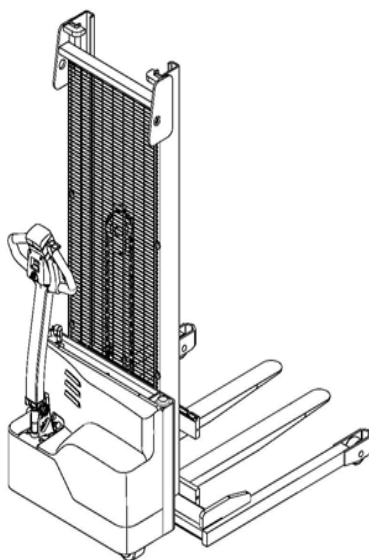


POWERED STRADDLE LIFT TRUCK MODEL 989021

FOR OPERATION SAFETY, please read and understand instructions carefully prior to assembling, installing, operating, or performing maintenance on the product. Be sure to observe all safety information. Failure to comply with instructions could result in personal injury and/or property damage. Retain instructions for future reference.



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 tires, horn, lights, battery, controller, lift system (including forks or attachments, chains, cables and limit switches), brakes, 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 and sound horn at cross aisles and wherever vision is obstructed.

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.

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.

Use special care when operating on ramps - travel slowly, and do not angle or turn. Travel with lifting mechanism downhill.

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, neutralize travel control, 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 Global Industrial truck may weigh more than some cars, depending on the model. Observing and practicing the safety warnings in this manual cannot be over-emphasized. Just knowing the warnings, however, is no substitute for **common sense**. Focusing on the task at hand, 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 26](#) 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

The Global Industrial Straddle trucks utilize the straddle leg configuration, which normally straddles the load.

Control for steering, braking, forward and reverse travel, horn and speed con-

trol are all located on the control handle. All trucks feature an automatic high speed cut-off circuit which locks out high speed when the forks are elevated.

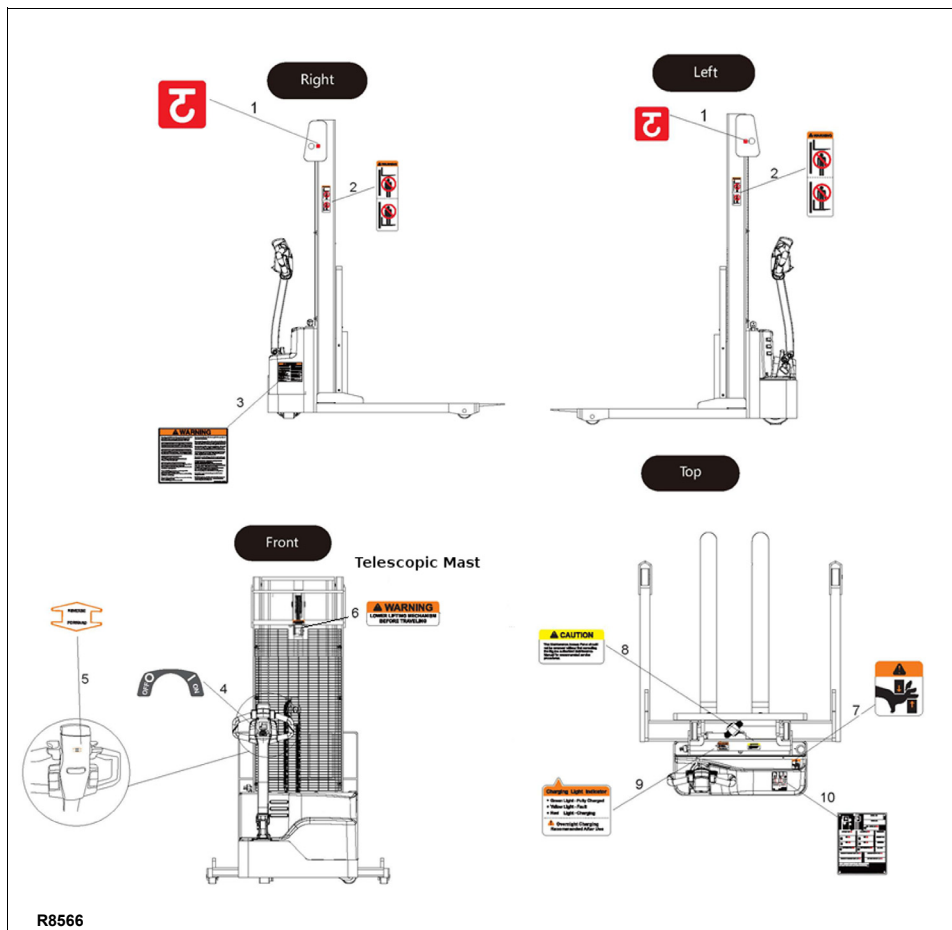
NAME PLATE AND WARNING DECAL

Warning decal locations are near the steering arm within sight of the operator. The name plate is mounted on the trucks rear cover. See illustration on next pages

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

The name plate shows the model number, serial number, and truck type. Battery type, with voltage and minimum weight, is shown along with information on the load capacity and load center.

The warning decal contains warnings which also appear, with illustrations, in the Operation section of this manual.



989021 Name Plate and Warning Decal Locations - Typical

ITEM	DESCRIPTION
1	Hook label (indicating lift spot)
2	Mast warning label
3	Warning label
4	Key switch label
5	Forward and Reverse label
6	Warning label
7	Pinch point label
8	Caution label
9	Charger status indicator label
10	Data 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:



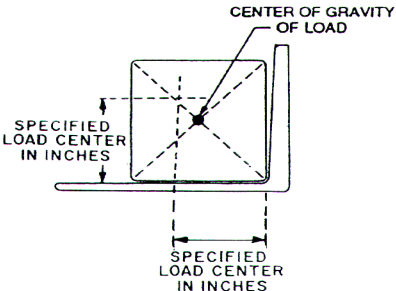
R6115

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

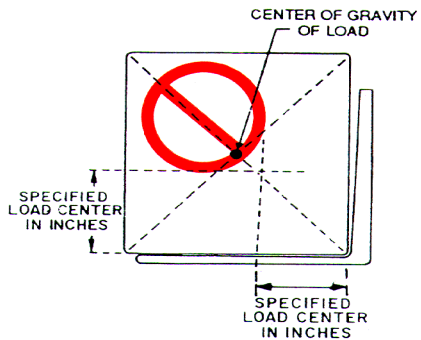
no more than 24 inches from the face of the forks or 24 inches above the top side of the forks. Note that a truck undergoing speed changes is less stable than a standing truck. If you are not sure that the truck can lift a certain load, consult your supervisor or the designated authority.

WITHIN STABILITY LIMITS



R3814

BEYOND STABILITY LIMITS



Load Center

BEFORE OPERATION

The table on [page 9](#) covers important inspection points on trucks which should be checked prior to operation. Depending on use, some trucks may require additional checks.

The illustration on the next page 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 service technician**.



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
Tires		
Load Wheels		
Horn		
Lift—Lower Control		
Attachment Operation		
Forward & Reverse Controls		
Steering		
Electrical Brakes		
Hydraulic Leaks, Cylinders, Valves, Hoses, Etc.		

Sample of Operator Check List

Operator Checks

ITEM	PROCEDURE
Transmission and hydraulic systems	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 and load backrest	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.
Horn	Check that horn sounds when operated.
Steering	Check for binding or looseness in steering arm when steering.
Travel controls	Check that speed controls on control handle operate in all speed ranges in forward and reverse and that belly button switch functions.
Wheels	Check drive wheel for cracks or damage. Move truck to check load wheels and casters for freedom of rotation.
Hydraulic controls	Check operation of lift and lower to their maximum positions.
Brakes	Check that brakes actuate when steering arm is raised to upright position, and when lowered to horizontal position.
Deadman/Parking brake	Check that steering arm raises to upright position when released and brake applies.
Battery disconnect	Check that battery can be disconnected and reconnected. Check for connector damage. Check that the emergency power disconnect is functioning properly.
High speed limit switch	Allow for enough space to operate truck in high speed. Elevate forks approximately two feet, then test drive truck to check if high speed is cut out.

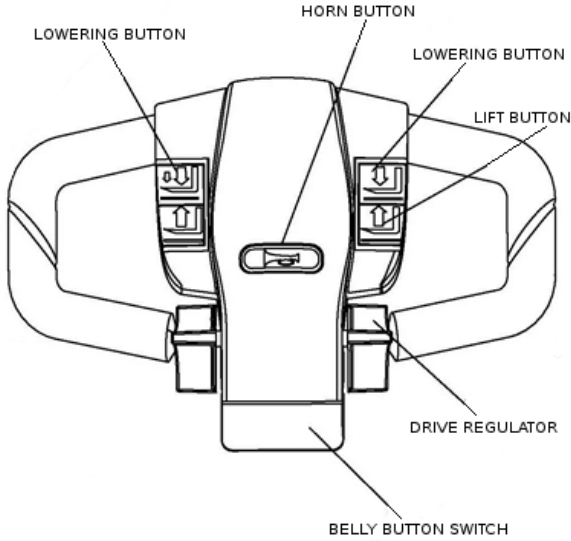
INSTRUMENTS AND CONTROLS

The steering arm and control handle provide controls for steering, forward and reverse speed control, braking, horn, and raising and lowering the forks. Control handles on all models have a “belly button” reversing switch which

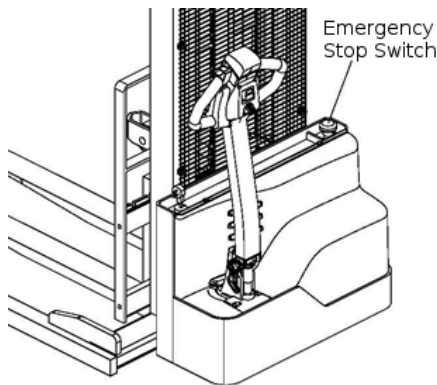
reverses the direction of the truck upon contact with the operator.

Detailed operating instructions are in the Operation section of this manual.

Pushing the red emergency stop switch removes all power from truck circuits in the event of an emergency.



R8567

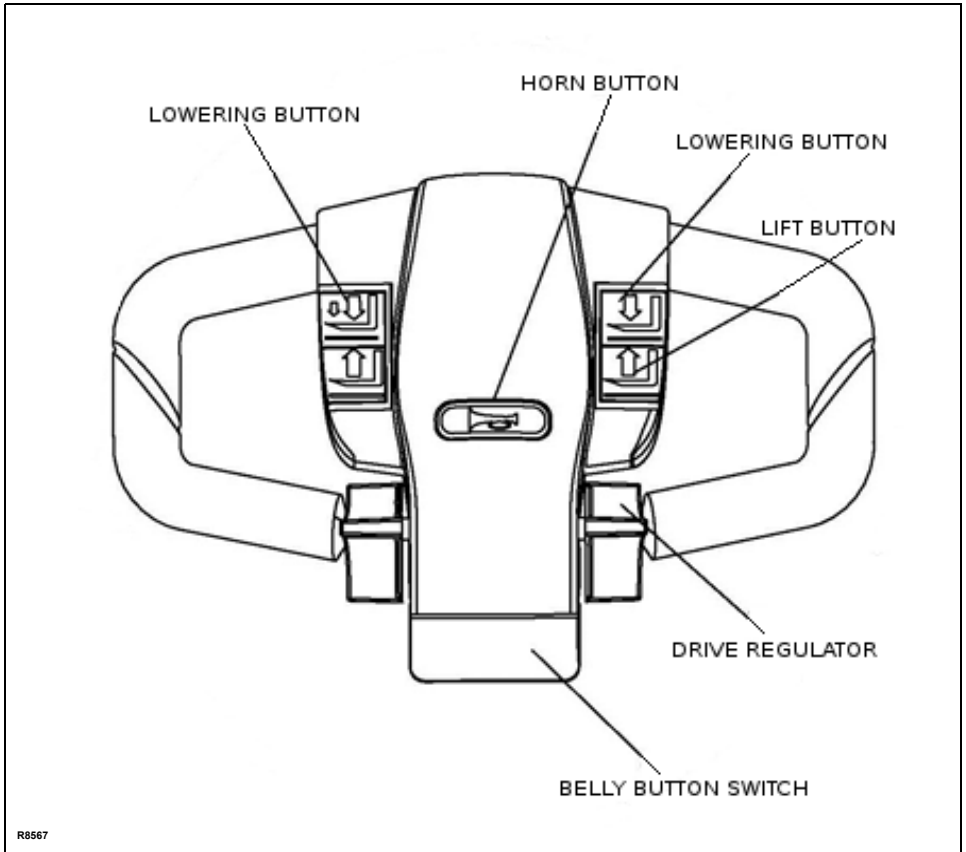


R8568

Controls

OPERATION

Forward and Reverse Travel and Speed Control



Control Handle

All directional and speed controls are located on the control handle.

Forward and reverse are controlled by rotating the speed control lever as shown. The lever is spring loaded to return to neutral when released. Further rotation in either direction will progress the truck from slow to maximum travel speed.

To change directions or to stop the truck, rotate the speed control lever in the opposite direction. The truck will come

to a stop and then, unless the controls are returned to the center neutral position, accelerate in the opposite direction.

Steering

Moving the control handle (which connects to the steering arm) right or left will turn the truck right or left. When maneuvering around corners, make square turns and be sure there is adequate clearance.

Stopping

Stop the truck as gradually as possible. Unnecessary rapid stopping could be hazardous. Load could become unstable.

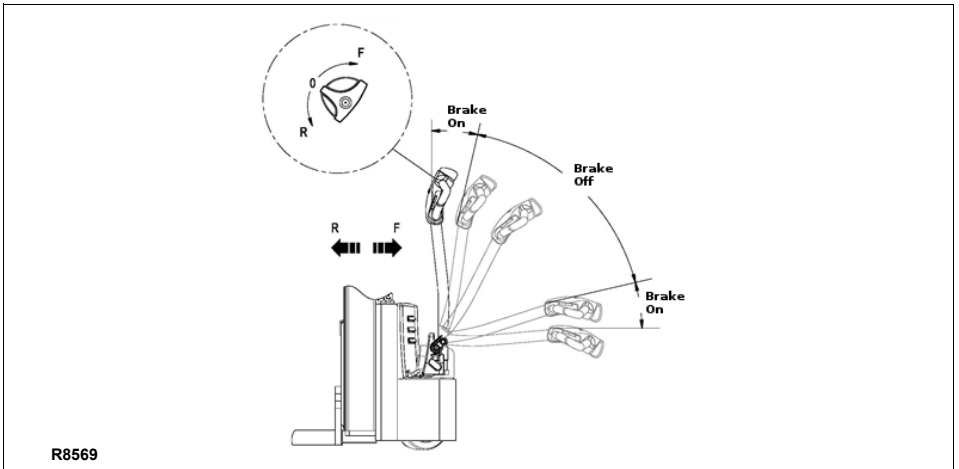
You can use plugging to stop the truck, this electrical braking function consists of rotating the speed control lever in the opposite direction of travel and then releasing it when the truck stops. Plugging is a convenient way to stop the truck during normal operation. If the control is not released, the truck will accelerate in the opposite direction.

You can also stop the trucks movement (forward or reverse) by raising the control handle to the up position or push the control handle all the way down. In

either positions, the travel controls will deactivate and the brake will apply. To release the brake, just move the control handle to the operating position.

NOTE: The steering arm return spring automatically raises the steering arm to the upright position when the steering arm is released.

CAUTION: If the control handle does not raise immediately to the vertical position when released, the truck should be placed "OUT OF SERVICE" until it can be inspected by a qualified repair technician.



Steering Arm Braking Positions

Parking

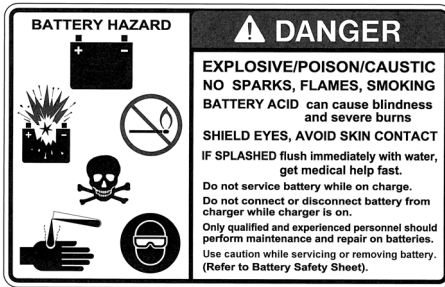
When parking the truck, do not obstruct traffic lanes or aisles.

1. Park the truck in its designated parking area.
2. Raise the steering arm until vertical to apply the parking brake.

3. Fully lower forks and make sure the lift carriage is all the way down.
4. Turn keyswitch to off position. Remove key for added security.
5. Pushing the red emergency stop switch removes all power from truck circuits in the event of an emergency. Do not use as an On/Off switch since it will wear the contactor prematurely.

Battery Charging

Refer to [page 24](#) for battery safety and maintenance.



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

Load Handling



WARNING:

Handle only loads arranged for stability and always use caution. Raise and lower the load smoothly to prevent the load from falling.



WARNING:

Always be sure the load and load center are within the capacity of the truck. If in doubt check the nameplate.

1. Approach the load slowly.
2. Stop the truck when the forks are just in front of the load.
3. Adjust the forks to the maximum practical width to support the load to be lifted. If the truck has rigid forks, position the truck so the forks will give maximum support to the load.
4. Raise or lower the forks until they are properly aligned with the pallet openings.
5. Move the truck slowly into position so that the forks are centered about the load.
6. Make sure the load is against the backrest and then raise the forks until the pallet clears the rack.
7. Move the truck away from the rack until the load clears the rack and then lower the forks.
8. Always operate the truck with the forks in the DOWN position and slightly raised when operating on a grade.
9. Lead the truck by the control handle with the load trailing except when in confined areas. Ramps should always be traveled with operator uphill of truck.
10. Always look in the direction of travel. Move slowly and check clearances when approaching obstructions.
11. Do not make sudden starts and stops. Operate truck smoothly and gradually.
12. Travel slowly and squarely around corners. Remember that the trailing load wheels do not follow the turn path of the drive wheel; instead, they tend to cut the corner.
13. Line up the truck with the unloading area.
14. Stop the truck and raise or lower the forks until the pallet is in position with the unloading area.
15. Check the load alignment with surrounding objects.
16. Be careful not to damage or move adjacent loads and objects.
17. Slowly move into position.
18. Lower the forks until the load is securely settled on its own. Be sure there is no downward force on the forks on the rack or floor.

19. Carefully move the truck away from the load watching to make sure the load doesn't move or shift. If the load does move, return the truck to the load and reset.

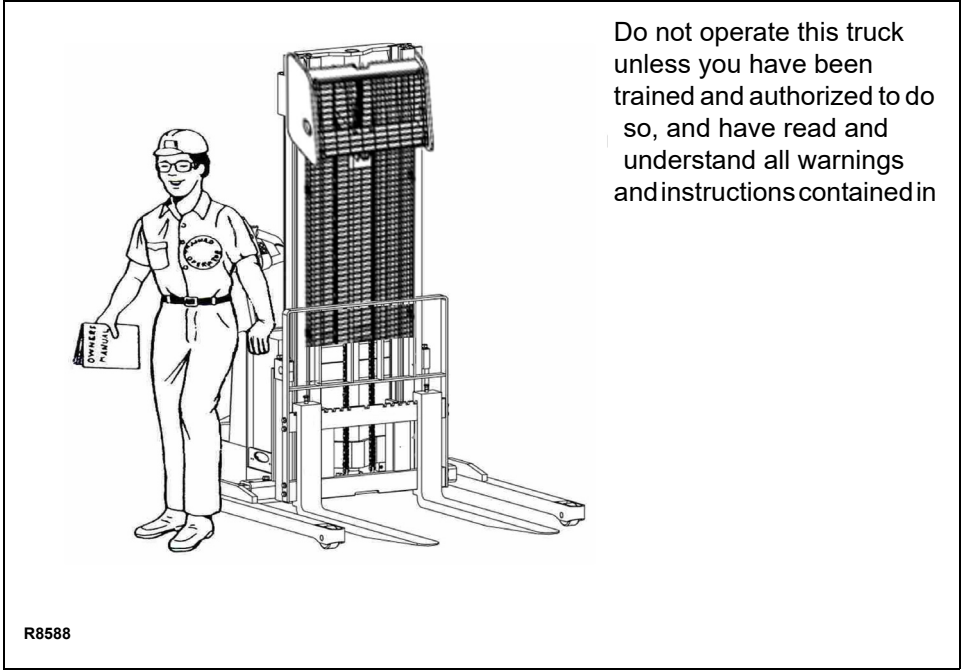
NOTE: Make sure when working in a rack area, that you do not disturb another load while placing yours in the rack. This may cause a dangerous situation for other operators or pedestrians working in this area later.

20. If forks are elevated, lower to travel position.

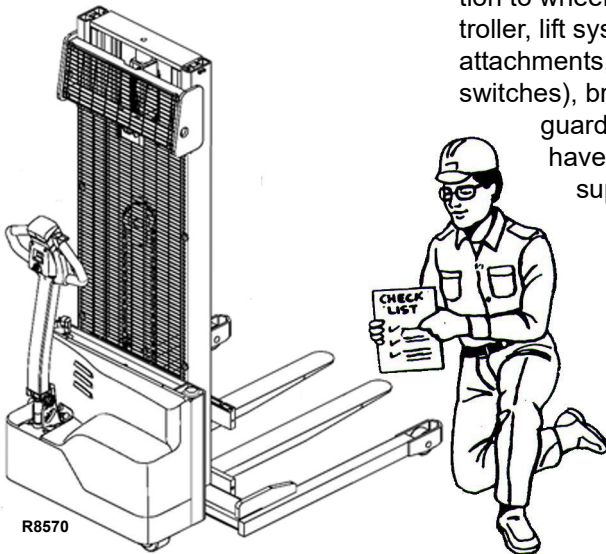
Moving a Disabled Truck

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

The following operating instructions appear on the truck warning decal, which is located near the steering arm.



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

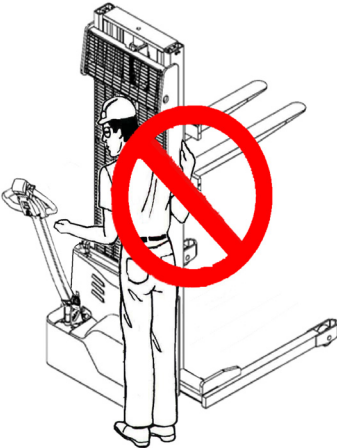


Operate truck only from walking position.



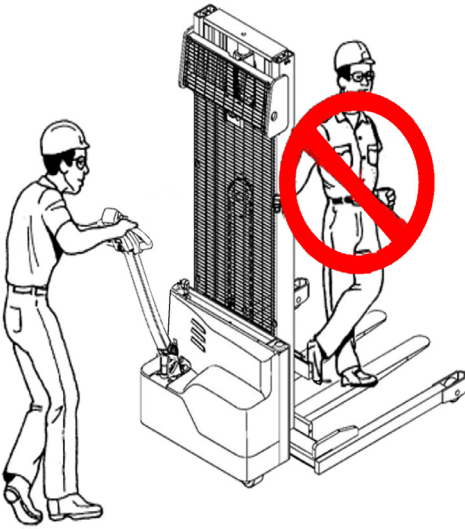
R8571

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



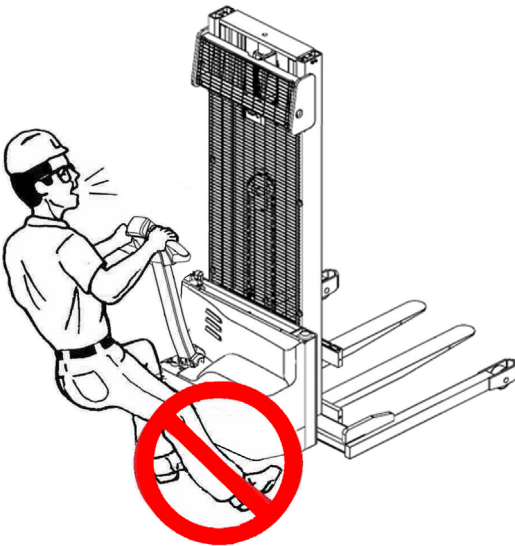
R8572

Do not carry passengers.

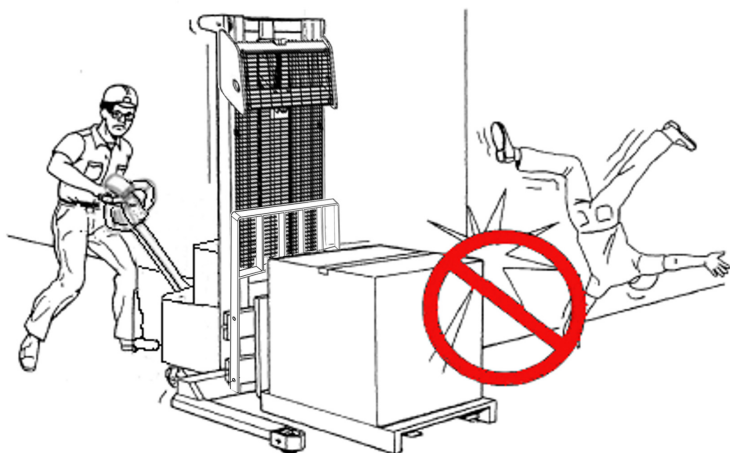


R8573

Keep feet clear of truck and always wear foot protection



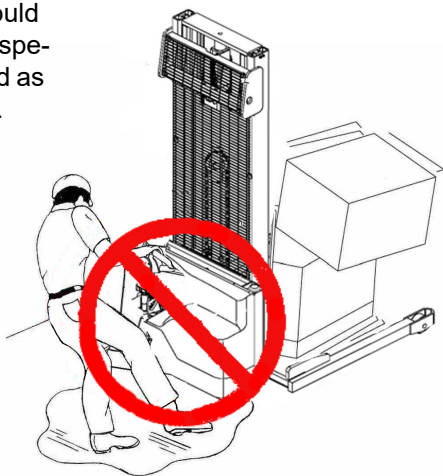
R8577



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

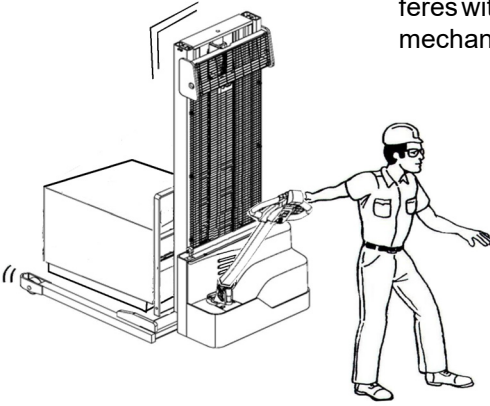
R8574

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.



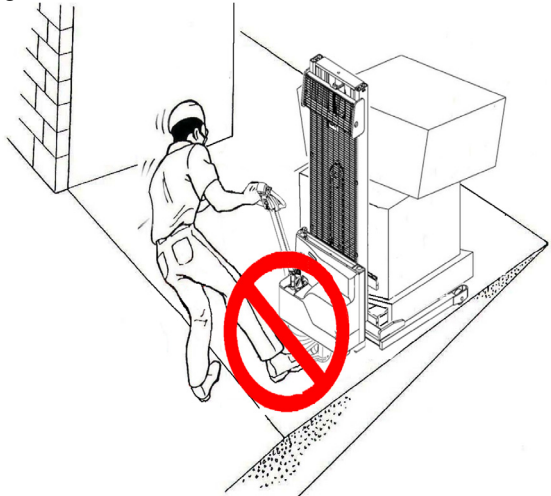
R8576

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.



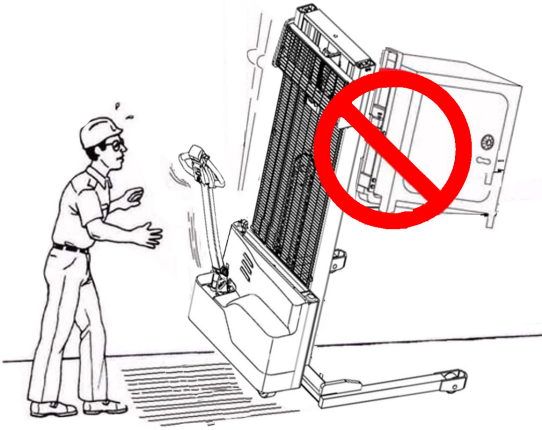
R8578

Use special care when operating on ramps; travel slowly and do not angle or turn. Always travel with lifting mechanism downhill and driver uphill.



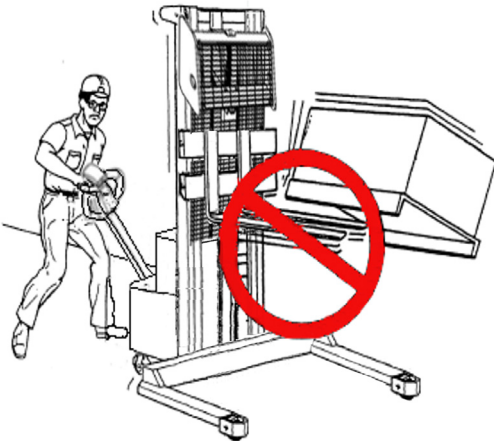
R8579

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



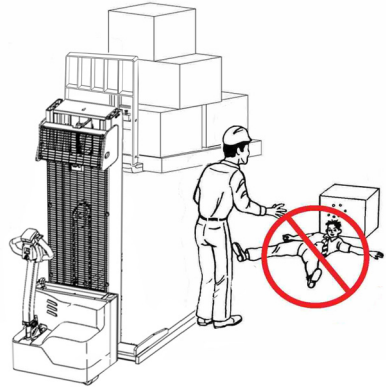
R8580

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.



R8581

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.

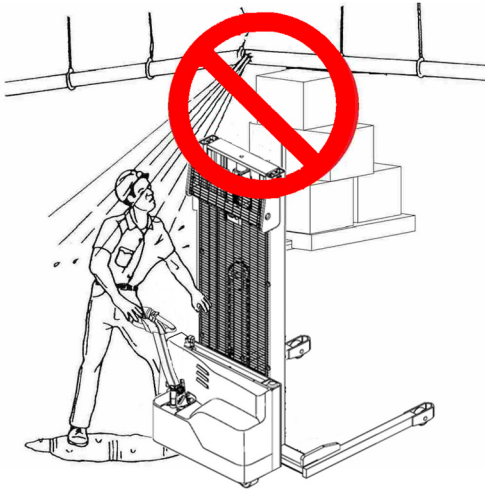


R8582

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.



R8583



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

R8584

Do not lift personnel on forks or work platform 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.



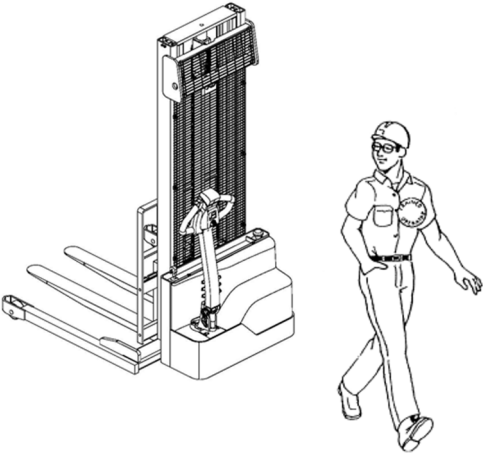
R8585

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



R8586

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



R8587

BATTERY SAFETY AND MAINTENANCE**CAUTION**

Only qualified and experienced personnel should perform maintenance and repair on batteries.

**WARNING**

Gases produced by a battery can be explosive. Do not smoke, use an open flame, create an arc or sparks in the vicinity of the battery. Ventilate area well when servicing and when charging. Batteries contain sulfuric acid which may cause severe burns. Avoid contact with eyes, skin, or clothing.

In case of contact, flush immediately and thoroughly with large amounts of clean water. Remove contaminated clothing. Obtain medical attention. In case of spills, dilute spill cautiously with five to six volumes of water and gradually neutralize with lime, soda ash or baking soda. For waste disposal consult Federal, State and Local Regulations.

BATTERY TYPE

The batteries in your lift truck are considered a maintenance free type. Maintenance free batteries do not have removable vent caps and should never be opened in any way or the battery will be permanently damaged or destroyed.

SAFETY RULES

Wear protective clothing, such as, rubber apron, gloves, boots and goggles when performing any maintenance on batteries. Do not allow electrolyte to come in contact with eyes, skin, clothing, or floor. If electrolyte comes in contact with eyes, or skin flush thoroughly with large amounts of clean water, remove contaminated clothing and obtain medical help immediately.

- Keep vent plugs firmly in place at all times.
- Do not bring any type of flame, spark, etc., near the battery. Gas formed while the battery is charging, is highly explosive. This gas remains in the cells long after charging has stopped.
- Do not lay metallic or conductive objects on battery. Arcing may result.
- Do not allow dirt, cleaning solution, or other foreign material to enter cells. Impurities in electrolyte has a neutralizing effect reducing available charge.
- Observe any battery safety decal or other safety decals that are on your lift truck

BATTERY CARE

The care and maintenance of your battery is very important to obtain maximum efficiency from the battery charge and obtain maximum battery life.

**CAUTION**

Only qualified and experienced personnel should perform maintenance and repair on batteries.

Cleaning (Follow Safety Rules at all Always keep vent plugs in place when cleaning battery. When the batteries are discharged and charged correctly, they should remain clean and dry. All that is necessary is to brush or blow off any dust or dirt which may accumulate on the battery. However, if electrolyte is spilled or overflows from the cell, dilute spill cautiously with five to six volumes of water and gradually neutralize with lime, soda ash or baking soda. To do this, remove battery from truck and clean with the solution of soda and water, brushing the soda

solution to get the solution beneath the connectors and removing grime from the covers. Then rinse the battery with cool water from a low pressure supply to remove the soda and loosened dirt. If batteries stay wet consistently, they may be either overcharged or overfilled. This condition should be investigated by a qualified and experienced maintenance personnel and corrected.



WARNING

Never smoke or bring flames near the battery. Gas formed during charging is highly explosive and can cause serious injury.

Charging requirements will vary depending on use of truck. Monitor the batteries discharge state with the discharge indicator gauge on the truck. Avoid using or storing the truck at full discharge, which shortens battery life. However repeated partial charging will also reduce battery life. Using the truck until 80% discharged and then fully charging the batteries to 100% charged will help ensure maximum output for the life of the batteries.

Follow safety rules when placing a battery on charge. Proceed as follows:

1. Park truck at a charging station with forks lowered and key switch off. Make sure area is well ventilated and not near any open flame or anything that could cause a spark.
2. Check the condition of the AC cord. If there are any cuts in the cable, any exposed wires, loose plugs or connectors, DO NOT attempt to charge the batteries. Contact a supervisor or appropriate personnel for repairs to be made.
3. Connect AC cord to AC power source. The charger will cycle automatically (charges the batteries, depending on amount of charge needed). Fully charged batteries will read accordingly on the truck's battery discharge indicator gauge.

4. Once fully charged disconnect AC plug, wind up or stow (as needed) the AC plug and coiled cable to prevent any damage.

BATTERY REMOVAL

(Follow Safety Rules at all times)



CAUTION

Only qualified and experienced personnel should perform maintenance and repair on batteries.



WARNING

Extreme care must be used when removing a battery from a lift truck. Contact between battery terminals and metal components of the truck or removal equipment can cause a short circuit resulting in a battery explosion.



WARNING

Make certain the same type of batteries are installed in the truck. Also make certain the batteries are of similar weight to the original batteries to ensure comparable performance. See nameplate for minimum and maximum battery weights.



CAUTION

Batteries are very heavy, use caution when lifting.

5. Use a non-conductive battery sling to remove battery.



WARNING

Use of non-insulated hooks or chains may cause a spark or explosion, if those hooks or chains come in contact with the battery terminals or posts.

1. When lifting the battery out, do not allow any metallic object to come in contact with battery cells or posts.
2. When disconnecting battery cables, Use extreme caution to prevent tools from shorting against terminals and from positive and negative cables from coming in contact with each other.

NOTICE - OBTAINING A PARTS AND SERVICE MANUAL

A complete parts and service manual covering this truck is available from Global Industrial.

NOTES

