

OPERATOR'S MANUAL



MANUAL PROPELLED SEMI-ELECTRIC STRADDLE LIFT TRUCK

WARNING

Do not operate this truck unless you have been authorized and trained to do so, and have read all warnings and instructions in Operator's Manual and on this truck.

Do not operate this truck until you have checked its condition.

Give special attention to wheels, battery, lift system (including forks or attachments, chains, cables and limit switches), floor locks, steering mechanism, guards and safety devices.

Operate truck only from designated operating position.

Never place any part of your body into the mast structure or between the mast and the truck.

Do not carry passengers. Keep feet clear of truck and always wear foot protection.

Observe applicable traffic regulations. Yield right of way to pedestrians.

Slow down at cross aisles and wherever vision is obstructed.

Start, stop, travel and steer smoothly. Slow down for turns and on uneven or slippery surfaces that could cause truck to slide or overturn.

Use special care when traveling without load as the risk of overturn may be greater.

Travel with lifting mechanism as low as possible. Always look in direction of travel.

Keep a clear view, and when load interferes with visibility, travel with load trailing.

Do not operate on ramps.

Do not overload truck. Check nameplate for capacity and load center information.

When using forks, space forks as far apart as load will permit.

Before lifting, be sure load is centered, forks are completely under load, and load is as far back as possible against load backrest.

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.

Do not handle loads which are higher than the load backrest or load backrest extension unless load is secured so that no part of it could fall backward.

Elevate forks or other lifting mechanism only to pick up or stack a load.

Watch out for obstructions, especially overhead.

Do not lift or transport personnel.

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

When leaving truck, fully lower lifting mechanism and set brake.

When leaving truck unattended, also shut off power.

PROPOSITION 65



WARNING

In accordance to

California Health & Safety Code Sections 25249.5 et. seq.

this warning is to let you know that this product can expose you to chemicals known to the state of California to cause cancer, birth defects and other reproductive harm.

For more information visit: www.p65warnings.ca.gov

FOREWORD

As a lift truck operator, you are responsible for a machine that is useful, powerful, and can be hazardous if not operated as described. Your Big Joe truck may weigh more than some cars, depending on the model. Observing and practicing the safety warnings in this manual cannot be overemphasized. Just knowing the warnings, however, is no substitute for common sense. Using your common sense will, in almost all cases, prevent accidents. Think of the truck as your own. In this way you will learn its capabilities and limitations. This manual is intended to remain with the

truck at all times as a handy reference guide to operation. Detailed maintenance procedures are found in the parts and service manual for the specific truck model, and are to be performed only by a qualified technician. For further information on obtaining a complete parts and service manual, see page 21 of this manual. The operator who knows his truck will learn to spot problems as they develop. This is accomplished by performing the Daily Checks and reporting any problems to the designated authority.

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SAFETY SYMBOLS

WARNING and **CAUTION** are both signal words intended to alert the viewer to the existence and relative degree of a hazard. They are both preceded by a safety alert symbol consisting of an exclamation mark enclosed by a triangle.



A **Warning** indicates a hazard which could result in injury or death if proper precautions are not taken.

A **Caution** indicates a reminder of routine safety practices.

A prohibition slash (circle with diagonal slash through it) indicates a procedure or action that should not be performed under any circumstances, as both personal injury and/or damage to equipment will result.



GENERAL DESCRIPTION

Big Joe LLC M22 utilize the straddle leg configuration, which normally straddles the load.

The mast handles are used to help control the lift truck. The control handle is used to propel and steer the lift truck. Lift and Lower are controlled by a lever located near the operator.

The model number will be found on the name plate along with the serial number, lifting capacity and load center.

If the name plate or warning decal are lost or damaged they should be replaced immediately. Have your supervisor or the designated authority contact Big Joe Authorized Dealer for replacement









Name Plate



WARNING:

This truck is equipped with a battery. Read and heed the following warning plus any other warnings located near or on the battery. An example is shown here:

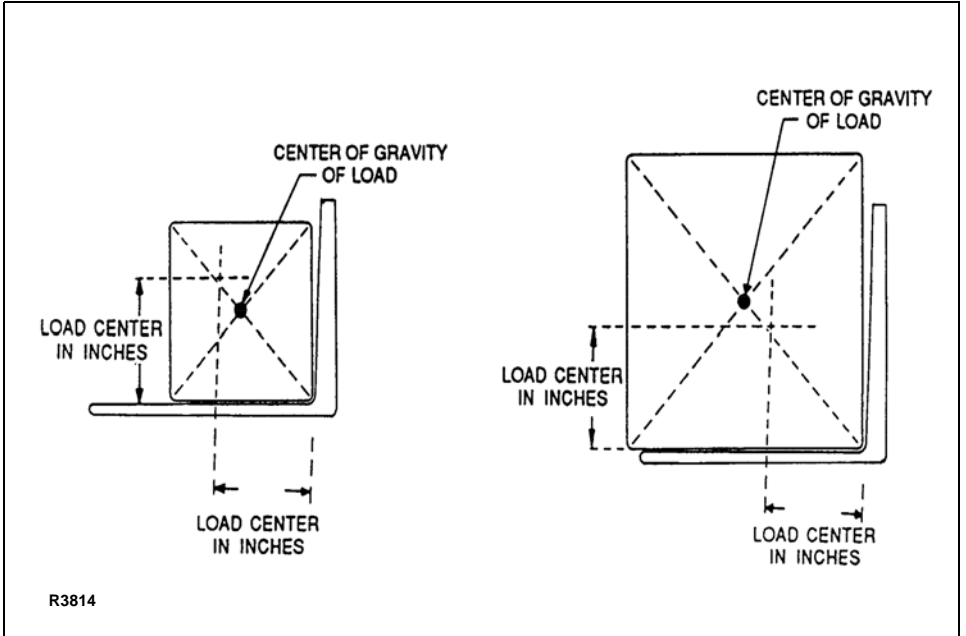
<p>BATTERY HAZARD</p>      	<p>! DANGER</p> <p>EXPLOSIVE/POISON/CAUSTIC NO SPARKS, FLAMES, SMOKING BATTERY ACID can cause blindness and severe burns SHIELD EYES, AVOID SKIN CONTACT IF SPLASHED flush immediately with water, get medical help fast.</p> <p>Do not service battery while on charge. Do not connect or disconnect battery from charger while charger is on.</p> <p>Only qualified and experienced personnel should perform maintenance and repair on batteries. Use caution while servicing or removing battery. (Refer to Battery Safety Sheet).</p>
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LOAD CAPACITY

The further the load center is from the backrest, the lower the load capacity. The load center must also be no higher than that specified above the lifting surface (Top side of forks). For example, a load capacity of 2200 pounds with a load center of 24 inches means that the truck can be used to lift 2200 pounds only when the load's center of gravity is no more than 24 inches from the face of the forks

or 24 inches above the top side of the forks. Note that a truck under-going speed changes is less stable than a standing truck. If you are not sure that the truck can lift a certain load, consult your supervisor or the designated authority.

An overload can cause machine damage and stability loss or tipping of the lift truck.



Load Center

BEFORE OPERATION

The table on page 6 covers important inspection points on the truck which should be checked prior to operation. Depending on use, some trucks may require additional checks.

The illustration below shows a sample format for an Operator Checklist, which can be modified as necessary to fit your operation.



WARNING:

Periodic maintenance of this truck by a QUALIFIED SERVICE TECHNICIAN is required.



WARNING:

A QUALIFIED SERVICE TECHNICIAN should check the truck monthly

for proper lubrication, proper fluid levels, brake maintenance, motor maintenance and other areas specified in the parts and service manual maintenance section.



WARNING:

If the truck is found to be unsafe and in need of repair, or contributes to an unsafe condition, report it immediately to the designated authority. Do not operate it until it has been restored to a safe operating condition. Do not make any unauthorized repairs or adjustments. All service must be performed by a qualified maintenance technician.

If the truck has not been used for a long time (more than a month), regular battery maintenance should be performed.



Electric Truck Daily Operator Check-Off List

Date _____

Operator _____

Truck No. _____

Model No. _____

Dept. _____

Shift _____

Hour Meter _____

Reading Drive _____

Hoist _____

Check	O.K. (✓)	Need Maintenance
Casters		
Load Wheels		
Lift - Lower Control		
Forward & Reverse		
Steering		
Floor Lock		
Hydraulic Leaks, Cylinder, Valve, Hoses, Etc.		

Sample of Operator Check List

Operator Checks

ITEM	PROCEDURE
Key Switch	Check that key switch disconnects & restores truck power when turned off and on.
Battery capacity	Before operation, turn on key switch and check that the electric capacity is enough. If low, recharge the battery.
Hydraulic system	Check for signs of fluid leakage.
Forks	Check for cracks and damage and that they are properly secured.
Chains, cables and hoses	Check that they are in place, properly secured and not damaged.
Guards	Check that safety guards are in place, properly secured and not damaged.
Safety signs	Check that warning labels, nameplate, etc., are in good condition and legible.
Wheels	Check drive wheel for cracks or damage. Move truck to check load wheels and casters for freedom of rotation.
Lift and Lower	Check operation of lift and lower to their maximum positions.
Floor Lock	Check that floor lock holds the truck stationary.

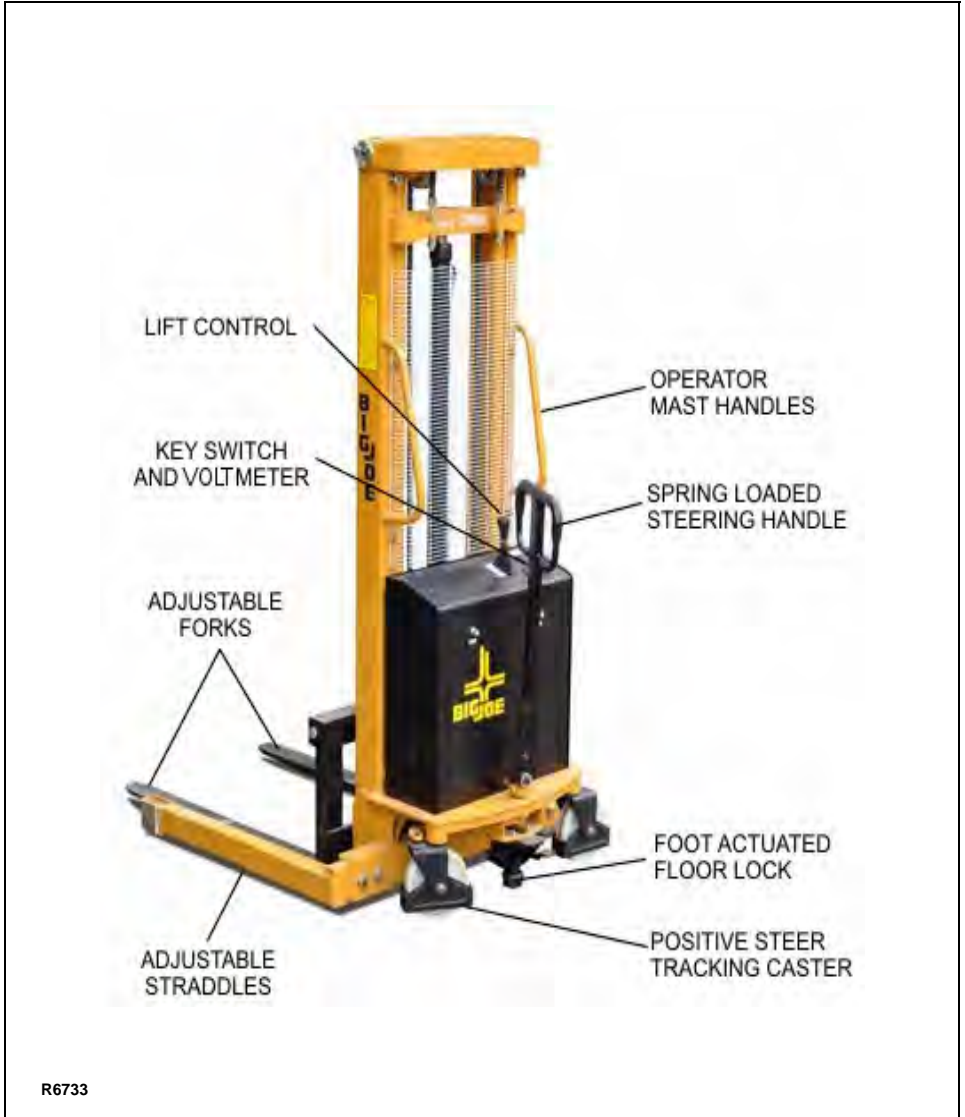
INSTRUMENTS AND CONTROLS

The instrument panel contains the key switch, lift/lower control lever, volt meter and charging indicators.

The foot actuated floor lock is used to hold the truck stationary. The operator mast handles

dles located on each side of the mast are used to help control the truck.

The spring loaded steering handle is used to propel and steer the lift truck. It is linked to the left caster to provide steer tracking.



Control Handle

Battery Indicator

OPERATION

TRANSPORT

Moving and Stopping

NOTE: The truck should only be operated on a level surface.

1. Turn on the key switch and check that the electric capacity is enough. If low, recharge the battery
2. Check that the load is in the down position before traveling.
3. Release the floor lock.
4. Apply pressure to the steering handle and mast handles to move the truck forward. Pull evenly on the steering handle to move the truck backward.
5. To stop the lift truck, hand restraint against the steering handle and mast handles is usually adequate.
6. After the lift truck has stopped, always engage the floor lock before lifting or lowering and when parking.
7. Turn off the key switch to prevent battery drain and to prolong the service life.



M22 Lift Truck

Turning

1. Release the floor lock.

NOTE: Turning and maneuvering the lift truck is made easier if the truck is in motion.

2. Begin rolling the truck and simultaneously apply side pressure to the steering handle to cause the caster wheels to swivel.

OPERATING THE LIFT

WARNING: Check the space above the load on the forks to ensure that the load will not strike any obstruction while being raised.

1. Turn the key switch ON.
2. To raise the forks, pull the lift control back and hold until the forks reach the desired height. The forks will raise at a fixed speed. Return the lift control to the neutral position.
3. To lower the forks, push the lift control forward and hold until the forks reach the desired level. The lowering speed can be controlled by the lever. Return the lift control to the neutral position.

LOADING AND UNLOADING

1. Move the truck to the location where the load is to be picked up.
2. Adjust the forks to the maximum practical width to support the load.
3. Raise the forks to the desired height for entry under the load.
4. Move the lift truck into position so that the forks are centered under the load.

5. Move the lift truck forward to place the load as far back as possible toward the lift carriage. Raise the forks to lift the load.

CAUTION: To avoid spilling the load, move slowly and use extra caution when turning.

6. Move the lift truck backward from the loading position.
7. When the load is clear of its rack, lower the load, leaving enough floor clearance to maneuver the truck.
8. Push or pull the truck carefully to the area where the load is to be placed.
9. Align the lift truck with its new position.
10. Raise the forks to the desired height and slowly move the lift truck into position for off-loading.

CAUTION: The load must rest squarely on its rack when it is lowered into position.

11. When the load is in position, lower the forks until the pallet rests on its rack and the forks are free.
12. Slowly move the lift truck backward, checking that the forks do not catch on the pallet or rack.
13. Lower the forks when they are clear.
14. Proceed to move the next load.

PARKING

When finished with moving loads, lower the forks and move the lift truck to its maintenance or storage area. Engage the floor lock. Turn off the key switch. Charge the battery if required.

BATTERY CHARGING

Refer to DOC 245 for battery safety and maintenance.

Turn on the key switch when charging the battery. Charge for 3 to 5 hours (but not more than 24 hours).

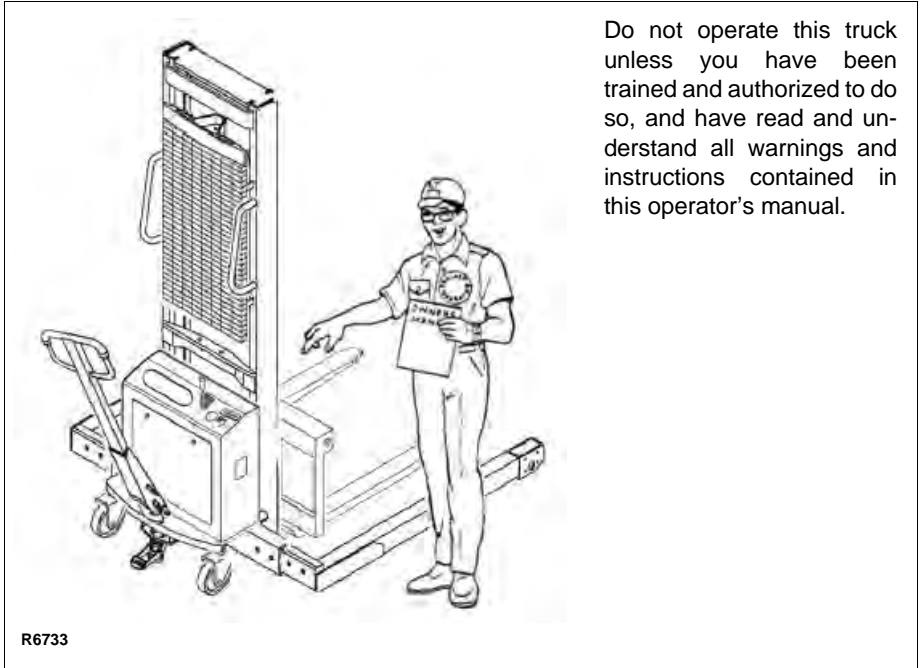
NOTE: Battery charging instructions are contained in the service manual.



MOVING A DISABLED TRUCK

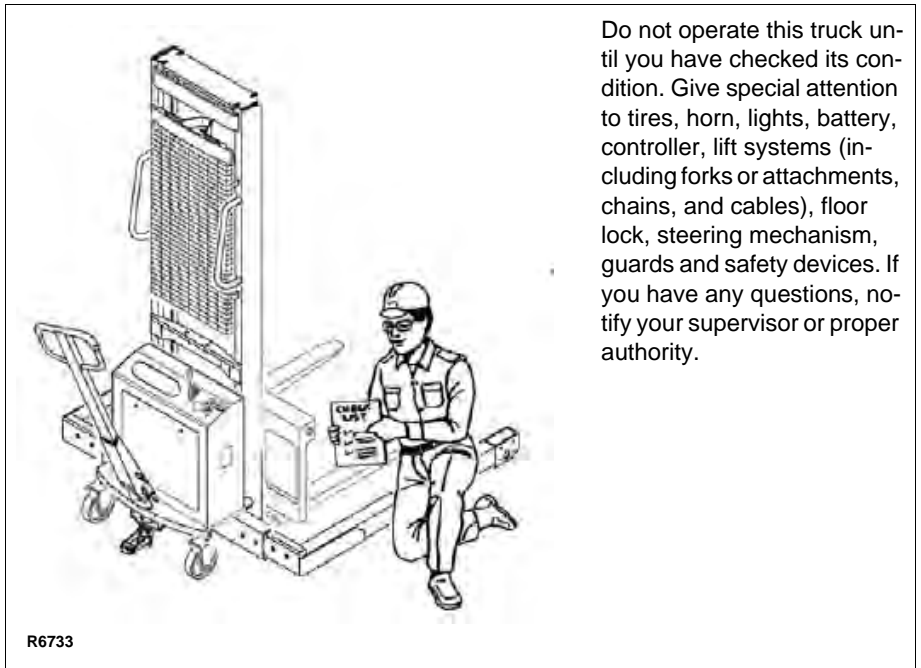
Do not attempt to move a disabled truck; notify your supervisor or proper authority.

The following operating instructions should be followed at all times when using truck.



Do not operate this truck unless you have been trained and authorized to do so, and have read and understand all warnings and instructions contained in this operator's manual.

R6733



Do not operate this truck until you have checked its condition. Give special attention to tires, horn, lights, battery, controller, lift systems (including forks or attachments, chains, and cables), floor lock, steering mechanism, guards and safety devices. If you have any questions, notify your supervisor or proper authority.

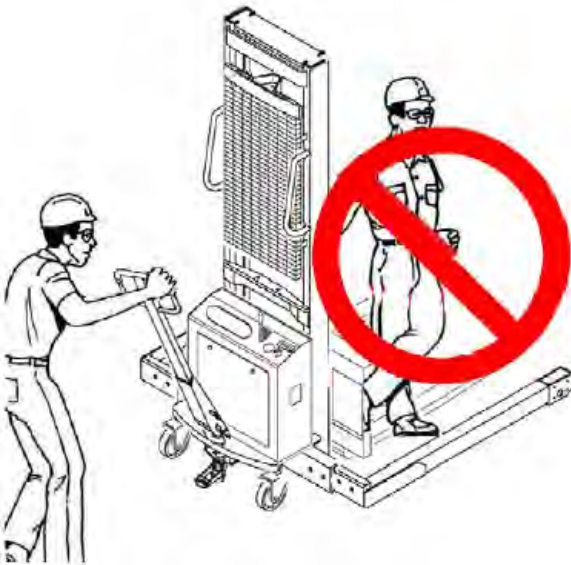
R6733

Never place any part of the body into the mast structure.



R7184

Do not carry passengers.



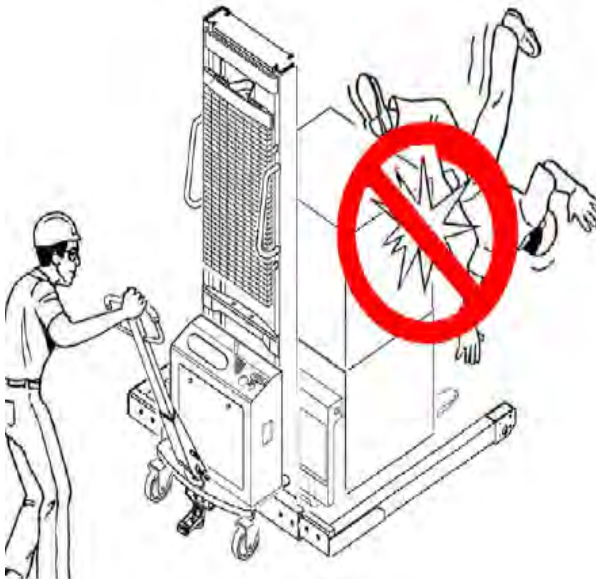
R7185

Keep feet clear of truck and always wear foot protection.



R7186

Observe applicable traffic regulations. Yield right-of-way to pedestrians. Slow down and at cross aisles and wherever vision is obstructed.



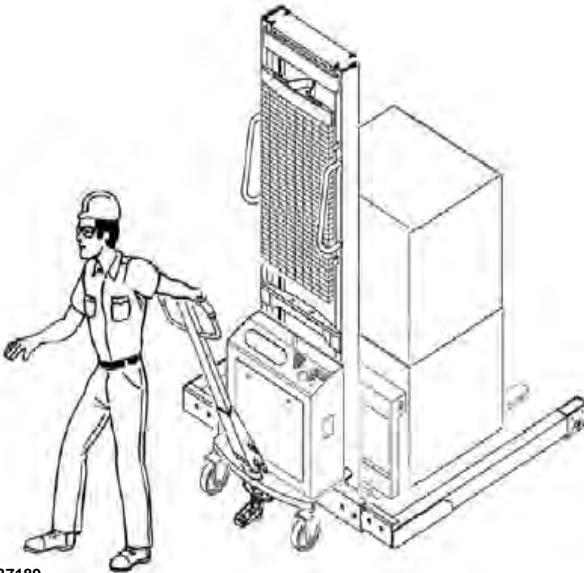
R7187

Start, stop, travel, steer and brake smoothly. Slow down for turns and on uneven or slippery surfaces that could cause truck to slide or overturn. Use special care when traveling without load as the risk of overturn may be greater.



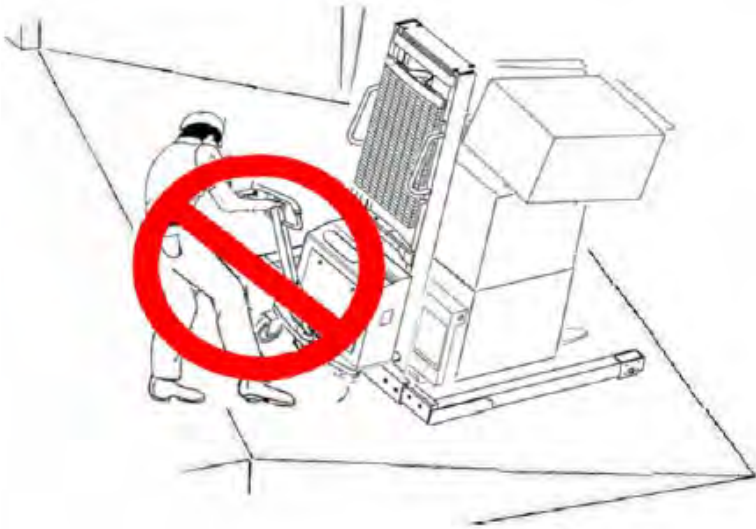
R7188

Travel with lifting mechanism as low as possible. Always look in direction of travel. Keep a clear view, and when load interferes with visibility, travel with load or lifting mechanism trailing.



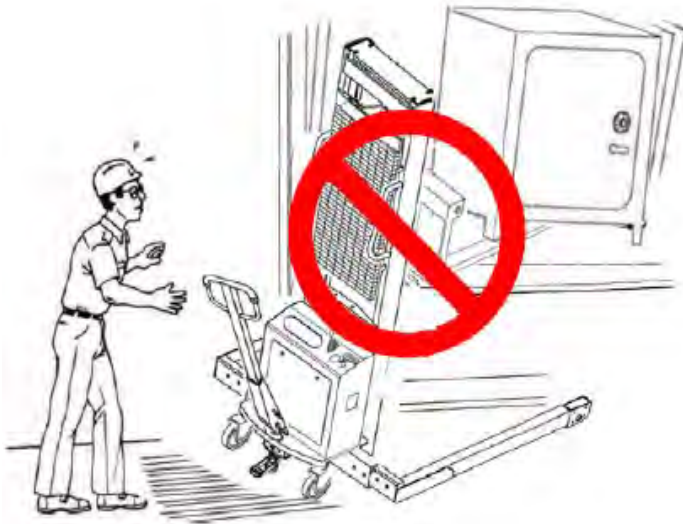
R7189

Do **NOT** operate on Ramps!



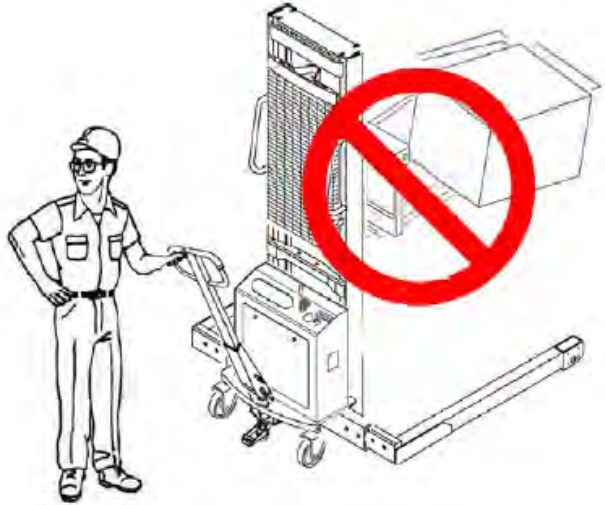
R7190

Do not overload truck. Check name plate for load weight capacity and load center information.



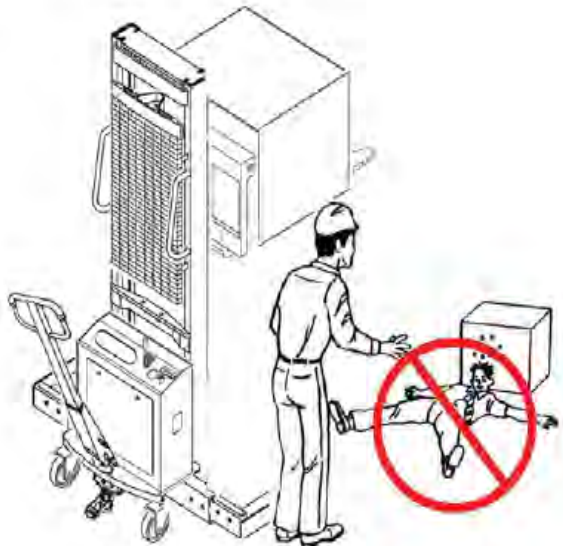
R7191

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



R7192

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.



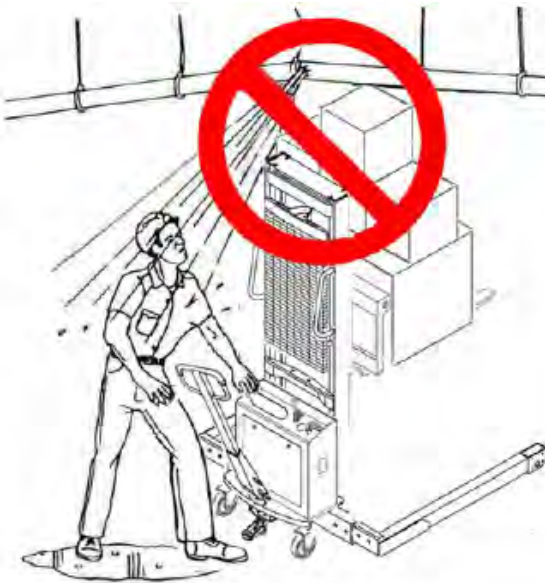
R7193

Do not handle loads which are higher than the load backrest or load backrest extension unless load is secured so that no part of it could fall backward.



R7194

Elevate forks or other lifting mechanism only to pick up or stack a load. Watch out for obstructions, especially overhead.



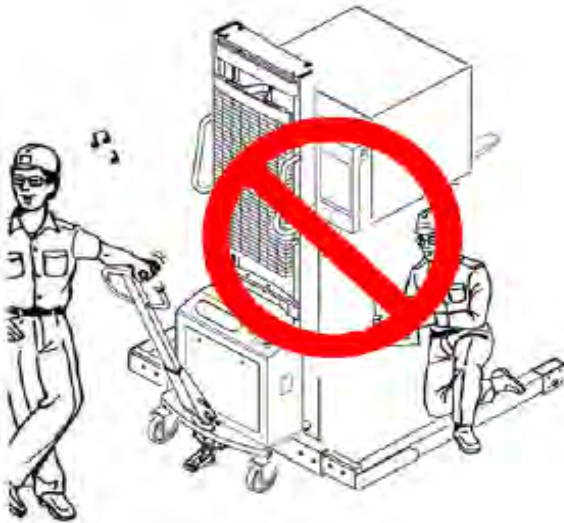
R7195

Do not lift personnel with this truck. It is not designed for this function and someone could get seriously injured if they fell off. Use the correct equipment for this task.



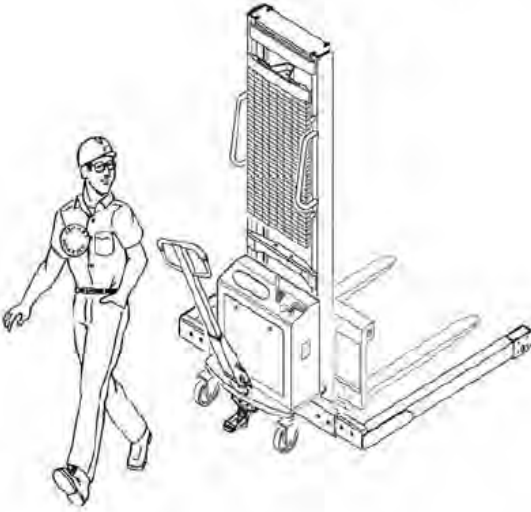
R7196

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



R7197

When leaving truck neutralize travel control. Fully lower lifting mechanism and set brake. When leaving truck unattended also shut off power.



R7198

NOTICE - OBTAINING A PARTS AND SERVICE MANUAL

A complete parts and service manual covering this truck is available at www.bigjoesupport.com. For questions or service please contact your Big Joe Authorized Dealer.

