeze. A solution of 50% ethylene glycol and 50% water is recommended — never use water only.

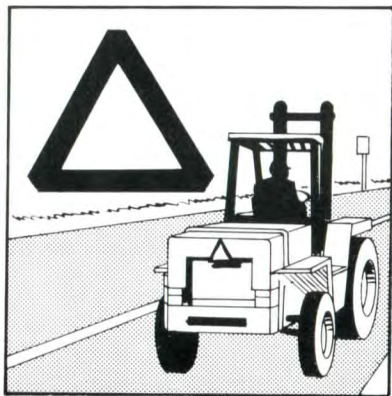
Remember to replace radiator cap and make sure that it is properly secured after check of radiator coolant level has been completed.

Close engine compartment cover, secure hold-down latches, and attach air intake stack.

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

## 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.

Highway use also requires that you lock both the left and right hand service brake pedals together before operation.



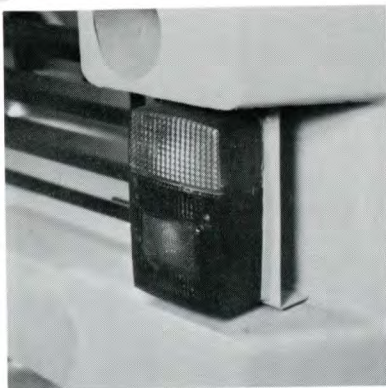
84M040



84M047

Check condition of both headlight guards, headlight lamps and turn signal lenses.

## OPERATOR'S DAILY CHECK

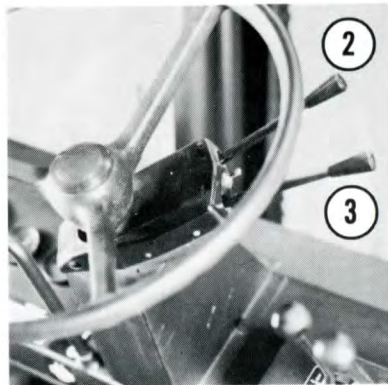


84M048

Check condition of both rear lamp lenses.



84M049



84M050

To visually check the operation of all lighting, seek assistance.

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

Check the front and rear lights as follows:

Lift lever (2) up to turn headlights and rear taillights **on**, down to turn **off**.

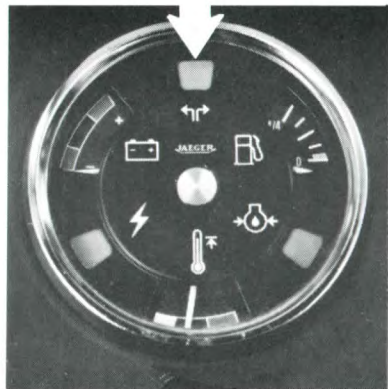
Pull lever (3) toward you to check **right hand** turn signal operation, return to middle position to **shut off**, forward position to check operation of **left hand** turn signal. Check turn signals both front and rear of truck.

Step on service brake pedal(s) to make certain rear brake lights are operating properly.

Check to make sure the horn sounds when you push lever (3) towards the steering column.

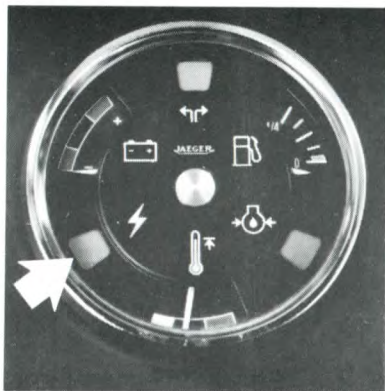
If any of the lights or horn do not operate, note condition on the daily checklist and report the condition to your supervisor before operating the truck.

## OPERATOR'S DAILY CHECK



84M055

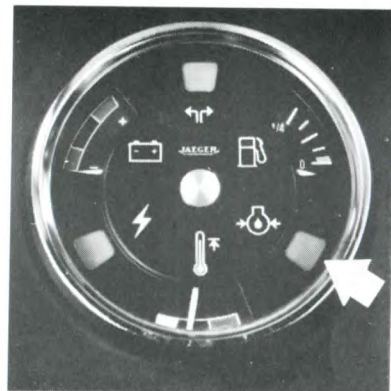
Look at the large instrument gauge. The green turn signal indicator must flash when the turn signals are actuated.



84M055

Check the red electrical contact indicator.

When illuminated the truck electrical circuit is functioning correctly.



84M055

Check the operation of the red engine oil pressure indicator.

This light should go out after engine is started.

If it does not go out after engine is started, stop the engine, note the condition on the daily checklist and notify your supervisor.

## OPERATOR'S DAILY CHECK



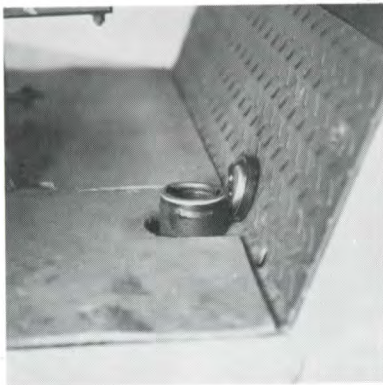
84M055

Check the fuel gauge.

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

Start your shift with a full tank.

Only refuel in authorized refueling areas.



84M056

The fuel tank filler is located under the operator's seat.

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.

Wipe all spilled fuels before starting engine.

Fill the fuel tank at the end of each shift.

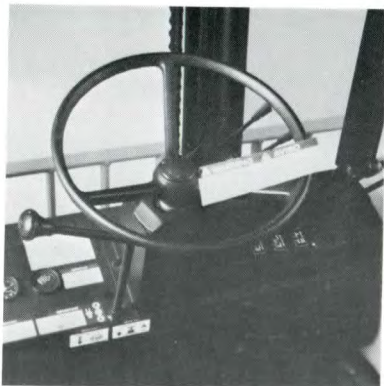


84M057

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

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

## OPERATOR'S DAILY CHECK

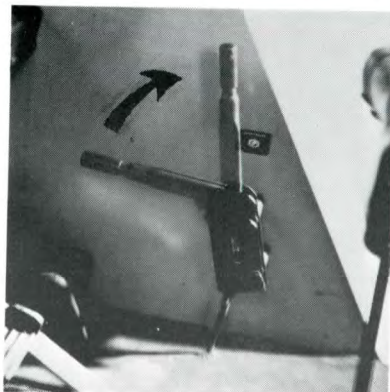


84M032

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.

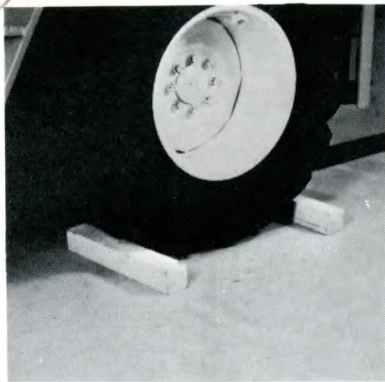


84M053

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

**END OF  
OPERATOR'S  
DAILY CHECK  
SECTION**

## BEFORE OPERATION



84M054

### BEFORE OPERATION CHECKS.

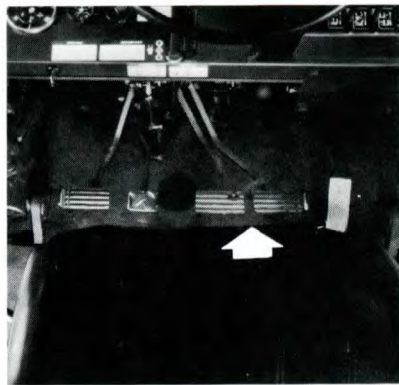
Remove the wheel blocks. Carefully enter the operator's compartment and position yourself in the driver's seat.



25027



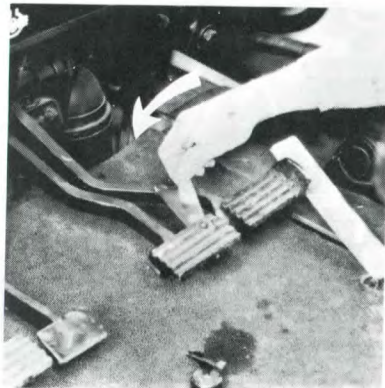
Always operate your truck with the seat belt properly fastened.  
**BUCKLE-UP.**



84M041

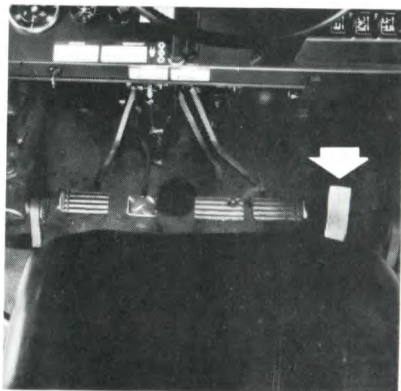
Press down firmly on the brake pedal. The pedal should be "firm". If the pedal feels "spongy" or "fades" under foot pressure **DO NOT OPERATE THE TRUCK.** Report the problem immediately.

## BEFORE OPERATION



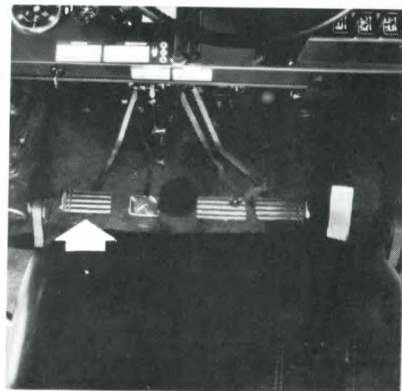
84M040

Look at the brake pedals to make sure that they have not been left locked together. If they have — unlock them.



84M041

Place your left foot on the inching brake (clutch) pedal and push down to disengage the transmission. This will reduce the engine load while it is being started. It also applies the brakes when fully depressed.

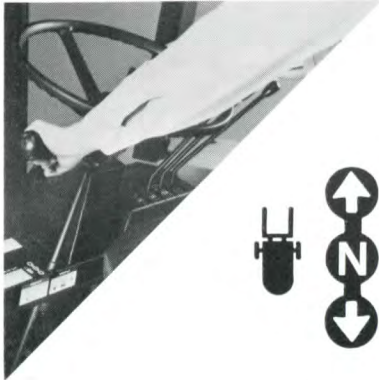


84M041

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



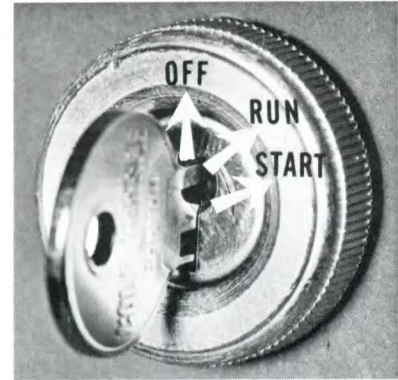
## BEFORE OPERATION



84M070/Decal



84M053



13226

Make certain that the forward/reverse travel lever is in the neutral (middle) position and that the parking brake is in the up position (applied).

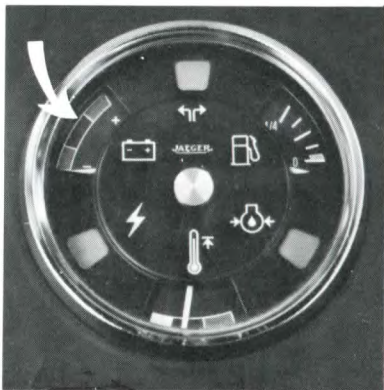
Now push and turn the switch key clockwise to engage the starter. Release the key as soon as the engine starts and it will automatically return to the normal "run" position.

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 spindown before restarting.

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

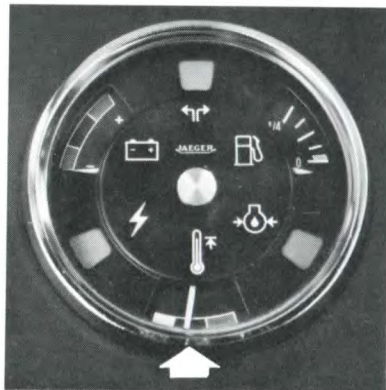
## BEFORE OPERATION



84M055

The battery charge indicator indicates the state of charge of the battery.

If the indicator pointer registers continually in the (-) or the (+) charge section note the condition on the daily checklist and notify your supervisor.

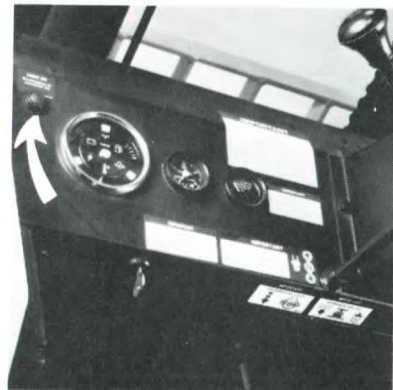


84M055

After truck has been operating check the engine coolant temperature gauge. The pointer should always be in the "black" area of the scale.

If the pointer enters the "red" zone note the condition on the daily checklist, stop the engine and notify your supervisor.

Do not attempt to remove the radiator cap until the engine coolant has cooled.



84M049

After truck has been operating under load check to make sure that the torque converter oil temp. indicator lamp has not illuminated.

If this lamp should light, run the engine for a few minutes at a high idle r.p.m. with the forward/reverse lever in neutral.

If the light remains on, stop the engine, note the condition on the daily checklist and notify your supervisor.



84M057

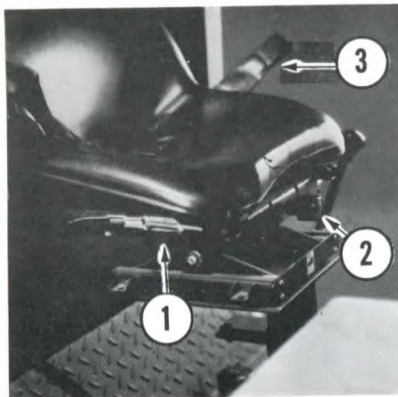
During idle and while traveling check the forward/reverse pressure gauge.

When in neutral position with the engine running the gauge pointer should indicate between 87-102 psi (6-7 bars).

When traveling the gauge should read between 174-203 psi (12-14 bars).

Write any other conditions on the daily checklist.

## BEFORE OPERATION



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 damping (stiffness).
3. Do not operate truck until you buckle-up the seat belt and secure yourself.



84M053


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

**Note:** The parking brake releases easier if you step on the service brakes first.

## BEFORE OPERATION



84M072

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

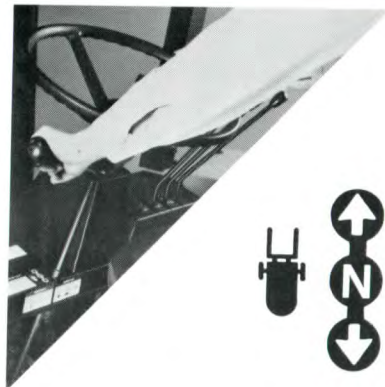


84M073

Push the gear selector lever forward to 1st gear, indicated by the number 1.



84M074



84M070/24974

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

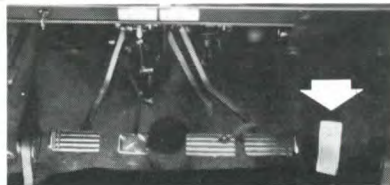
Push the forward/reverse travel lever forward.

And slightly push down on the accelerator pedal with your right foot.

The truck should move forward in a smooth motion.

The truck should not jerk or lunge forward.

## BEFORE OPERATION



84M041-84M074

While traveling forward alternately operate the accelerator and shift to 2nd gear and then 3rd gear using the gear shift lever.

Make certain the shifting is positive and NOT jerky.



84M072

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

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

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

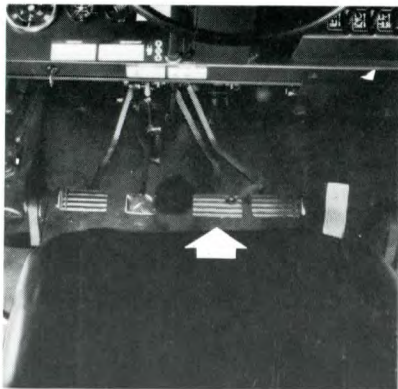


84M035

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

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

## BEFORE OPERATION

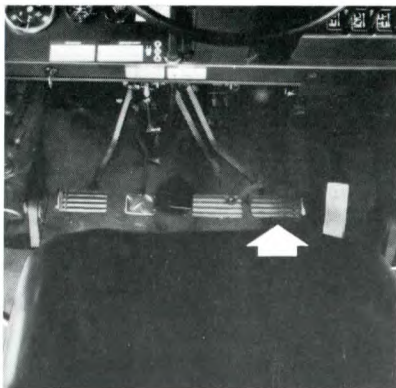


84M041

While moving forward apply downward pressure on the left brake pedal.

The truck should pivot in the left hand direction.

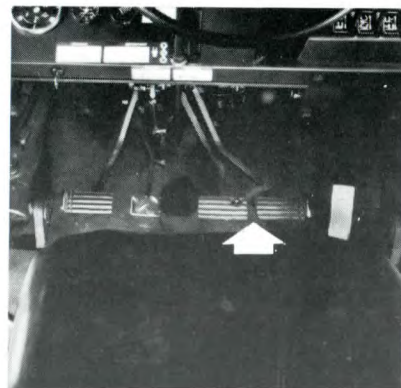
Lift your foot off the left brake pedal.



84M041

Apply downward pressure on the right brake pedal.

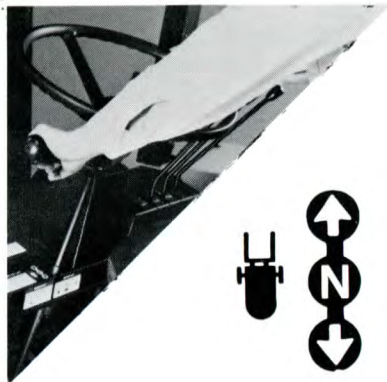
The truck should pivot in the right hand direction.



84M041

Stop the truck by applying downward pressure on both brake pedals at the same time with the right foot.

Braking should be smooth and positive.



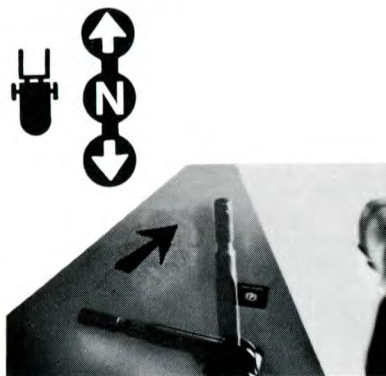
84M070/24974

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

Make sure the travel path is unobstructed.

**WARNING:** Do not change travel direction lever from forward to reverse unless the truck is stopped.

## BEFORE OPERATION



24974/84M053

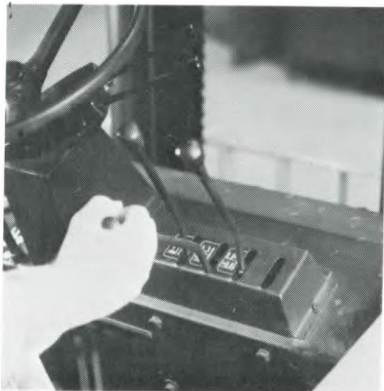
Upon completion of reverse operation checks, stop the truck and move the forward/reverse travel lever to neutral (N), and pull up the parking brake lever in the applied position.



84M064

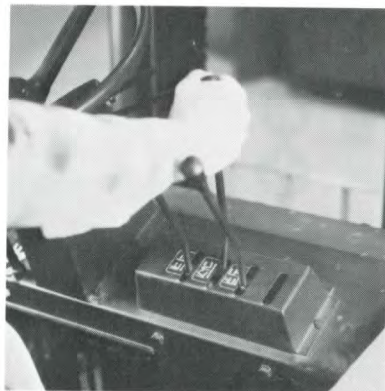
Make sure that your forks are unobstructed, then gently pull back on the tilt control lever and hold until upright reaches full back tilt.

## BEFORE OPERATION



84M076

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



84M077

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.

Record any erratic or unusual operation on your checklist.

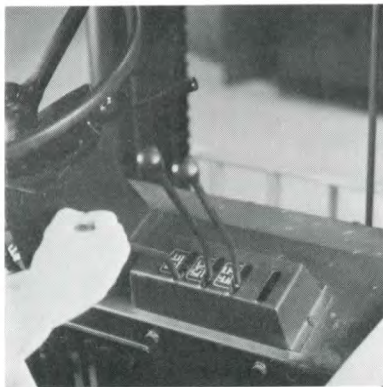


84M037

Carefully check for adequate unobstructed overhead clearance.



## BEFORE OPERATION



84M078

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

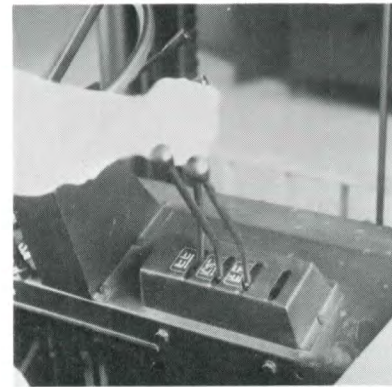
Return lift lever to its neutral position to halt lift at desired level.

Note any erratic upright operation on your checklist.



84M038

Make sure no personnel are standing under the forks.



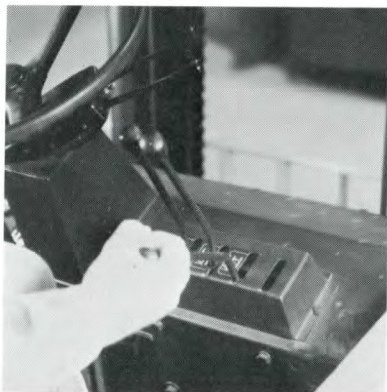
84M079

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

Return lift control lever to its neutral position to stop upright descent near (about 4-6 inches) floor level.

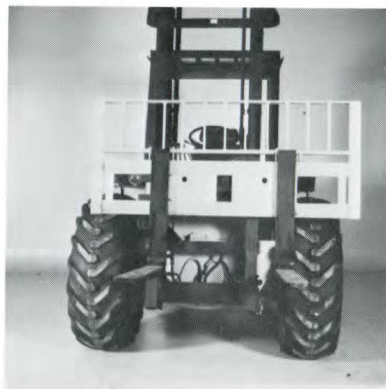
Record any erratic or unusual operation on your checklist.

## BEFORE OPERATION



84M080

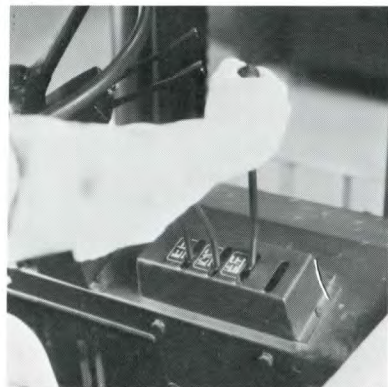
Gently pull back on the side shift lever. The forks should move sideways to your right.



84M081

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

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

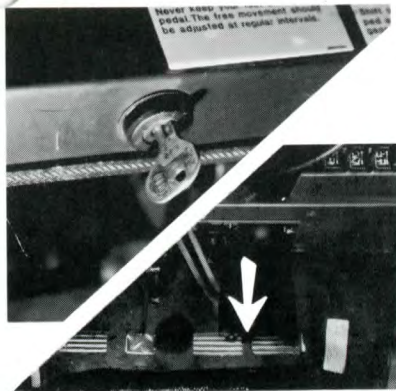


84M082

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

Note any erratic side movement operation on your checklist.

## BEFORE OPERATION



84M052/84M041



84M053

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 make certain you remove the key from the key switch, step on the service brakes and pull the parking brake lever up.

**CLARK** DRIVER'S DAILY CHECKLIST  
Check Before Start Of Each Shift

CHECK ONE  GAS LIFT OR DIESEL TRUCK  ELECTRIC TRUCK

TRUCK NO. \_\_\_\_\_ OPERATOR \_\_\_\_\_ SUPERVISOR OR \_\_\_\_\_ DATE \_\_\_\_\_

YEAR METER READING: START OF DAY \_\_\_\_\_ END OF DAY \_\_\_\_\_

Hours Accordingly  OK  Needs Attention or Repair

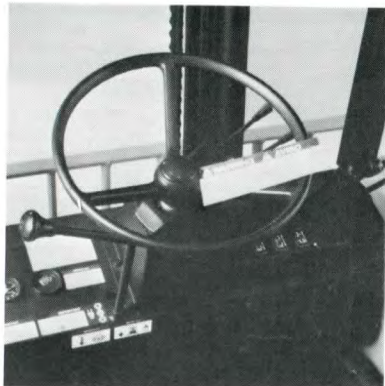
VEHICLE CHECKS		OPERATIONAL CHECKS	
TIRE CONDITION		WORN	
HEAD AND TAIL LIGHTS		STEERING	
WARNING LIGHTS		SERVICE BRAKES	
HOOP WATER		PARKING BRAKES	
OTHER GAUGES AND INSTRUMENTS		HYDRAULIC CONTROLS	
CHARGE CHARGE AND LEAD		SEAT BRACE	
ENGINE OIL LEVEL		STARTER CORD TEST	
WATER OR WATER LEVEL		NOTE: BATTERY INDICATOR MUST INDICATE FULL CHARGE ON FULL SCALE OF METER. BATTERY CHARGE MUST BE MAINTAINED BY OPERATOR THROUGHOUT OPERATIONAL PERIOD.	
FUEL LEVEL			
BATTERY PLUG CONNECTION			
WATER AND OIL ON BATTERY PLUG			
CHARGE TO 100%			
BATTERY DISCHARGE INDICATOR			
WATER ON BATTERY INDICATOR			
WATER TO OIL ON BATTERY			

WARNING: BATTERY ACID IS TOXIC. WEAR PROTECTIVE GEAR.

13124

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



84M032

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 MÁQUINA NECESITA REPARARSE. (VER OTRO LADO)

LA OPERACIÓN DE ESTE VEHÍCULO LE PUEDE OCASIONAR DAÑOS PERSONALES A UD. O PODRÍA DAÑAR LA MÁQUINA. PARA MAYOR INFORMACIÓN LLAMAR A \_\_\_\_\_  
NO. TELEFONO \_\_\_\_\_

FECHA \_\_\_\_\_

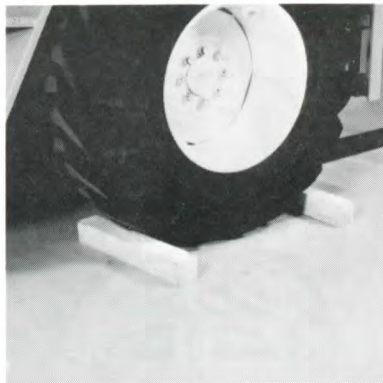
QUITAR ESTE AVISO SOLAMENTE DESPUÉS DE QUE SE HAYA TERMINADO LA REPARACIÓN.

19 886 0567 MAR 82

24805

**END OF  
BEFORE  
OPERATION  
CHECKS SECTION.**

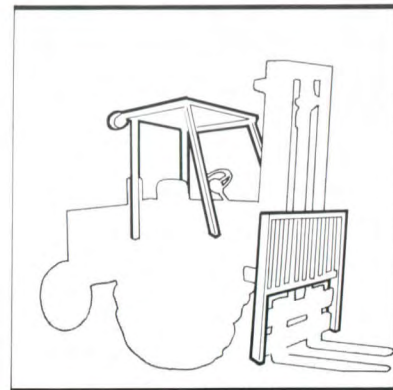
## OPERATION



84M054

Remove blocks from the wheels.

**OPERATION  
OF  
TRUCK**



17435

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

## OPERATION



84M030

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.

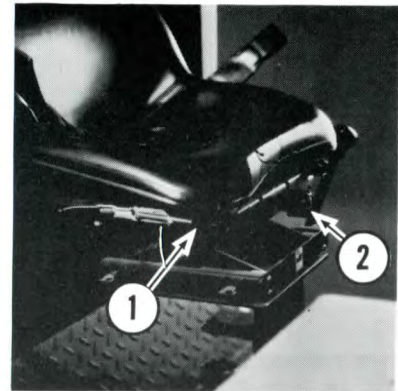


25027

### **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



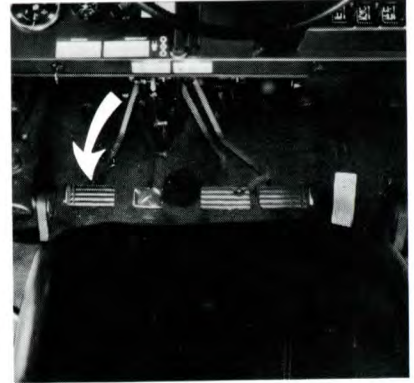
84M040

If the truck is to be operated on the work site make certain that the brake pedals are not locked together. If they are, unlock them.



84M040

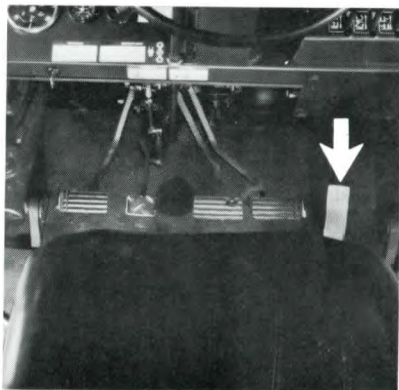
If the truck is to be operated on improved or public highways make certain that the brake pedals are locked together.



84M041

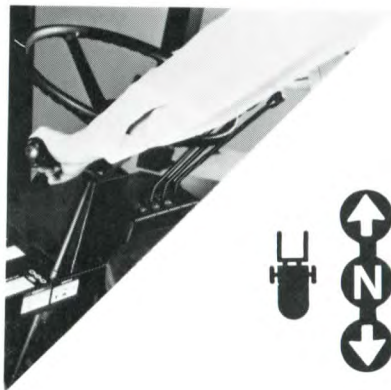
Place your left foot on the inching brake (clutch) pedal and push down to disengage the transmission. This will reduce the engine load while it is being started. It also applies the brakes when fully depressed.

## OPERATION



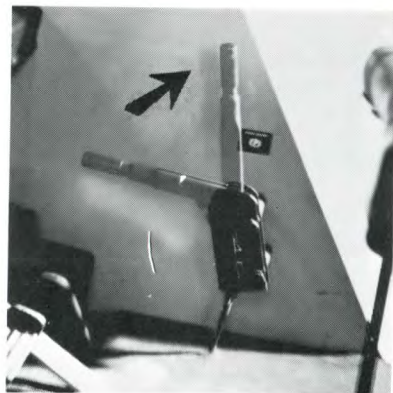
84M041

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



84M070/24974

Make certain that the forward/reverse travel direction lever is in the neutral position.



84M053

Make certain the parking brake handle is in the up (applied) position.



## OPERATION



84M049



13226



84M049

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.

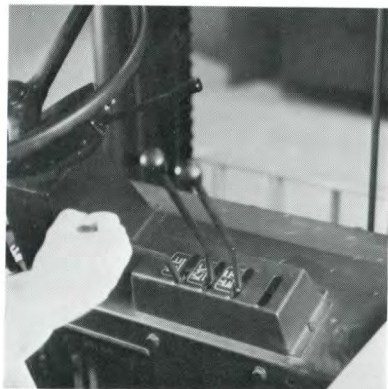
Do not hold starter in the "engaged" position for more than 20 seconds at a time. If the engine fails to start during the first 20 seconds, release the key and wait at least two minutes before attempting restart. This will allow starter to cool.

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

Run the engine at a fast idle for a few minutes to allow it to warm-up.

Make sure the oil pressure, alternator and torque converter warning lights go out when the engine starts.

## OPERATION



84M078

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



84M064



84M033

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.

## OPERATION

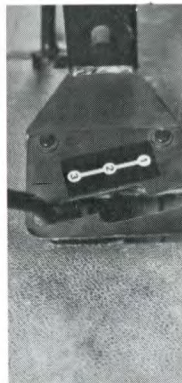


84M072

Push the range selector lever 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



84M073/84M074

Push the gear selector lever forward to 1st gear, indicated by the number 1.

Pull into gear's 2 and 3 if faster speeds are desired while truck is traveling.

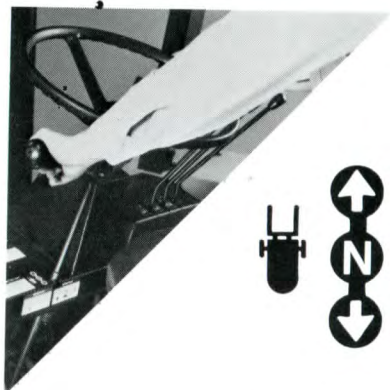


84M053

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

**Note:** The parking brake releases with less effort if you step on the service brakes first.

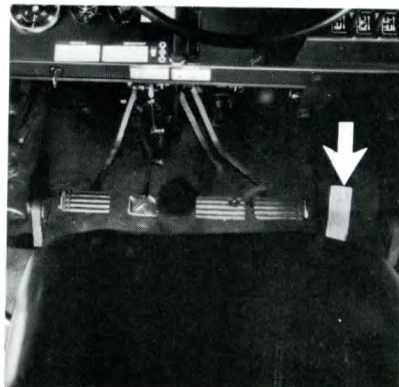
## OPERATION



84M070/24974

Move the forward/reverse lever to the desired direction of travel as indicated by the arrows and (N) for neutral.

Never move this lever unless the truck is stopped and the engine is running.



84M041

Gently press down on the accelerator pedal with your right foot.

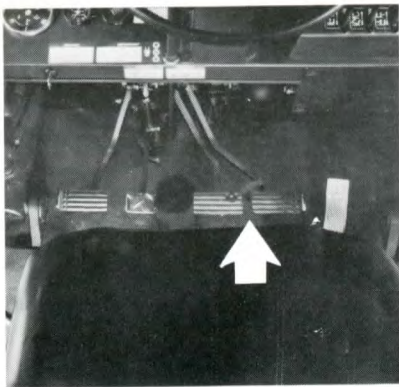


84M035

Turn steer hand wheel in the desired direction of travel.

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

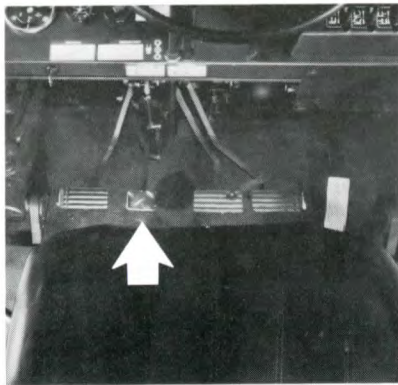
## OPERATION



84M041

To stop the truck lift your right foot up and off the accelerator then press down on both brake pedals.

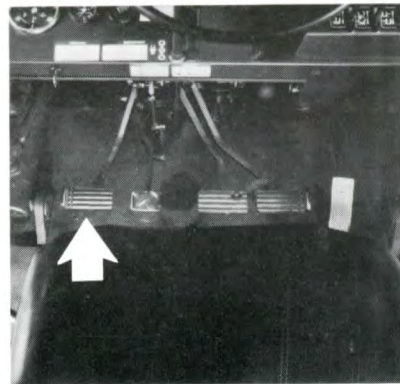
By pressing down on either the right or left brake pedal while gently pressing down on the accelerator pedal, the truck will pivot in the desired direction.



84M041

When operating on slippery or loose ground, press down on the differential lock pedal with your left foot.

This allows the two driving wheels to turn at the same speed for increasing traction.

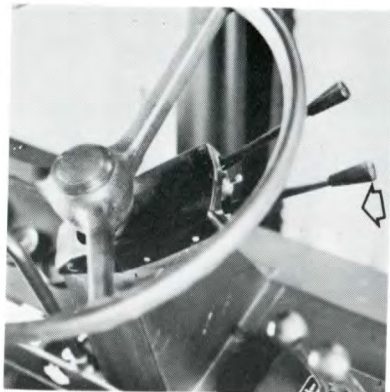


84M041

When operation requires the truck to inch up to a load, press down on the inching/brake pedal with your left foot until you reach your desired travel distance.

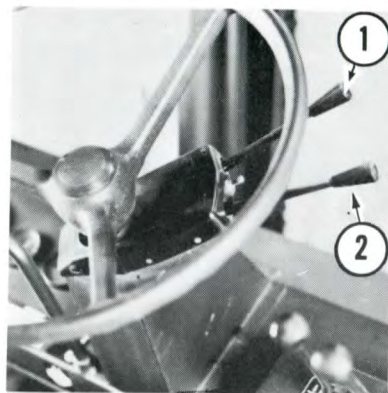
Pressing the pedal all the way down will stop the truck.

## OPERATION



84M050

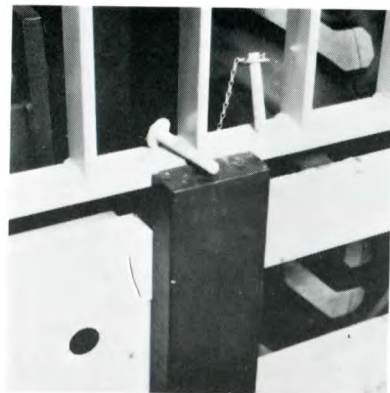
Push the turn signal lever toward the steering column to sound the horn when operating close to personnel and when approaching a blind crossway.



84M050

When the operation requires lighting, pull the headlight and running light lever (1) up toward the steer handwheel.

To activate turn signals pull the turn signal lever (2) towards you to make a right hand turn and push it away from you to make a left hand turn.



84M042

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

Move forks in a safe manner and keep your fingers away from pinch points.

Don't forget to put the pins back in the holes around the forks to secure them.

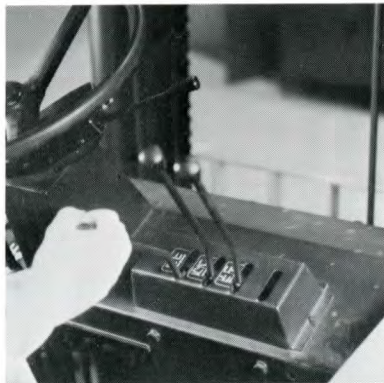
## OPERATION



84M037

### Removing stacked loads.

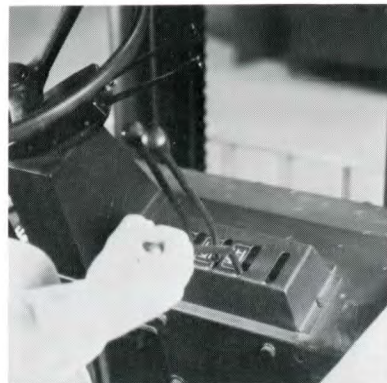
Before raising the forks when inside, carefully check for adequate unobstructed overhead clearance.



84M078

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

Return lift lever to neutral position to stop forks.



84M080

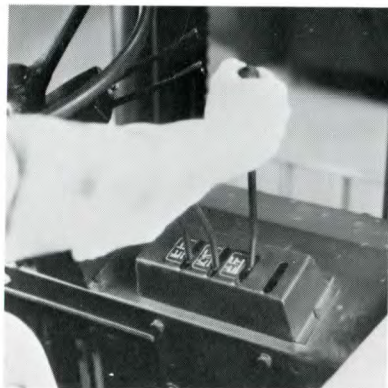
### Centering Forks

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.

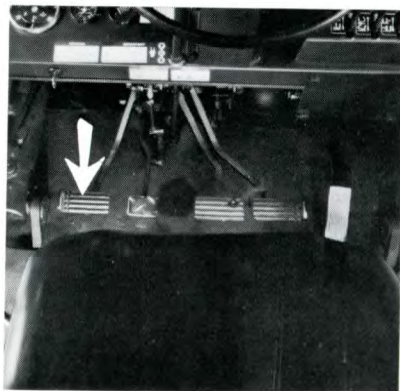
Return lever to middle (neutral) position to stop the side movement.

## OPERATION



84M082

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

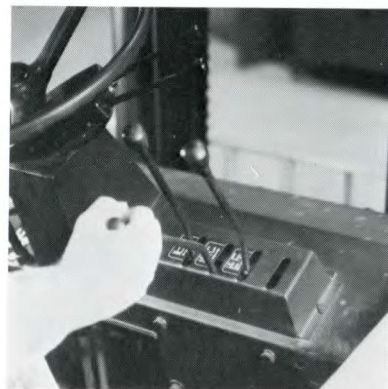


84M041

### Inching

Move the truck forks under the load as close to center as possible.

Use the inching/brake pedal to gently put the forks under the load.



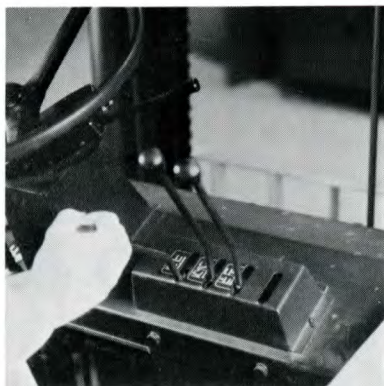
84M076

### Tilting Forks

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



## OPERATION



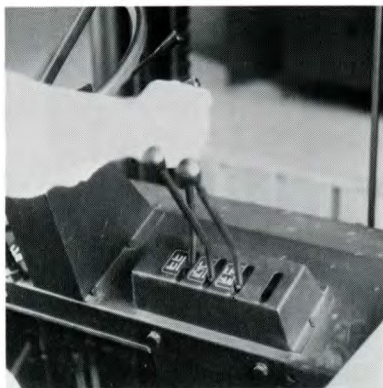
84M078

### 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.



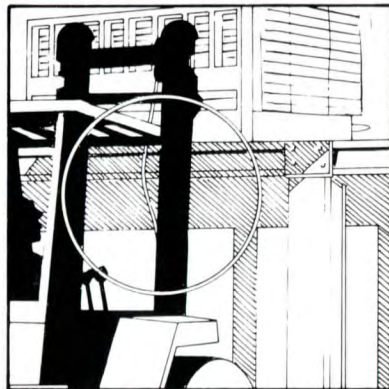
84M079

### 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.

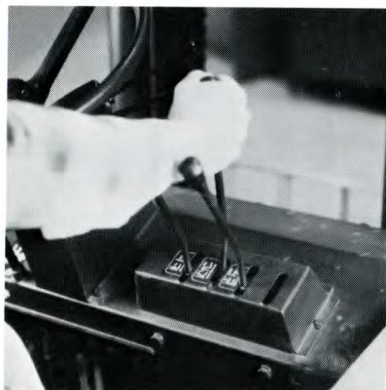
## **WARNING**

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

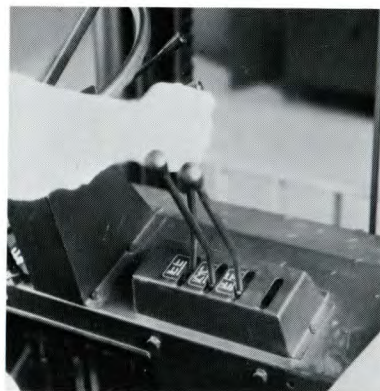


84M077

### Depositing Load

Push tilt lever forward and hold until upright tilts forward.

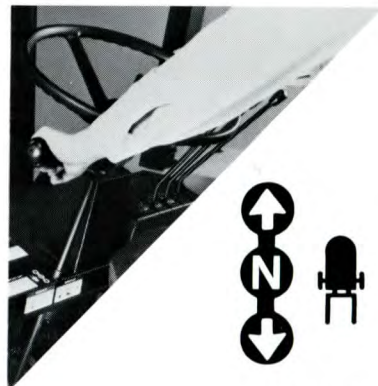
Return tilt lever to neutral position to halt forward tilting action at desired point.



84M079

Lower the load until it is resting in desired location.

Lower the forks slightly to be sure forks are free from pallet or load.



84M070/24974

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

Make certain the forks clear the load.

## OPERATION



84M049

After truck has been operating under load, check to make certain that the torque converter oil temp. indicator lamp has not lighted.

If this lamp should illuminate, run the engine for a few minutes at a high idle r.p.m. with the forward/reverse lever in neutral.

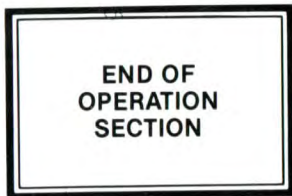
If the light remains on, stop the engine, note the condition on the daily checklist and notify your supervisor.



84M084

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

The unloaded draw bar pull is 7,716 lbs. (3500 kg).



84M033

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

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

Be constantly alert for unusual or erratic operation. Report any malfunction immediately so that adjustments or repairs can be performed by trained and authorized personnel.

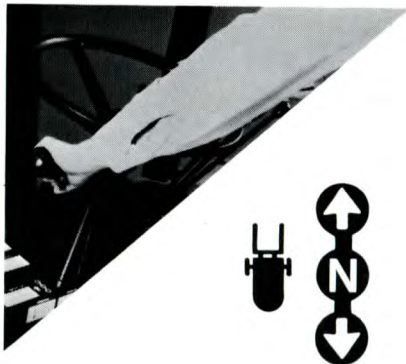


17426

Park lift trucks in designated parking areas only.

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

## PARKING



84M070/24974

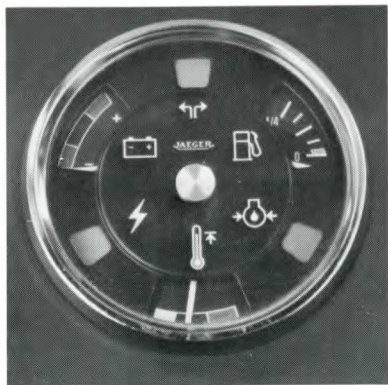
Place the forward/reverse lever in the neutral position.



84M053

Step on the service brake pedals and pull up the parking brake lever.

## PARKING



84M055

Before stopping a hot engine, it is advisable to 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.



13226

Turn the key switch to "OFF" counterclockwise, and remove the key.



84M083

Lower the forks to the ground.

## PARKING



84M054

Carefully dismount from the truck, firmly block the drive wheels to prevent accidental roll and turn the key and daily checklist in to 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

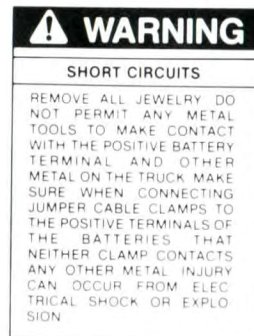
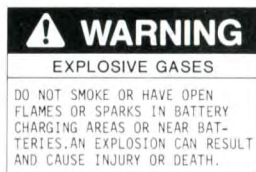
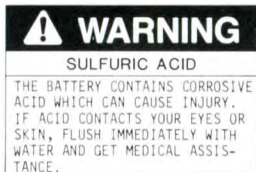
If your truck has a battery with terminals on the side, you will need a set of jumper cables with matching connector clamps, or cable adapters for side-mounted battery terminals.

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)



- 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.

- 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.

- Connect the jumper cables in the following sequence:

(Also refer to Figure 24871)

- 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 (+).
- 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.

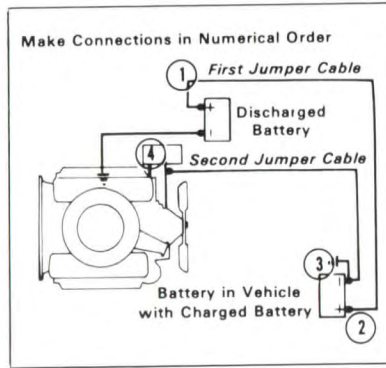
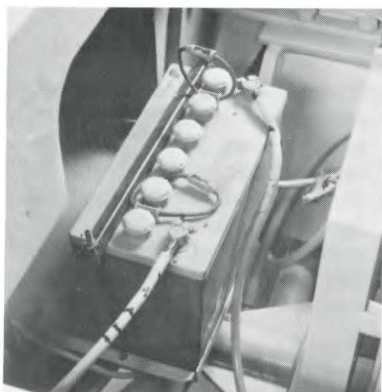


Fig. 24871

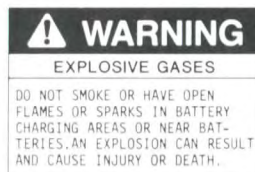
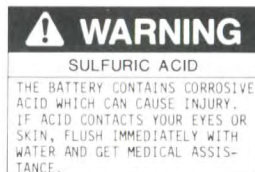
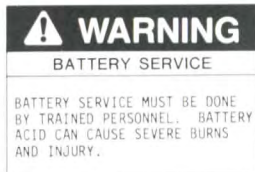
7. Start the engine of the truck with the discharged battery. Follow the starting instructions in the "Before Operation" section of this manual. Make sure that the engine is at idle speed before disconnecting the jumper cables.

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



84M036



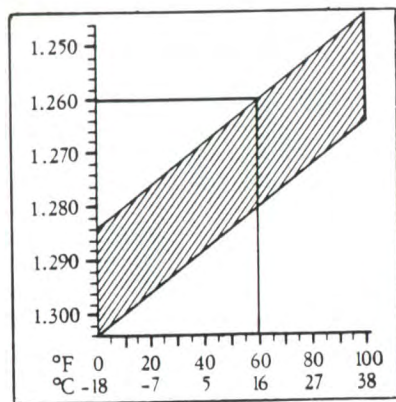
Use only batteries that meet the electrical requirements for use with diesel powered vehicles.

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.

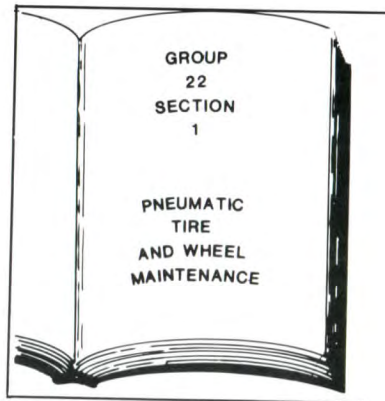
The efficiency of the battery is progressively reduced as the outside (ambient) temperature falls until it is practically useless at -40°C, -40°F.

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.



84M043

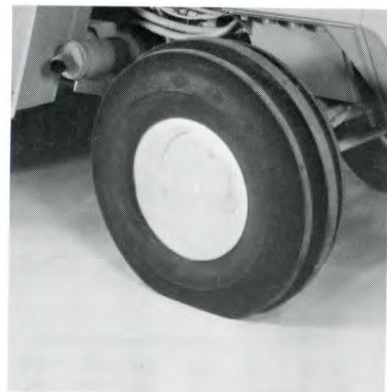
Check condition of drive wheels and tires.

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

Check drive tire pressure and adjust, if necessary.

Tire pressure is 32 psi.

Check for loose or missing wheel nuts.



84M044

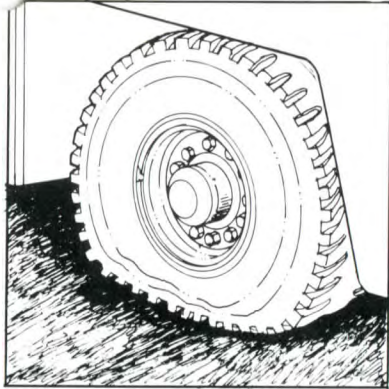
Check condition of steer wheels and tires.

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

Check steer tire pressure and adjust, if necessary.

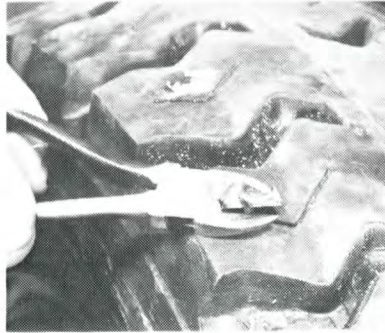
Tire pressure is 43 psi. Check for loose or missing wheel nut.

## 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.

# 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.



84M180

## 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 Use 50/50 Mixture of permanent-type antifreeze and water.
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



84M181

**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.



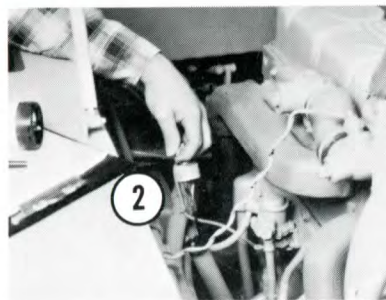


# MAINTENANCE AND LUBRICATION

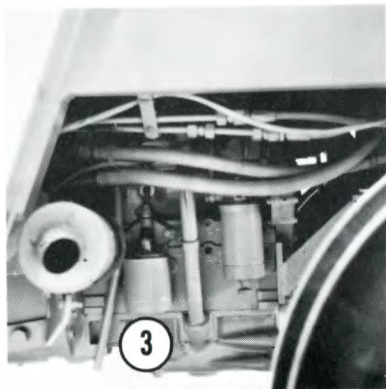
## Lubrication and Maintenance Chart (Continued)

17. Clean and grease mast pivot pins.
18. Clean and grease head tilt cylinder pin.
19. Clean and grease bottom tilt cylinder pin.
20. Clean and grease steering cylinder pin.
21. Clean and grease rear axle pivot pin.
22. Clean and grease stub axle pivots.
23. Lubricate pedals and control rods.

A	B	C	D	E	F
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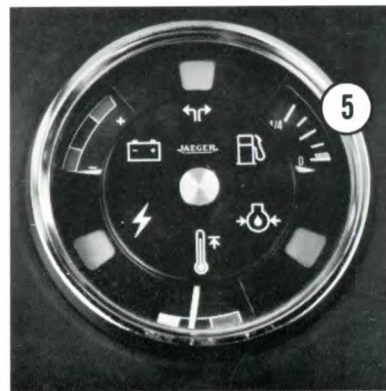
84M069



84M059

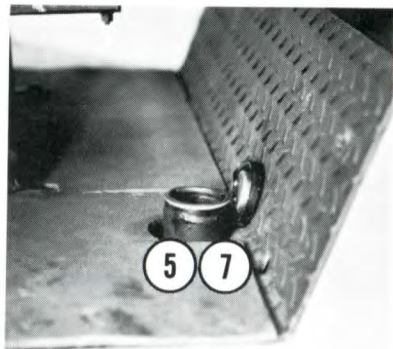


84M039

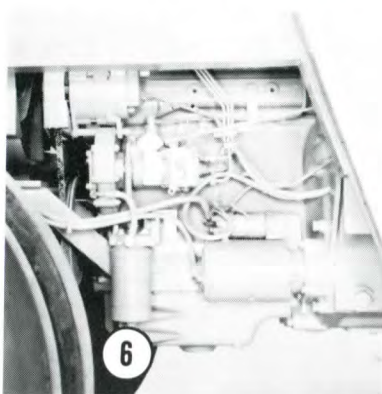


84M055

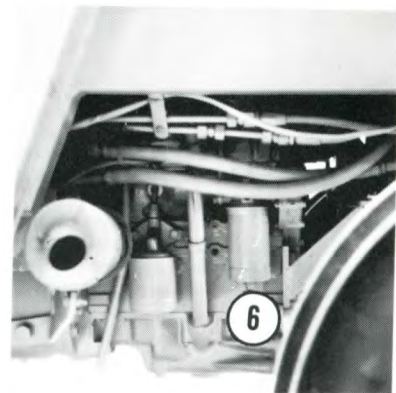
# MAINTENANCE AND LUBRICATION



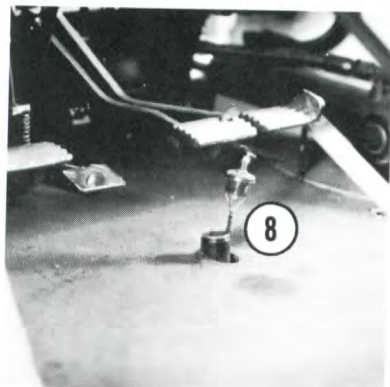
84M056



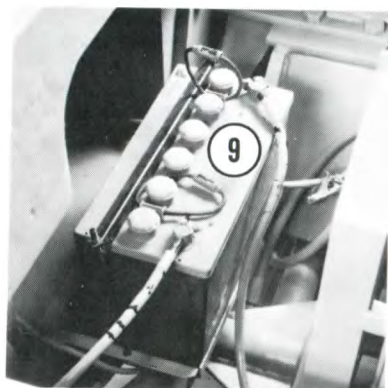
84M058



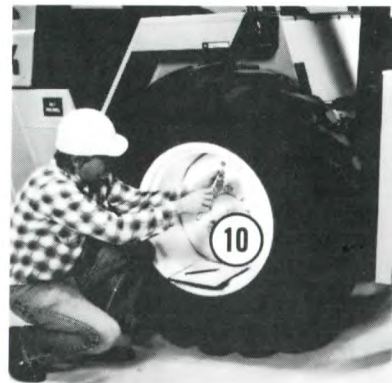
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84M065



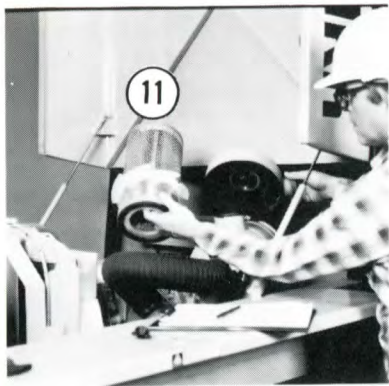
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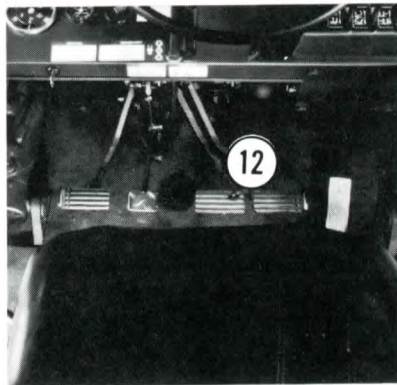
84M043

Code: OI-532

## MAINTENANCE AND LUBRICATION



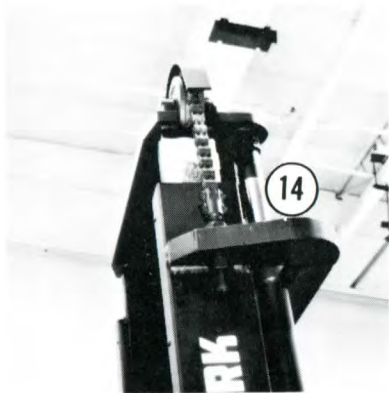
84M085



84M041



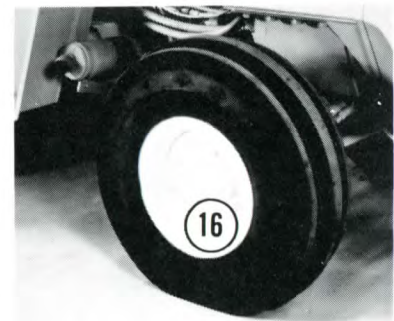
84M053



84M086

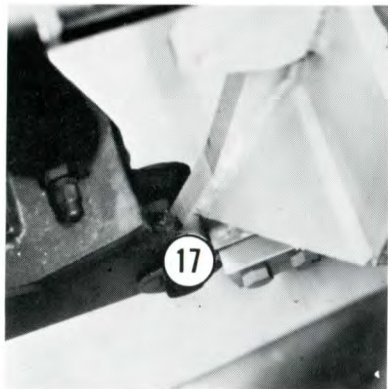


84M087

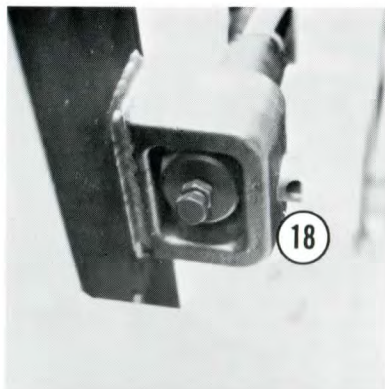


84M044  
Page 105

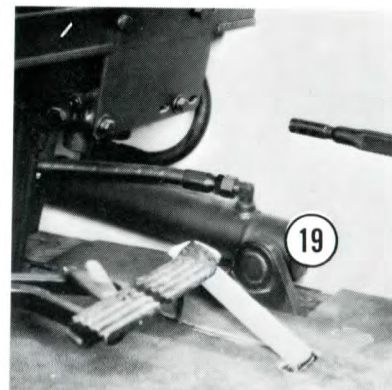
# MAINTENANCE AND LUBRICATION



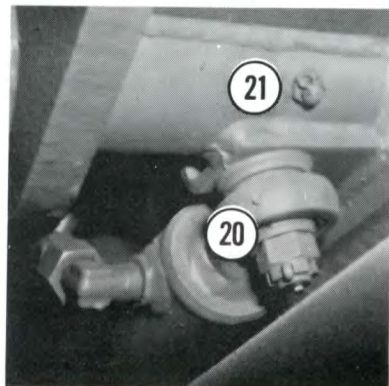
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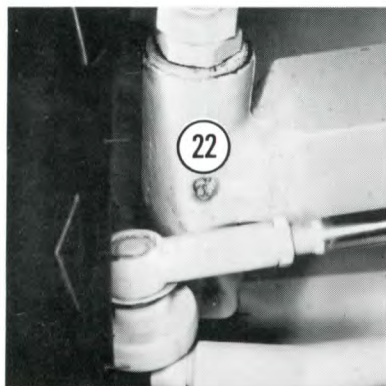
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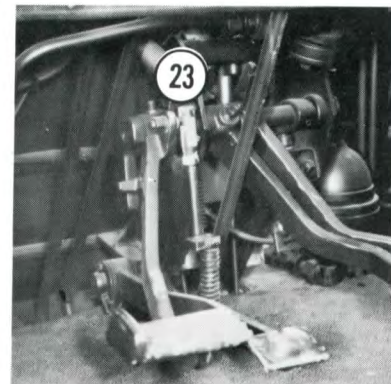
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84M177



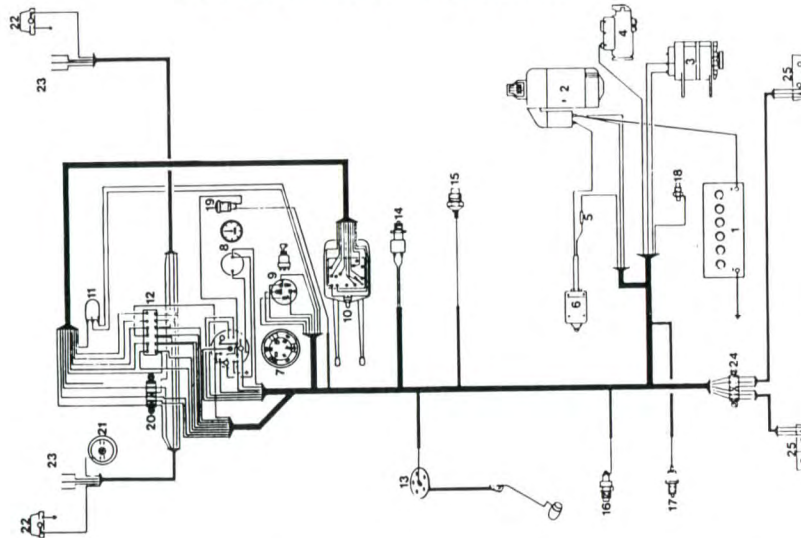
84M178



84M179

Code: OI-532

# ELECTRICAL DIAGRAM

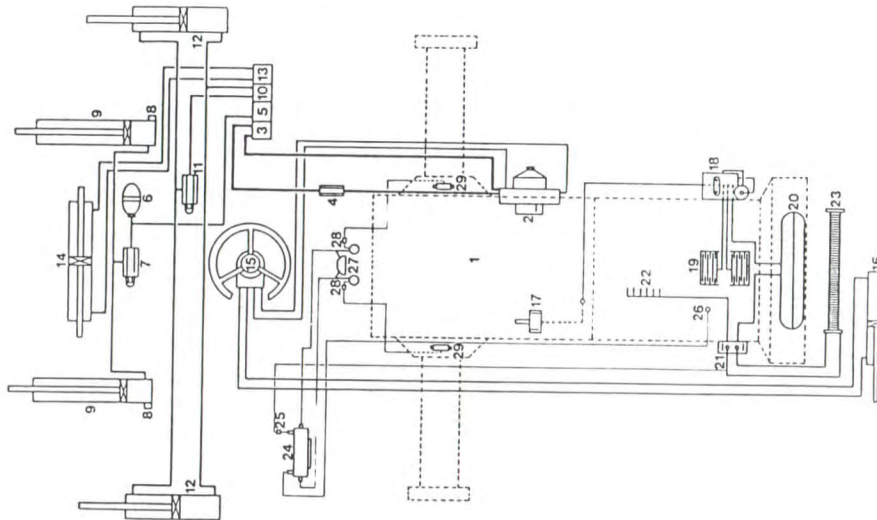


1. Battery
2. Starter
3. Alternator
4. Injection Pump
5. Connector
6. Start Security Switch
7. Combined Instrument Cluster
8. Hourmeter

9. Key Switch
10. Dual Switch
11. Flasher Unit
12. Fuse Box
13. Fuel Level Sender
14. Stop Light Switch
15. Torque Converter Oil Temperature Sender
16. Engine Coolant Sender

17. Engine Oil Temperature Sender
18. Preheat Switch
19. Preheat Light
20. Front Terminal Block
21. Horn
22. Indicator Flashers
23. Headlights
24. Rear Terminal Block
25. Rear Lights

# HYDRAULIC DIAGRAM



1. Transmission Housing
2. Main Pump and Filter
3. Pressure Regulator (Relief Valve)
4. One Way Valve
5. Valve S.A. (Lift Circuit)
6. Accumulator
7. Flow Restrictor Valve
8. Flow Restrictor Valve
9. Lift Cylinders

10. Valve D.A. (Tilt Circuit)
11. Flow Restrictor Valve
12. Tilt Cylinders
13. Valve D.A. (Side Shift or Attachments)
14. Side Shift Cylinder
15. Power Steering Unit
16. Steering Cylinder
17. Forward/Reverse Pump
18. Forward/Reverse Valve
19. Forward/Reverse Clutch Pack

20. Torque Converter
21. Junction Valve
22. Gear Box Lubrication Circuit
23. Torque Converter Oil Cooler
24. Oil Tank
25. Micro-Filter
26. Gear Box Return Line
27. Master Cylinder
28. Micro-Filter
29. Service Brake.

## 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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**CLARK** Industrial Truck  
Division

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