

# OPERATOR'S MANUAL

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## BG2-72 LOW LEVEL ORDER PICKER



ACTUAL PRODUCT MAY NOT APPEAR EXACTLY AS SHOWN



### WARNING

Do not operate or service this product unless you have read and fully understand the entire contents of this manual. Failure to do so may result in property damage, bodily injury or death.

# **BLUE GIANT**<sup>®</sup>

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# A 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, between the mast and the truck, or outside the Operator's platform. Be sure any operator personal safety systems (guardrails, safety belts, harnesses, lifelines, etc.) are in place, properly worn and connected. Utilize additional protective fall restraint equipment as applicable.

**Observe applicable traffic regulations. Do not carry passengers. 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 and keep a clear view.

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

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

Before lifting, be sure load is centered, forks are completely under load, and load is as far back toward operator's platform as possible.

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 when top of tiered load is more than 120 inches above the ground. Ensure there is proper protection against falling objects from adjacent high stack areas.

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

Do not lift other personnel. Never transport personnel on forks.

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.p65warn.ings.ca.gov](http://www.p65warn.ings.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 Blue Giant 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. Focusing on the task at hand 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 20](#) 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 self-propelled BG2 lifts and transports the operator (on the platform portion of the lift carriage) and the payload (on forks or optional payload platform). This permits efficient selection and moving of materials in any area or at any level of the warehouse or storeroom. The design permits one man to perform all operations of selecting the stock, driving the truck, and replacing the stock at the designated place. The battery-powered truck is quiet and without exhaust fumes, allowing operation in closed areas without special provisions for ventilation.

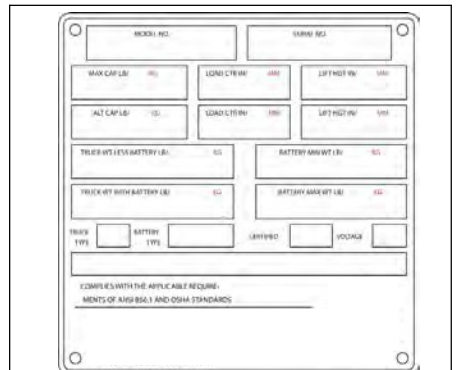
The truck can be driven with the platform raised or lowered; however the speed is restricted above 15".

On demand power steering makes the truck highly maneuverable.

The control arms are used to operate the work truck and provide operator safety.

The operator platform contains the deadman foot switch which must be depressed for the truck to operate.

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

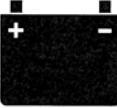







**Name Plate**



**WARNING:**

This truck is equipped with a battery. Read and heed the warning decal located near the battery. An example is shown here:

<p><b>BATTERY HAZARD</b></p>      	<p><b>! DANGER</b></p> <p><b>EXPLOSIVE/POISON/CAUSTIC</b> <b>NO SPARKS, FLAMES, SMOKING</b> <b>BATTERY ACID can cause blindness and severe burns</b> <b>SHIELD EYES, AVOID SKIN CONTACT</b> <b>IF SPLASHED flush immediately with water, get medical help fast.</b></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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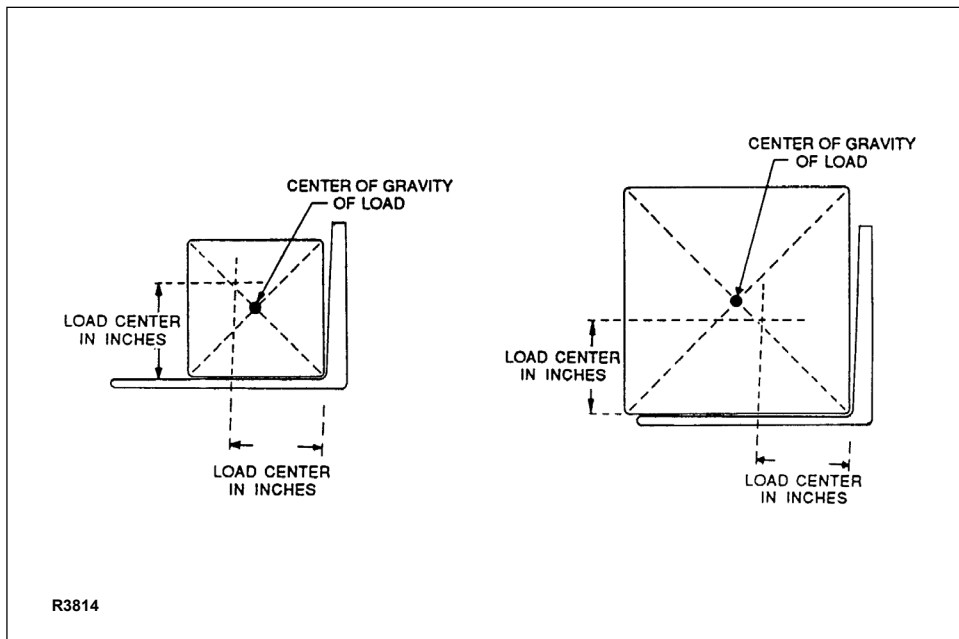
# LOAD CAPACITY

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

The load capacity depends on the load center. The load maximum capacity listed on the capacity plate assumes a uniform load whose center is at 1/2 the length of the fork and centered between the forks. The maximum load capacity is reduced when

the load center exceeds 1/2 the length of the forks or is not centered between the forks. The fork length and wheel base must be adequate for the skid or bin to be handled.

Note that a truck in motion 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.



Load Center

# BEFORE OPERATION

The table on [page 6](#) covers important inspection points on trucks 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 service technician.

Electric Truck Daily Operator Check/DF List			
Date	_____	Operator	_____
Truck No.	_____	Model No.	_____
Dept.	_____	Shift	_____
Reading Date	_____	Next	_____
Check	OK (I)	✓	Test/Remarks
Time			
Load/Weight			
Wheels			
Oil/Lubrication			
Water/Air Control			
Forward/Reverse Controls			
Controls			
Generator/Charger			
Hydraulic Lines/Controls			
Wheels, Hoses, Etc.			

R6235

Sample of Operator Check List

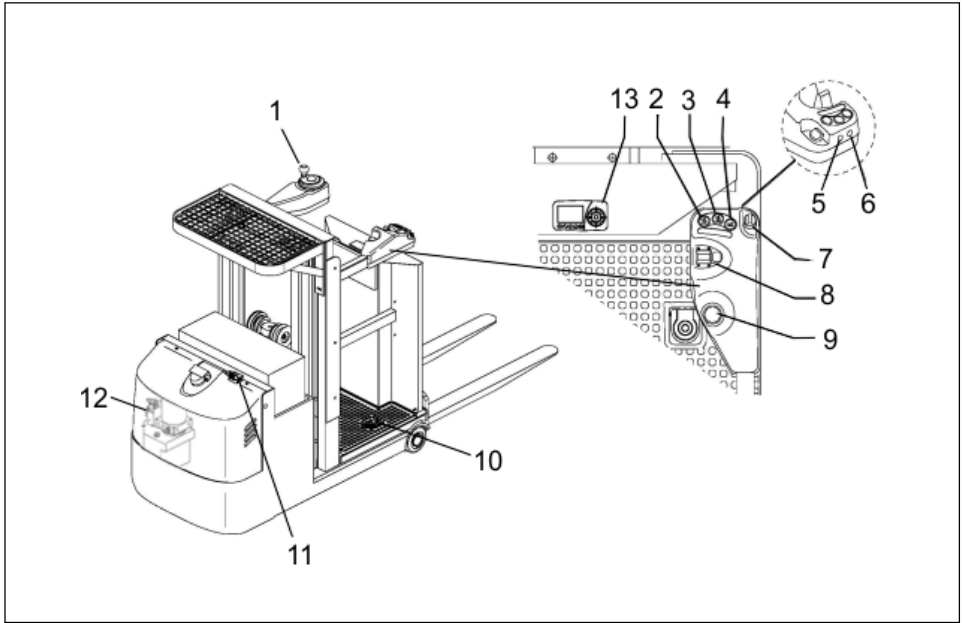
## Operator Checks

ITEM	PROCEDURE
Transmission and hydraulic systems	Check for signs of fluid leakage.
Forks and rear tray	Check for cracks and damage; that they are properly secured.
Chains, cables and hoses	Check that they are in place, secured correctly, functioning properly and free of binding or damage.
Control arms and guard rails	Check that truck operation is disabled when arms and guard rails are raised.
Safety warning label and nameplate	Check that warning labels, nameplate, etc., are in good condition and legible.
Horn and flashing lights	Check that horn sounds when operated and flashing lights are operable.
Steering	Check for binding or looseness when steering.
Travel controls	Check that travel control on right control arm operates in all speed ranges in forward and reverse.
Wheels	Check drive wheel for cracks or damage. Move truck to check load wheel for freedom of rotation.
Hydraulic controls	Check operation of lift and lower to their maximum positions.
Emergency power disconnect switch	Check that brake actuates when emergency power disconnect switch is depressed.
Battery disconnect	Check that battery can be disconnected and reconnected. Check for connector damage.
Speed limit switches	Allow for enough space to operate truck in all speeds. Test drive the truck to check for speed reductions when elevated.
Platform Operation	Check that all controls in the platform operating compartment are operational.



# CONTROLS

Refer to the following illustration for the location of the controls.



## Controls

### STEERING CONTROL (1)

This control is operated in the conventional manner. Drive wheel direction is also indicated on the instrument panel.

### OPERATOR PLATFORM LIFT (2)

To raise the operator platform, push and hold this button until the desired height is reached. Guard rails need to be in the lowered position and deadman footswitch needs to be engaged for travel and lift.

### OPERATOR PLATFORM LOWER (3)

To lower the operator platform, push and hold this button until the desired height is reached. Guard rails need to be in the lowered position and deadman footswitch needs to be engaged for travel and lift.

### HORN BUTTON (4)

Sounds the horn.

### **FORK LOWER BUTTON (5)**

To lower the forks, push and hold this button until the desired height is reached. Guard rails need to be in the lowered position and deadman footswitch needs to be engaged for travel and lift.

### **FORK LIFT BUTTON (6)**

To lift the forks, push and hold this button until the desired height is reached. Guard rails need to be in the lowered position and deadman footswitch needs to be engaged for travel and lift.

### **KEY SWITCH (7)**

The key switch has two positions, ON and OFF. Remove the key to prevent unauthorized use.

### **TRAVEL SWITCH (8)**

This switch controls forward, neutral and reverse travel. Travel direction is also indicated on the instrument panel.

### **EMERGENCY POWER DISCONNECT SWITCH (9)**

Pushing down the emergency power disconnect switch disconnects the main power, deactivates all electrical functions, causing the truck to brake automatically.

### **DEADMAN SWITCH PEDAL (10)**

Operator must stand on this pedal to activate the controls.

### **BATTERY DISCONNECT (11)**

The battery disconnect can be used to cut off all power to the truck. It is also used to connect the batteries to the battery charger.

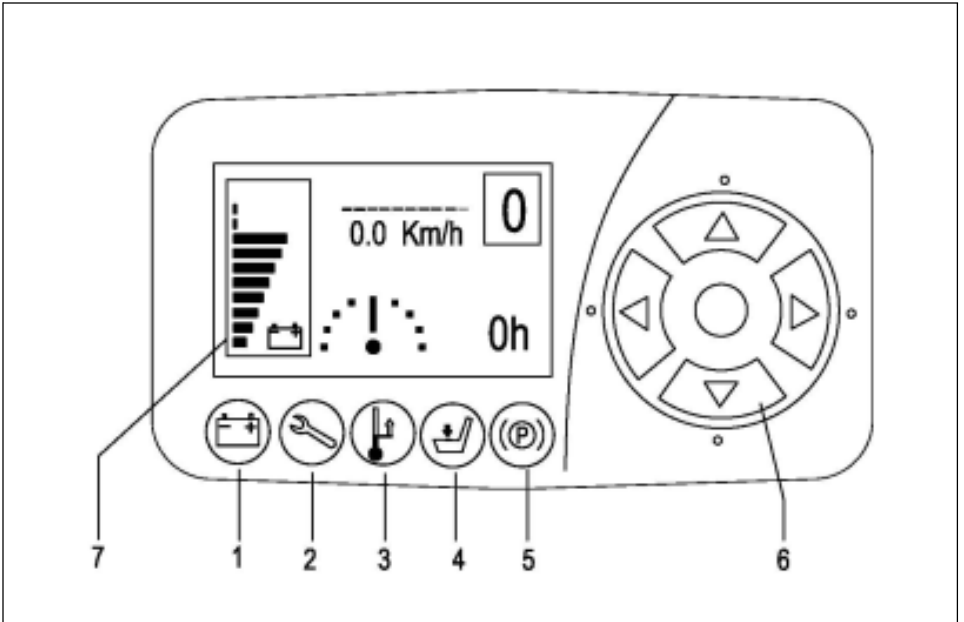
### **EMERGENCY LOWERING BUTTON (12)**

Press this button to lower the platform in case of an emergency.

### **INSTRUMENT PANEL (13)**

The instrument panel contains the following displays and controls:

# INSTRUMENT PANEL



## LOW BATTERY ALARM LED (1)

This LED lights when the measured battery voltage is equal or less than 40% normal battery voltage.

## FAULT ALARM LED (2)

When a fault is detected, this LED will light. The display (7) will display the warning and fault indication. Report alarm to the designated authority and do not use the truck until corrected by a qualified mechanic.

## TEMPERATURE ALARM LED (3)

When the temperature of the motor/controller exceeds allowable range (too high or low), the LED will illuminate. Temporarily stop operation until the temperature drops and notify an authorized technician.

## DEADMAN SWITCH ALARM LED (4)

When the deadman switch pedal is released, this LED will illuminate.

## BRAKE ALARM (5)

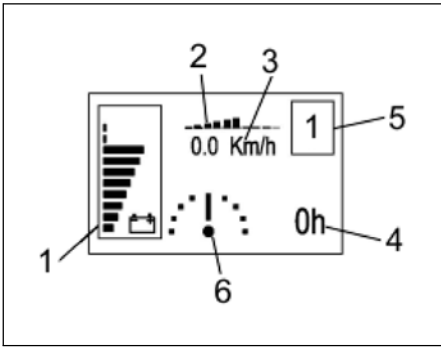
This LED will illuminate when the brake is applied.

## FUNCTIONAL KEYS (6)

Use the left arrow button to adjust the speed mode. Use the down arrow button to switch the driving mode.

## DISPLAY (7)

The display has the following functions:



### Display

**Battery Indicator (1):** The state of charge is displayed by ten notches. Each notch represents 10% of the battery charge. For example, the illustration shows the battery has 80% charge.

**Information Display (2):** Displays the warnings and faults. Report warnings and faults to the designated authority and do not use the truck until corrected by a qualified mechanic.

**Speed Display (3):** Indicates the truck's speed.

**Driving Mode Display (4):** The truck can be operated in two driving modes, high speed or crawl speed.

**High Speed**



**Creep Speed**

**Speed Mode Display (5):** There are four speed ranges available in both high speed driving mode and the creep speed driving mode. Use the "left function key to select the desired mode. "1" indicates the slowest speed while "4" indicates the highest speed.

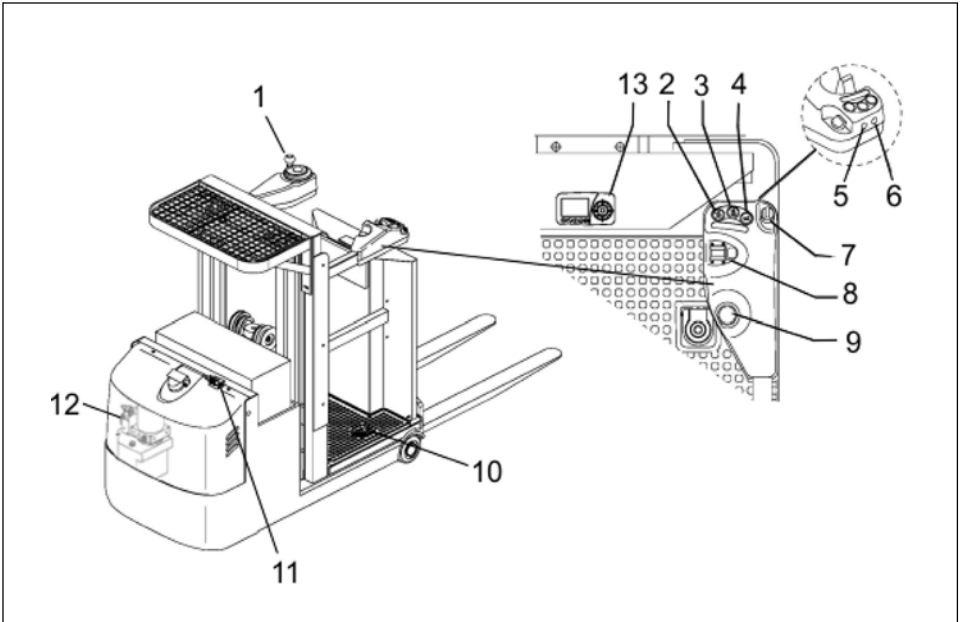


**CAUTION:**

When the platform rises the truck automatically enters crawl speed.

**Steering Display (6):** One of nine notches will indicate the steering angle of the drive wheel.

# OPERATION



## Operation

### DRIVING PROCEDURES.

The truck can be driven with the platform raised or lowered; however, the speed is restricted when the platform is raised above a preset limit of 15".



#### WARNING:

Do not leave the platform while the operator platform is elevated. Do not lean out from the outside of a cage rail. Climbing on the guard rails and/or forks is strictly prohibited and can lead to severe injury or death.



#### WARNING:

Only one person is permitted in the operator's compartment at all times.

Proceed as follows to start and stop the truck.

1. Step on the operator platform with your back against the back rest.
2. Lower the control arms and guard rails.
3. Turn on the keyswitch (7) and pull up on the emergency power disconnect switch (9).

4. Step on the deadman footswitch (10) to activate the electrical controls.
5. Select the speed mode using the “left” function key on the instrument panel (13).
6. Using the steering control (1) to steer the truck in the required direction. Drive wheel directions is indicated on the instrument panel.
7. Using your right hand, move the travel switch (8) to the desired direction.

**NOTE:** The truck direction may be reversed while moving. The control will cycle the motor to stop and then reverse in a timed sequence without danger to the equipment. Exercise caution when doing so, especially when traveling at maximum speed.

**Emergency Braking:** To stop rapidly when an emergency exists, press the emergency power disconnect switch (9).



**WARNING:**

The truck is equipped with a level sensor. When the truck is elevated and on a slope greater than 0.5 degrees, the level sensor sounds an alarm beeper. The truck is only to be used indoors on a level surface. This truck is not for use on mezzanines or balcony areas.

**STOPPING PROCEDURES.**

The brake pattern of the truck depends largely on the ground conditions. The driver must take this into account when operating the truck. The driver must be looking ahead when traveling. If there is no hazard, brake moderately to avoid moving the load.

The truck can brake in three different ways:

**Coasting Brake:** release the deadman switch pedal (10) and allow the truck to coast to a stop.

**Plugging:** To stop faster, slowly move the travel switch (8) to the opposite direction.



**WARNING:**

Except in an emergency, do not stop suddenly.

**PICKING UP A LOAD.**

The operator platform lift is used to raise the platform to desired height for picking the load. The fork lift is used to adjust the load height to a comfortable operator height.

1. Drive the truck carefully up to the storage location.
2. Press and hold lift button (2) until the platform reaches the desired height.
3. Adjust the forks to a comfortable operator height using fork buttons (5 and 6).
4. Move the load from storage location to the forks or rear tray.
5. Press and hold lower button (3) until the platform is completely lowered.

**TRANSPORTING LOADS.**

1. Always transport load with the platform completely lowered.

2. Always transport loads on the forks or the rear tray.
3. Always be prepared to brake. Only stop suddenly in emergency situations.
4. Reduce speed in tight areas.

### **PLACING LOADS.**

1. Drive the truck carefully to the storage location.
2. Press and hold lift button (2) until the platform reaches the desired height.
3. Press and hold lift button (6) to raise the load to a comfortable operator height.



#### **WARNING:**

Ensure storage location is suitable for storing the load (size and capacity).

4. Move the load from the forks or rear tray to the storage location.
5. Press and hold lower button (3) until the platform is completely lowered.

### **OVERHEAD MAINTENANCE.**

When performing overhead maintenance, please ensure there are no obstacles, beams or other obstructions

before elevating lift. Always fully lower the platform before moving to the next maintenance position. Ensure a safe workenvironment before proceeding with maintenance and never operate the truck outside.

### **PARKING.**

When leaving the truck, it must be securely parked even for a short time.

1. Park the truck in its designated parking area.



#### **WARNING:**

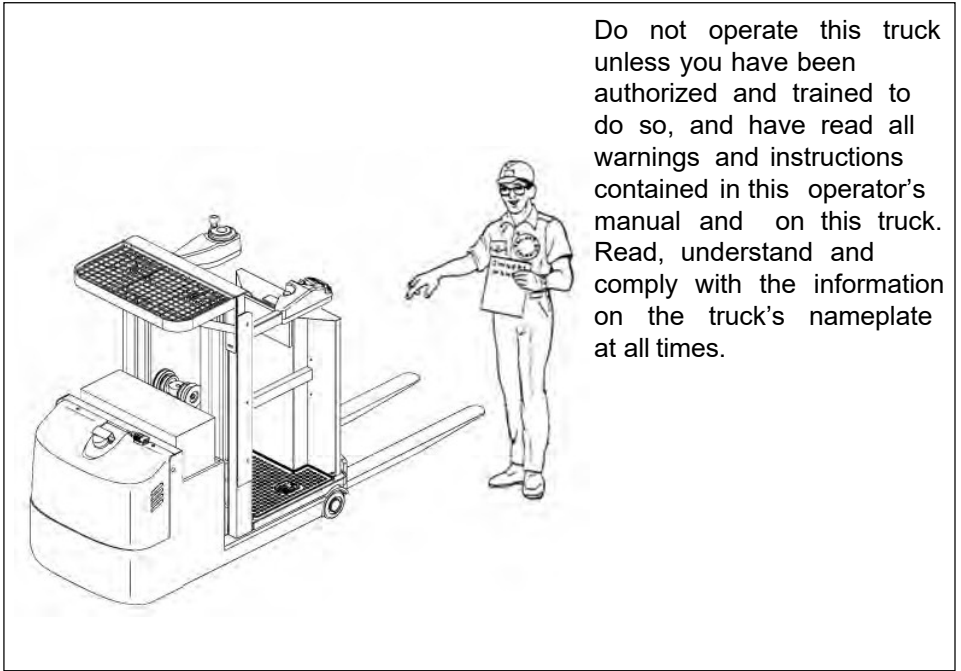
Do not park the truck on a slope. The forks and platform must be completely lowered.

2. Lower the forks and platform completely.
3. Set the emergency power disconnect switch (9) to apply the brake.
4. Turn keyswitch (7) to off position. Remove the key for added security.
5. Pull out battery disconnect (11).

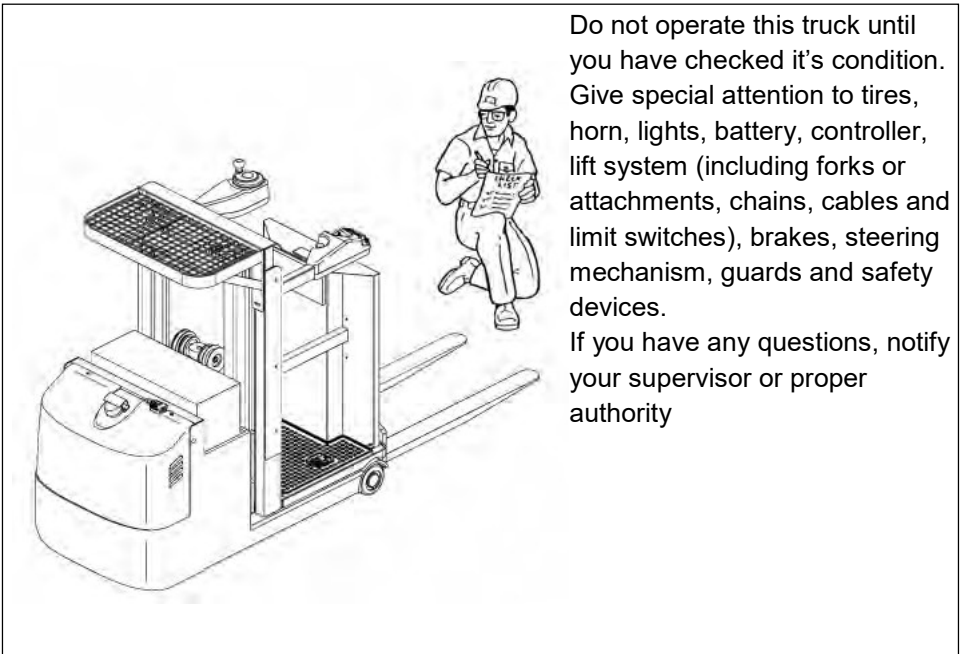
### **MOVING A DISABLED TRUCK**

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 on the operator platform.



Do not operate this truck unless you have been authorized and trained to do so, and have read all warnings and instructions contained in this operator's manual and on this truck. Read, understand and comply with the information on the truck's nameplate at all times.

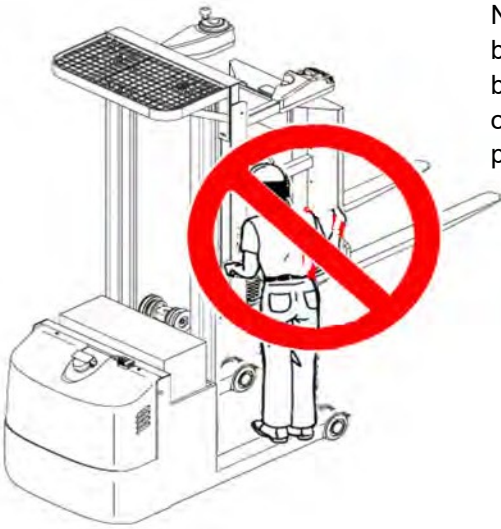


Do not operate this truck until you have checked it's condition. Give special attention to tires, horn, lights, battery, controller, lift system (including forks or attachments, chains, cables and limit switches), brakes, steering mechanism, guards and safety devices.

If you have any questions, notify your supervisor or proper authority



Operate truck only from designated operating position. Never place any part of your body into the mast structure, between the mast and the truck, or outside the Operator's platform.



Observe applicable traffic regulations. Do not carry passengers. Yield right of way to pedestrians. slow down and sound horn at cross aisles and wherever vision is obstructed.



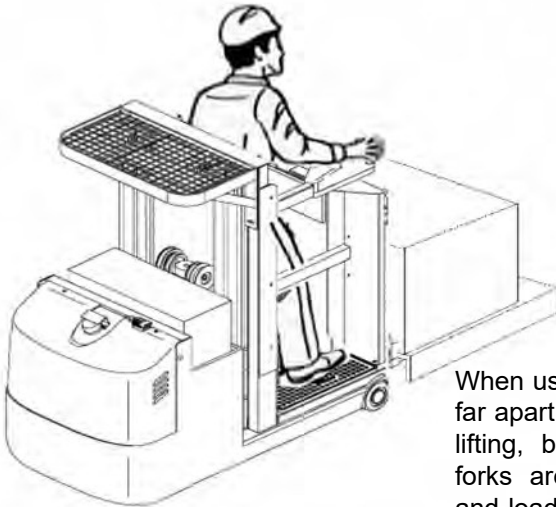
Travel with lifting mechanism as low as possible. Always look in direction of travel & keep a clear view.



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 transferring loads to platform or platform shelf, do not exceed capacity ratings on truck nameplate. Ensure loads are centered and do not contact any obstructions in the trucks vicinity.



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



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 allow any one 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 disconnect the battery.

## **NOTICE - OBTAINING A PARTS AND SERVICE MANUAL**

A complete parts and service manual covering this truck is available from Blue Giant. To order, obtain the serial number of your truck and contact your Blue Giant Authorized Dealer.



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