

***BLUE GIANT***®

**Walkie Lift Truck**



**BGL Series**

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**OWNER'S MANUAL**

**IMPORTANT:** Read and understand the contents of this manual before operating the equipment.

### Receipt Inspection

This equipment was thoroughly inspected and tested prior to leaving the factory. Before placing the equipment in service it should be thoroughly checked for damage or loss occurring in transit. If any such damage or loss is evident, a claim must be made against the carrier.

*Refer to: Damage in Transit information enclosed with the packing slip.*

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## **Safety Information**

- Do not operate this truck unless you have been trained and authorized to do so.
- Do not operate this truck until you have checked its operation and condition. Give special attention to tires, battery, controls, lifting systems including switches, brakes, steering mechanism, guards and safety devices.
- Report the need for truck repairs to your supervisor immediately and do not operate truck until repairs are made. Neglect may cause a minor repair to become a major service problem and cause the truck to become unsafe.
- Do not exceed the rated capacity of the vehicle as marked on the nameplate.
- Do not lift with the fork tips or one fork only.
- This equipment is designed for evenly centered loads with forks completely supporting the load. Off centering of loads can result in a dangerous operating condition and may cause damage or injury.
- Always look in direction of travel. Use caution when load interferes with visibility.
- Extreme caution must be used when handling or transporting loosely stacked/packaged loads.
- Watch swing clearance when turning near walls, racks, pillars or other obstacles.
- Start, stop, change direction, travel and brake smoothly. Slow down for turns and on uneven or slippery surfaces that could cause truck to slide or tip. Be aware that the truck behaves differently without a load than with a load.
- Know and understand gradient capabilities of this vehicle. Maximum recommended gradient under load not to exceed 5%. Straddle type equipment is designed for level surface only.
- Observe applicable traffic regulations. Yield right of way to pedestrians. Slow down and sound horn at all aisle intersections and where vision is obstructed.
- Do not ride on this equipment unless it has been equipped and designated for such use.
- Do not allow personnel to stand under the forks (loaded or unloaded) when forks are in the raised position.
- Do not carry passengers or lift personnel.
- Before you leave the truck, fully lower lifting mechanism and shut off power and key switch if equipped.
- Do not use forward mast tilt with the load elevated unless the load is directly over other support.
- When traveling with or without a load, forks should be in lower most position and tilted back if applicable.
- For straddle trucks, straddle distance must be equally spaced in relation to truck chassis. Straddle inside dimension must be set at a minimum of 25% of maximum lifting height. Straddle legs adjustment should be done by authorized blue giant representatives.

**REMEMBER: A safe operator is a smart operator!**

## Pre-Operation Instructions

- Remove any packing material and check for visible damage.
- Open the drive unit cover and check the wiring harness and hydraulic hoses for damage or loose connections. Remove the breather and check that the oil reservoir is filled to approximately 1" from the top (forks must be in lowered position).
- Open the battery compartment and check that all connections are tight. Check that the battery or cables have not been damaged. The battery should be fully charged before the vehicle is placed into service. Refer to Battery and Charger Instructions.
- Refer to Safety and Operating Instructions and check that the truck operates satisfactorily.
- Complete the Warranty Validation form included in this manual and return it to Blue Giant. Warranty may be void if warranty validation form is not completed and returned to Blue Giant.

## Operating Instructions

**Travel Controls:** Rotating the twist grip in the head of the control handle controls Direction and speed. This unit is equipped with a fully programmable electronic speed control and has variable speed that is regulated by turning the twist grip handle in the forward or reverse direction as required. With the electronic speed controller travel controls (reversing travel direction) may be used for braking purposes during regular use.

**Brake:** The brake is applied when the control handle is in the fully raised or fully lowered position. Power to the traction (drive) motor is cut off whenever the brake is applied in the fully raised or lowered position. Equipment includes "Deadman" safety feature. Spring loaded steering handle, when released automatically returns to upright/"Deadman" position that engages the brake and will slow the unit down to a full stop.

**Horn:** The horn pushbutton is located on the steering handle allowing instantaneous fingertip use without travel interruption.

**Safety Reversing Button:** Located at the top of the steering handle. When the truck is being driven in the direction of the operator and the safety-reversing button is depressed by an obstruction or trapped operator the vehicle instantly reverses direction, in high speed and the horn will energize.

**NOTE: DO NOT USE SAFETY REVERSING BUTTON FOR NORMAL TRAVEL.**

### Lift and Lower Controls:

Manual lever control (standard) is located on the right hand side of the dash plate. Pushbutton control, if ordered, is located on the top of the control handle.



**CAUTION**

**NEVER EXCEED THE RATED CAPACITY OF THE TRUCK AS MARKED ON THE NAMEPLATE. DO NOT LIFT WITH THE FORK TIPS OR ONE FORK ONLY**

### Mast Tilt Controls:

Manual lever control is located on the right handle side of the dash plate. Pushbutton control, if ordered, is located on the top of the control handle.



**CAUTION**

**DO NOT USE FORWARD TILT WITH THE LOAD ELEVATED UNLESS THE LOAD IS DIRECTLY OVER OTHER SUPPORT.**

## **Electronic Speed Controller Operation and Maintenance**

These units are factory set for normal operating conditions. This electronic speed controller provides maintenance free operation and reduces downtime and operating costs associated with contactor Controlled units.

Contact your Blue Giant representative for additional information.

### **Features:**

Arcless contactor switching extends direction contact tip life

Provides service diagnostic information with the use of the hand held programmer to quickly provide service information and history

Provides the ability to use plug braking (reversing travel direction) for smooth normal braking

During reduced speed operation the controller acts like a transformer and eliminates wasted battery energy. The result is a dramatic improvement in vehicle efficiency and increasing the operational time between battery charging

The Blue Giant servicing representative can do programming performance changes if required to suit the operational conditions. Some of the various programming adjustments available are High, Low or Creep speeds, Low speed, Acceleration rate or Top speed

### **Operation:**

The controllers are designed to automatically protect against damage caused by use of discharged batteries. When batteries are discharged the controller will cut back power to the motor when the battery voltage drops below 16 volts for a 24 volt unit. A slight loss of power will be felt which is normal and if this occurs the unit should be returned for battery charging. The controller will return to normal operation when the battery is fully recharged

### **Maintenance:**

The electronic speed controller is a sealed solid state unit that normally requires no adjustments and almost no maintenance. As with any electrical or electronic device, tight connections and ensuring that connections are free of corrosion will ensure trouble free operation. Therefore we recommend that the following be inspected and performed every three months for normal applications, or monthly in a high moisture or corrosive type of application. Make sure that all electrical connections at the controller, motor and batteries are tight. When checking the controller bus bar connections be sure to use the double wrench technique to avoid applying stress on the bus bars or cracking the bus bar seal.

Ensure that the connections on the controller are kept clean and free of any moisture or corrosion as their presence may lead to electrical leakage and faulty operation. The controller connections should be cleaned with a damp rag or suitable electrical contact cleaner. A thin coating of white lithium grease (non-conductive) lubricant may be applied to the terminals to reduce further oxidation

## Preventive Maintenance

Spotting trouble before it happens can prevent costly down-time and extensive repairs and make it possible for service and repairs to be performed when the unit is not required for regular operations. Inspection intervals outlined are for normal single shift use and conditions. More frequent inspections are necessary for adverse conditions such as: rough floor conditions, temperature extremes, several operators, multi shift use, dusty atmosphere, etc.

### Inspection Intervals

<b><u>Daily:</u></b>	All Operating Controls (SAFETY) Battery Charge Brake Operation	<b><u>Quarterly:</u></b>	Electrical System Hydraulic System Drive Unit & Mechanical Parts
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### CAUTION

**DISCONNECT THE BATTERY AND DEPRESS HORN SWITCH TO DRAIN CONTROLLER RESIDUAL CURRENT BEFORE ATTEMPTING ANY TYPE OF INSPECTION OR SERVICE**

### Lubrication

(based on single shift, normal usage)  
Refer also to Body Assembly/Lubrication Points Diagram.

### Every Month:

Apply engine oil (SAE 10) to all points as shown on lubrication chart and lubricate drive unit swivel bearings with extreme pressure or multi-purpose grease.

### Hydraulic System:

To check oil level remove breather cap. Proper oil level is approximately 1" below the top of the reservoir with forks in the fully lowered position. Add approved oil if necessary through reservoir hole. Before you assemble, the breather cap should be wiped or cleaned with a suitable cleaning solvent.

- For hydraulic oil change remove reservoir or drain plug if equipped, discard used oil and clean reservoir. Clean and inspect strainer and replace if damaged. Reinstall and add oil until oil is level with bottom of filler hole. Use only Blue Giant approved hydraulic oil as indicated in the approved oil chart.
- Hydraulic system and surrounding area should be kept clean and free of debris. Leaking or damaged hoses and fittings must be repaired or replaced immediately for safe operation and to prevent loss of oil and possible serious damage to hydraulic pump.
- The hydraulic cylinders should be inspected and seals replaced if excessive oil leaks are found.

**Note:** Some seepage past seals resulting in minor leakage during operation is normal. External oil being evident does not necessarily require cylinder repair until the leakage is at a point that normal operation is adversely affected.

**Hydraulic Oil Change:** 500 hours or three months after the equipment is placed in service and every 2000 hours or a minimum of once a year thereafter.

## Battery Maintenance

### Charging:

The battery should be charged on a daily basis as required. Loosen vent caps but do not remove them during charging. Multiple shift use will require additional batteries for battery exchange to facilitate proper charging procedures.

**NOTE:** Do not allow the battery to become discharged below a specific gravity of 1.150 or there will be a permanent loss of capacity.

**CHARGER OPERATION:** These units are equipped with a fully automatic type charger. To connect charger for operation disconnect the battery SB connector from the machine. Ensure that the charger AC input power is on and plug the charger SB connector to the battery SB connector. Charging will begin automatically and stop when the battery is fully charged, which is approximately 8-12 hours for normal single shift use.



### **CAUTION**

**Ensure that charger SB connector is not plugged into the chassis SB connector or charger and unit electrical damage will result.**

### Records:

A daily record should be kept showing hydrometer readings of pilot cell at start and at end of charge. Change to a different pilot cell monthly.. Once a week record the hydrometer readings of all cells.

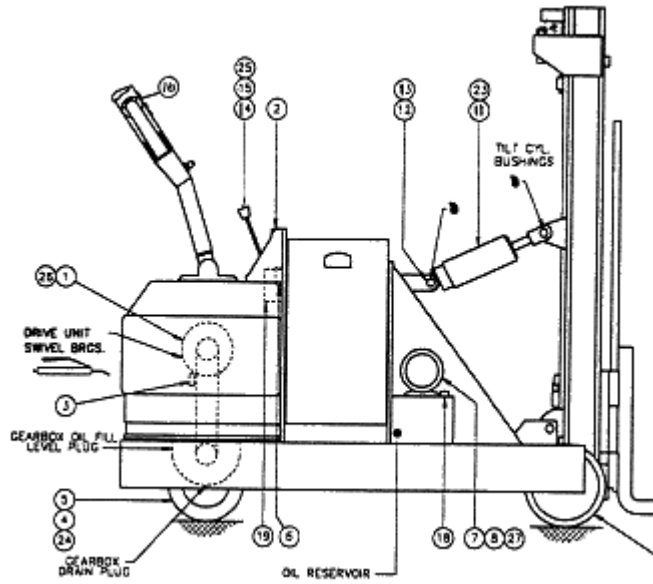
### Electrolyte Level:

Distilled water only should be added to each cell as often as necessary, normally after charging, to keep the electrolyte to the bottom of the vent well. If the electrolyte level is below the cell plates then water should be added to the top of the cell plates before the charging cycle begins, and topped up after completion of charge. Do not over fill. Normally water is required no more than once a week. Excessive water use in all or a single cell may indicate over-charging, high charging rates, or a weak or defective battery.

### General:

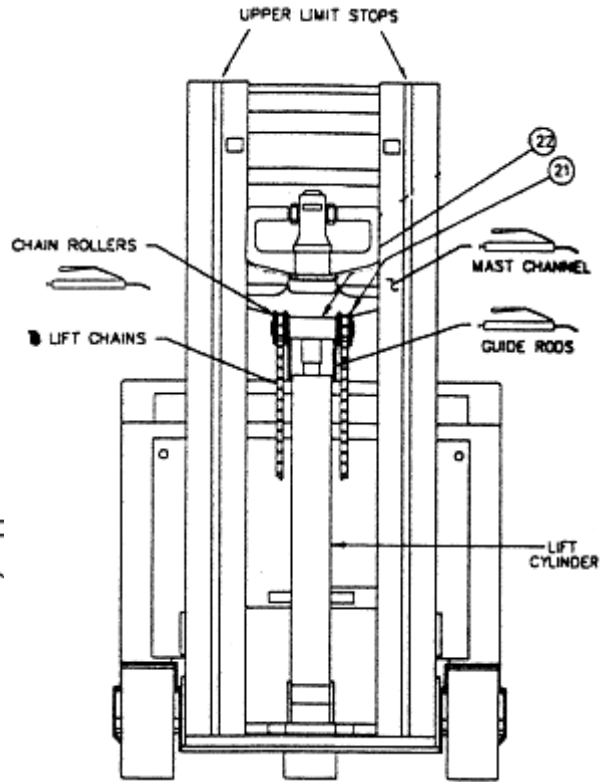
The top of the battery should be kept clean and dry. Wash off with clear hot water and baking soda when necessary. Ensure that proper safety protection (eye and hand protection) is used before performing any type of battery service. For safety reasons good ventilation is required during charging. Do not allow electrolyte temperature to exceed 110°F (43°C). Keep open flames away from battery. Never add acid to cells. Batteries used at temperatures below or above normal room temperature will have reduced capacity and will require additional charging and or battery exchange.

**Body Assembly Parts Illustration**



SIDE COVER REMOVED FOR CLARITY

**Lubrication Points**



POWER PACK ASSEMBLY AND TILT CYLINDER ASSEMBLY REMOVED FOR CLARITY

LUBRICATION INDEX		
SYMBOL	DEFINITION	TYPE OF LUBRICATION
	GREASE	Mp (Multi-Purpose) or EP (Extreme Pressure)
	OIL	SAE 10/10W30

MODEL	ITEM #21	PART NO	ITEM #22	PART NO
2-3000 Lbs	Chain Rollers	781-318	Cylinder Crosshead	783-906
4000 Lbs	Chain Rollers	792-306	Cylinder Crosshead	783-907

LIFT CYLINDER SEAL KITS (Single Cylinder Only)		
CYL. DIA	RAM DIA	COMPLETE SEAL KIT
2-1/2"	2"	783-550
3"	3"	783-553
3-1/2"	3"	780-843

ITEM	QTY	PART NO	DESCRIPTION	ITEM	QTY	PART NO	DESCRIPTION
1	1	907-0022	Drive Motor 24 Volt	14	1	907-0290	Tilt Lever
2	1	030-082	S.B. Connector (Red)	15	1	907-0290	Raise / Lower Lever
3	1	025-535	Deadman Switch	16	1	907-0105	Handle
4	1	020-077	Drive Tire Only	18	1	035-278	Hydraulic Breather
5	1	780-194	Drive Tire Assy c/w Hub	19	1	907-5057	Valve Bank
6	1	025-841	Pump Contactor 24 Volt	21	2	SEE CHART	Chain Rollers
7	1	030-782	Pump Motor 24 Volt	22	1	SEE CHART	Cylinder Crosshead
8	1	033-107	Pump	23	**	785-048-1	Tilt Cylinder Seal Kit
9	2	020-057	Load Wheel c/w Hub	24	1	110-433	Wheel Hub
10	8	018-501	Load Wheel Bearings				
11	*	785-048	Tilt Cylinder Assy	26	1	030-885	Drive Motor Brush Set
12	*	103-916	Tilt Cylinder Pin	27	1	030-812-1	Pump Motor Brush Set
13	*	018-000	Tilt Cylinder Pin Bushings				

\* NUMBER OF TILT CYLINDERS DEPENDS ON UNIT CAPACITY OF MAST TYPE  
 \*\* NUMBER OF SEAL KITS DEPENDING ON NUMBER OF CYLINDERS  
 \*\*\* FOR EE RATED VERSION PARTS SEE APPENDIX A – PAGE 11

**Drive Unit and Brake**



**CAUTION**

**BEFORE INSPECTING ANY PART OF THE DRIVE ASSEMBLY DISCONNECT MAIN BATTERY POWER AND DEPRESS HORN SWITCH TO DRAIN RESIDUAL CONTROLLER CURRENT**

- The traction motor has sealed bearings and requires no external lubrication
- Check the condition of the drive belt and adjust the tension if necessary. The belt is correctly tensioned when a 10 lb. force applied midway between the two sprockets causes a deflection of 3/16". Check belt for unusual wear which may indicate incorrect pulley alignment. Never use force or pry when installing a new replacement belt. To install a new belt reduce tension, install belt, readjust tension to achieve deflection indicated. Rotate the belt manually by hand for several revolutions and recheck tension after all fasteners have been tightened. Normally this belt should not require further tensioning but should be re-inspected after several shifts of operation. Over-tensioning a belt will cause excessive noise, reduce belt life and impose higher bearing loads in drive components.
- Change the oil in the gear reduction box 500 hours or three months after the equipment is placed in service and every 2000 hours or one year thereafter. Approved gearbox oils are listed on chart below.
- Check the brake for safe operation. Make sure the power cut off switch is open and disconnects the drive when the brakes are applied in both the up and down position. This unit is equipped with an internal multi-disc braking system that has no user adjustable parts. Qualified service personnel must perform brake adjustments only.

<b>BLUE GIANT APPROVED OILS FOR NORMAL AMBIENT OPERATING CONDITIONS</b>			
<b>APPROVED GEAR BOX OILS</b>		<b>APPROVED HYDRAULIC OILS</b>	
<b>Canadian</b>	<b>American</b>	<b>Canadian</b>	<b>American</b>
Esso Terresso #68	Exxon Teresstic #68	Sunvis 832	Dexron II
Shell Tellus #68	Shell Turbo T-68	Valvoline Antiwear ISO32	Valvoline AW32
Petro Canada Harmony #68			

**Mast and Carriage**

1. Check the condition and wear of all channel/chain rollers on a monthly basis and replace if necessary.
2. Lubricate the points as shown on diagram. For best performance lubricate monthly.
3. Periodically remove the lift chains and wipe clean with dry cloths. DO NOT use chemical degreasing agents since these may make the material brittle. Carefully examine the chain links, pins and clevises for damage, wear or stretch and replace them if any evidence of either is found. Use a paintbrush, recoat the chains with SAE 10 motor oil, or suitable chain lubricant. Adjust the chain tension so that with the carriage fully lowered, the chains are equally taut but not supporting the carriage.
4. Check the upper limit mechanical stops for damage and repair or replace.

**Hydraulic Adjustments**

**LIFTING PRESSURE:**

The hydraulic relief valve assembly controls the maximum hydraulic system pressure. The pressure relief is factory set and adjustment will be required only if a new valve or pump is installed. For operator safety adjustment to any of these components must be made by a qualified Blue Giant service representative only.

**LOWERING SPEED:**

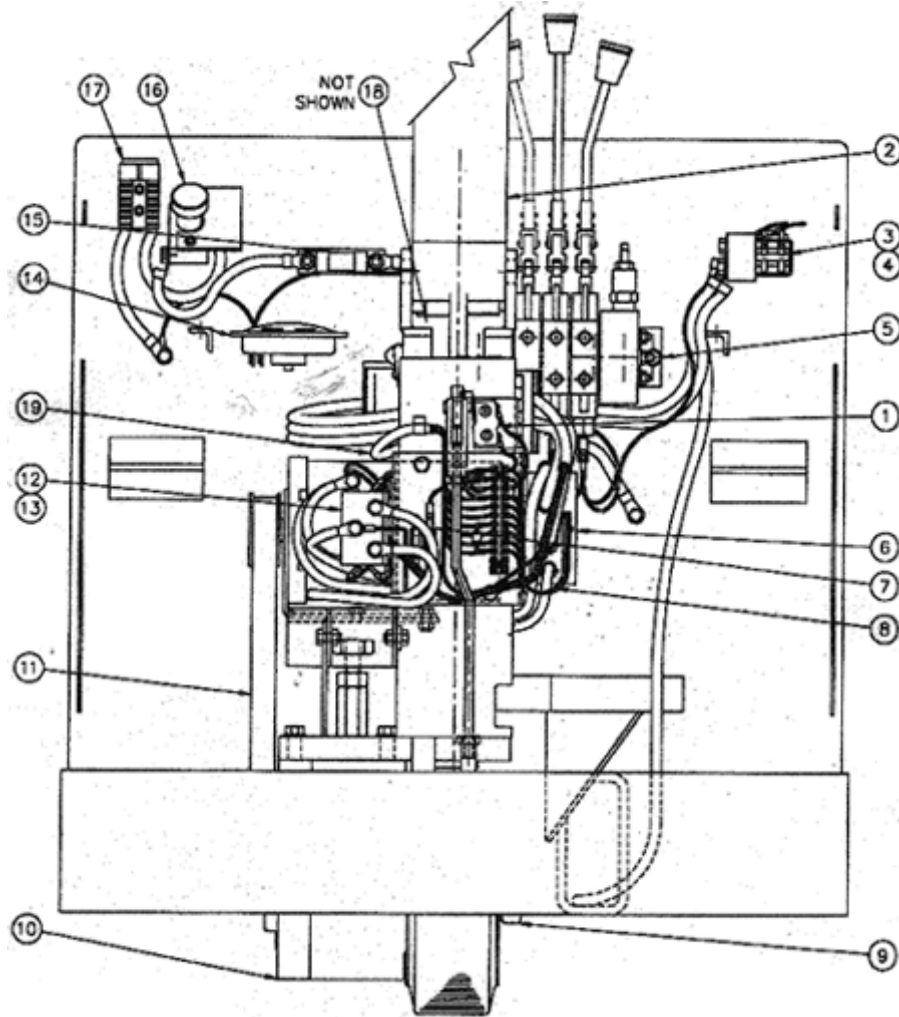
Lowering speed is factory set for safe lowering and should never be changed for safety reasons. For operator safety during valve replacement adjustment to the lowering speed must be made by a qualified Blue Giant service representative only.

**MAST TILT ADJUSTMENT:**

Tilt speeds and tilt angle are factory set and are not adjustable.

**NOTE:** ONLY AUTHORIZED BLUE GIANT SERVICE TECHNICIANS MUST PERFORM ALL HYDRAULIC REPAIRS OR ADJUSTMENTS TO MAINTAIN FACTORY SETTINGS FOR SAFE OPERATION.

**Drive Unit Parts Illustration**



ITEM	QTY	PART NO	DESCRIPTION
1	1	025-535	Dead-Man Switch
2	1	907-0105	Control Handle (Housing only)
3	1	025-841	Pump Contactor
4	1	028-870	Pump Contactor Tip Kit
5	1	134-5007	Manual Valve Bank
6	1	026-507-1	Speed Controller
7	1	026-146	Control Fuse
8	1	026-513	Controller Wiring Harness
9	1	011-563	Drive Tire Locking Nut
10	1	790-351	Gear Box Assembly
11	1	023-212	Drive Belt
12	1	025-973	Directional Contactor
13	1	025-988	Directional Contactor Tip Kit
14	1	032-302	Horn
15	1	026-154	Main Power Fuse 150A
16	1	025-977	Emergency Stop Button Assembly
17	1	030-082	S.B. Connector (Red)
18	2	017-064	Handle Return Springs
19	1	164-7003	Control Handle Wiring Harness

## **Cylinder Reseal Servicing Procedure**

1. Drain / remove all oil from the cylinder barrel by compressing cylinder rod fully into barrel until the rod bottoms out.
2. Extend rod fully by hand.
3. Remove the headnut locking ring by pulling on the tab protruding from the cylinder barrel until the retaining ring is removed completely.
  - (a) Pry up tip of locking ring.
  - (b) Rotate cylinder housing counter clockwise 360° while holding the retaining ring.
  - (c) Remove ring.
  - (d) Retaining ring can be reused if not damaged or broken
4. Place a long pin or suitable shaft through the open end of the rod pin housing.
5. Pull on the pin assembly to remove the headnut and rod assembly from the barrel. The assembly will pull free of the barrel.
6. Remove retaining nut from bottom of piston assembly. Note that some heat may be required, as nut is factory installed with Loctite #272, which also must be used during reinstallation.
7. Remove the piston assembly from the rod and remove all seals.
8. Thoroughly clean all metal components in a new clean solvent and inspect them for any abrasions, wear or damage. Any damage noted to piston, barrel, rod, and headnut or inside of cylinder barrel will necessitate the component or complete cylinder replacement.
9. Ensure that all components are dry after cleaning prior to seal installation.
10. Ensure that the working area is clean and free of any contaminants and reinstall all seals in kit provided using care during seal installation.
11. Lightly coat all the seal contact surfaces and the seals with petroleum based grease prior to assembly.
12. Use Loctite #272 sparingly on the threads, ensuring the threads are clean and dry when reinstalling the piston nut.
13. Position the piston in barrel and tap the piston rod eye with a soft-faced device until the piston is inserted into the cylinder housing. DO NOT allow the headnut to be inserted during the piston installation. Using a light, look through the cylinder barrel retaining ring installation hole to line up the groove in the headnut during headnut installation. Manually push or use a soft faced tool to gently install the headnut until the machined groove is visible and lines up with the barrel retaining ring hole.
14. Insert the end of the locking ring without the 90-degree tab into the hole in the gland.
15. Rotate the barrel 360° clockwise slowly while holding the retaining ring to pull in the retaining ring until the retaining ring tab at the end is located in the cylinder barrel hole. Do not force the retaining ring any further as the tab will be pulled into the groove. The tab must remain at the cylinder barrel hole to facilitate removal.
16. With the cylinder barrel firmly secured in a vise hydraulically pressurize the cylinder at approximately 1500 lbs. and allow the cylinder to fully extend and remain under pressure for a few minutes. Inspect cylinder for any signs of leakage. Never stand in front of or behind the cylinder while it is under pressure.

## Cylinder Reseal Servicing Procedure

**NOTE:** Some oil seepage past seals resulting in minor external leakage during operation is normal. External oil being evident does not necessarily require cylinder repair until the leakage is at a point that normal operation is adversely affected. If the unit being repaired is equipped with a return line at the top of the cylinder this seepage oil will be returned to the hydraulic tank during normal use.

<b>Recommended Spare Parts List BGL - 24 Volt</b>		
QTY	PART NO.	DESCRIPTION
1	785-048-1	Tilt Cylinder complete Seal Kit
1	030-885	Drive Motor Brush Set
4	018-501	Load Wheel Bearings
1	020-077	Drive Tire
1	020-057	Load Wheel
1	025-535	Dead-Man Switch
1	025-977	Emergency Stop Button Assembly
1	025-973	Directional Contactor
1	026-146	Control Fuse - 6 amp
1	026-154	Main Power Fuse 150A
1	023-212	Drive Belt
1	025-841	Pump Contactor
1	030-812-1	Pump Motor Brush Set
1	SEE PAGE 7	Lift Cylinder Seal Kits (single cylinder only)
<b>NOTE: Please specify serial number when ordering parts</b>		

<b>Appendix A Parts Used on EE-Rated – UL Approved Version</b>		
PART NO.	DESCRIPTION	
025-079	Strap Static Ground	YSF14 Gates #90330
025-969	Contactora – EE Rated – Pump	Cat #SW180EE-24DC-380
025-970	Contactora – EE Rated - Drive	Cat #DC88EE-24DC-249
030-089	Terminal Strip Weidmuller 4221.0	
037-021	Protector terminal 5719-050B	
124-5002	Enclosure – Power Fuse	EE Rated
780-150	Enclosure – Control Fuse	EE Rated
030-851	Band for Drive Motor (Shaft End)	EE Rated
030-852	Band for Drive Motor (Rear End)	EE Rated
030-857	Band for Pump Motor (Pump End)	EE Rated
030-858	Band for Pump Motor (Rear End)	EE Rated

**Trouble Shooting Guide**

The following charts are to assist in identifying possible equipment malfunctions.

**NOTE: REPAIRS / TROUBLE SHOOTING SHOULD BE PERFORMED BY YOUR AUTHORIZED BLUE GIANT SERVICE TECHNICIAN.**

**BEFORE TROUBLE SHOOTING, MAIN BATTERY POWER MUST BE DISCONNECTED.**

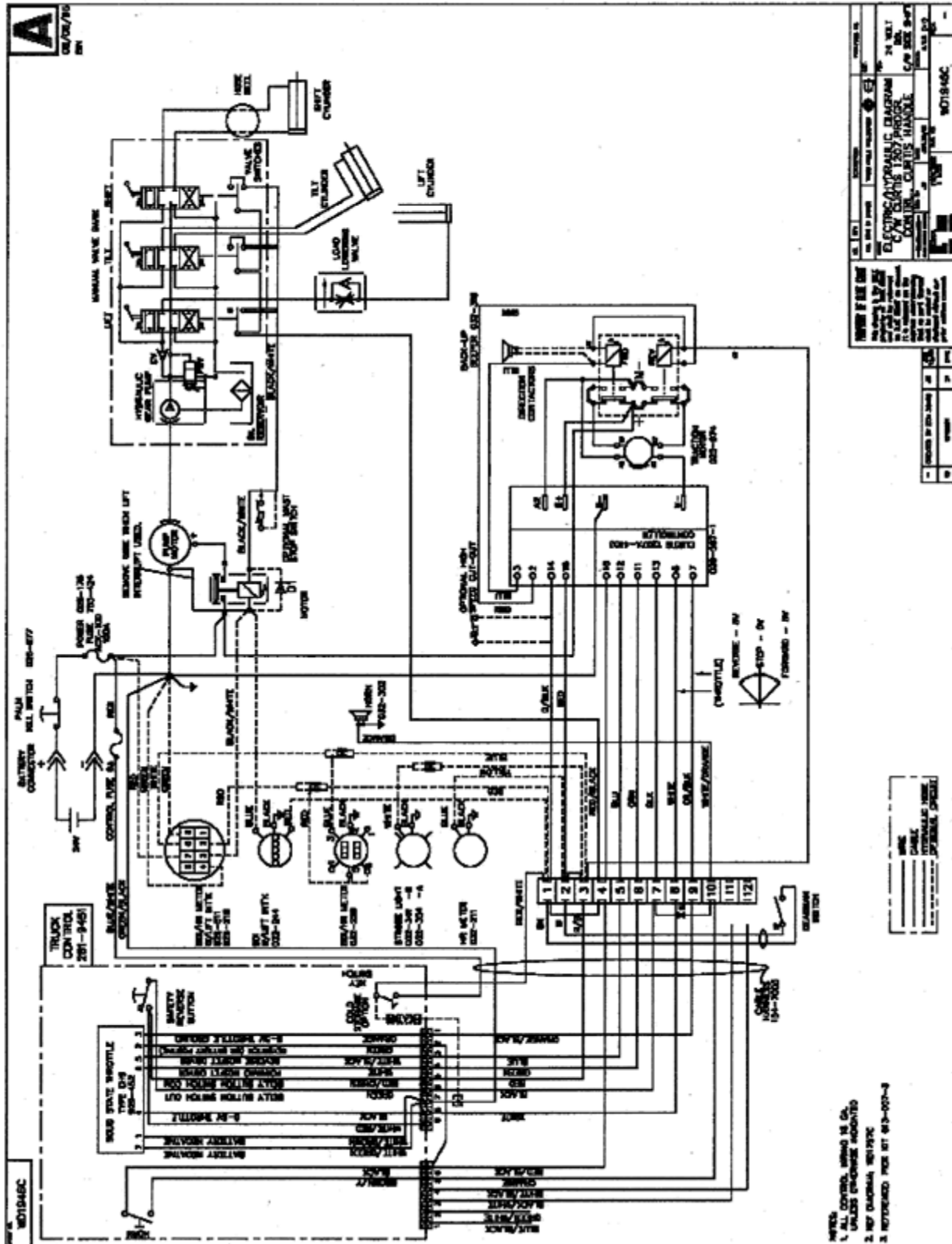
PROBLEM	POSSIBLE CAUSE
<b>NO LIFT</b> (motor does not run)	<ul style="list-style-type: none"> <li>• Discharged battery</li> <li>• Defective lift switch</li> <li>• Defective contactor for pump motor</li> <li>• Burned brushes in pump motor</li> <li>• Blown fuse</li> </ul>
<b>NO LIFT</b> (motor runs)	<ul style="list-style-type: none"> <li>• Discharged battery</li> <li>• Low hydraulic pressure</li> <li>• Pump check valve stuck open - Faulty solenoid valve</li> <li>• Check oil level if forks do not raise fully</li> <li>• Foreign material blocking lifting mechanism</li> </ul>
<b>FORKS WILL NOT LOWER</b>	<ul style="list-style-type: none"> <li>• Faulty solenoid coil</li> <li>• Defective lowering switch on steering handle if equipped</li> <li>• Defective valve</li> <li>• Obstruction in chain/mast/carriage</li> <li>• Control fuse blown</li> </ul>
<b>NO ELECTRICAL POWER</b> or <b>NO TRAVEL</b>	<ul style="list-style-type: none"> <li>• Discharged battery</li> <li>• Loose/corroded battery connections</li> <li>• Blown main or control fuse</li> <li>• Defective travel control switch</li> <li>• Defective contactor or contactor tips</li> <li>• Check traction motor</li> <li>• Broken/loose drive belt</li> <li>• Defective SB connector</li> </ul>
<b>TRUCK PERFORMS PROPERLY BUT REQUIRES CHARGING TOO FREQUENTLY</b>	<ul style="list-style-type: none"> <li>• Battery being removed from charger before recharging cycle is completed</li> <li>• Battery water level is too low to accept and hold a full charge</li> <li>• Battery capacity not adequate for workload required</li> <li>• Battery capacity reduced due to battery damage</li> </ul>
<b>FORKS WILL NOT LIFT TO FULL HEIGHT</b>	<ul style="list-style-type: none"> <li>• Oil level low in oil reservoir. Refill oil reservoir, determine area of leakage</li> </ul>
<b>PUMP MAKES MORE NOISE THAN NORMAL</b>	<ul style="list-style-type: none"> <li>• <b>CAUTION:</b> Use Only recommended oils</li> </ul>
<b>LOSS OF BRAKING POWER</b>	<ul style="list-style-type: none"> <li>• Brake requires adjustment. Must be performed by qualified personnel only</li> </ul>

**NOTE:** Additional testing and diagnostics must be performed by authorized service personnel through use of the diagnostics analysis tool in the controller programmer. Consult Blue Giant or your authorized Blue Giant Dealer for more details and assistance.



**Electric / Hydraulic Diagram**

c/w Curtis 1207 Programmable Controller – Curtis Handle  
 24 Volt – c/w Side Shift





**Service / Maintenance History**

DATE	WORK PERFORMED	COMMENTS / NOTES

**To Order Parts**

For prompt service when ordering parts, please provide the following information to your local distributor.

1. Model and serial number of the vehicle.
2. Part number, description and quantity.
3. Shipping instructions.

When in doubt as to part required, provide a sketch or the used part as a sample.

**Record Here For Future Reference**

Date into Service: \_\_\_\_\_

Model Number: \_\_\_\_\_

Serial Number: \_\_\_\_\_

Distributor: \_\_\_\_\_

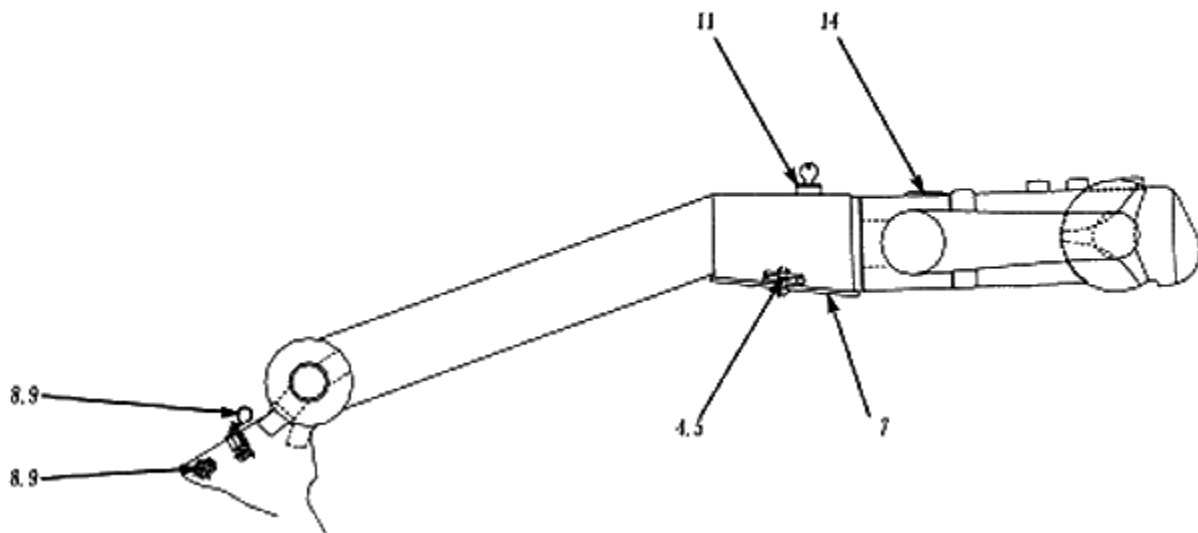
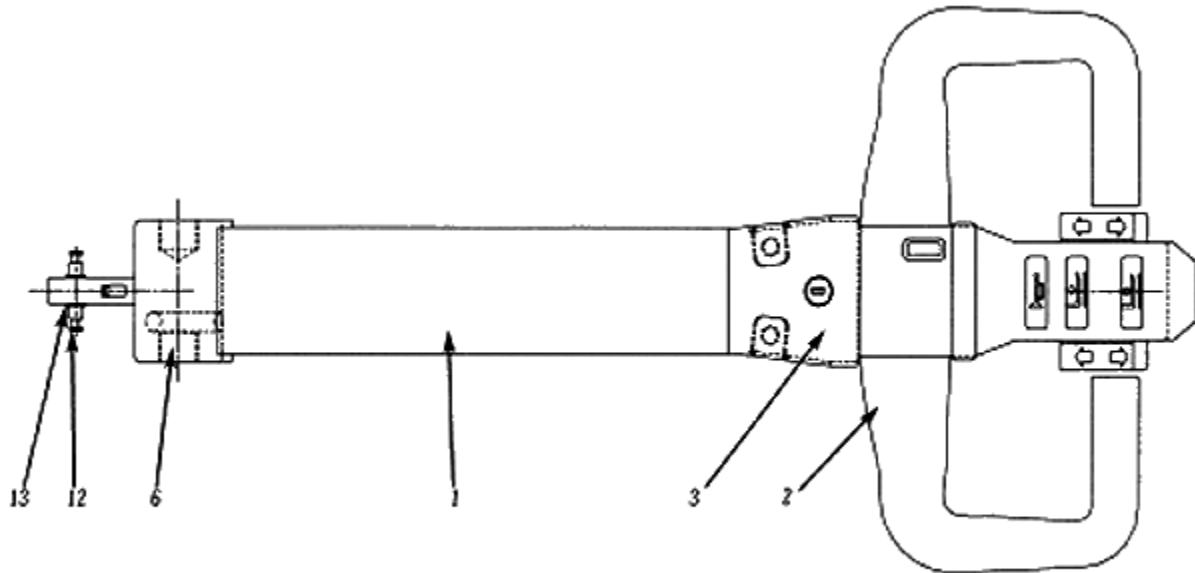
**FOR RECOMMENDED SPARE PARTS CONTACT BLUE GIANT**

**TEL: 800 6687078 / 905 457 3900**  
**FAX: 888 378 5781 / 905 450-6555**

# **PARTS MANUAL SUPPLEMENT**

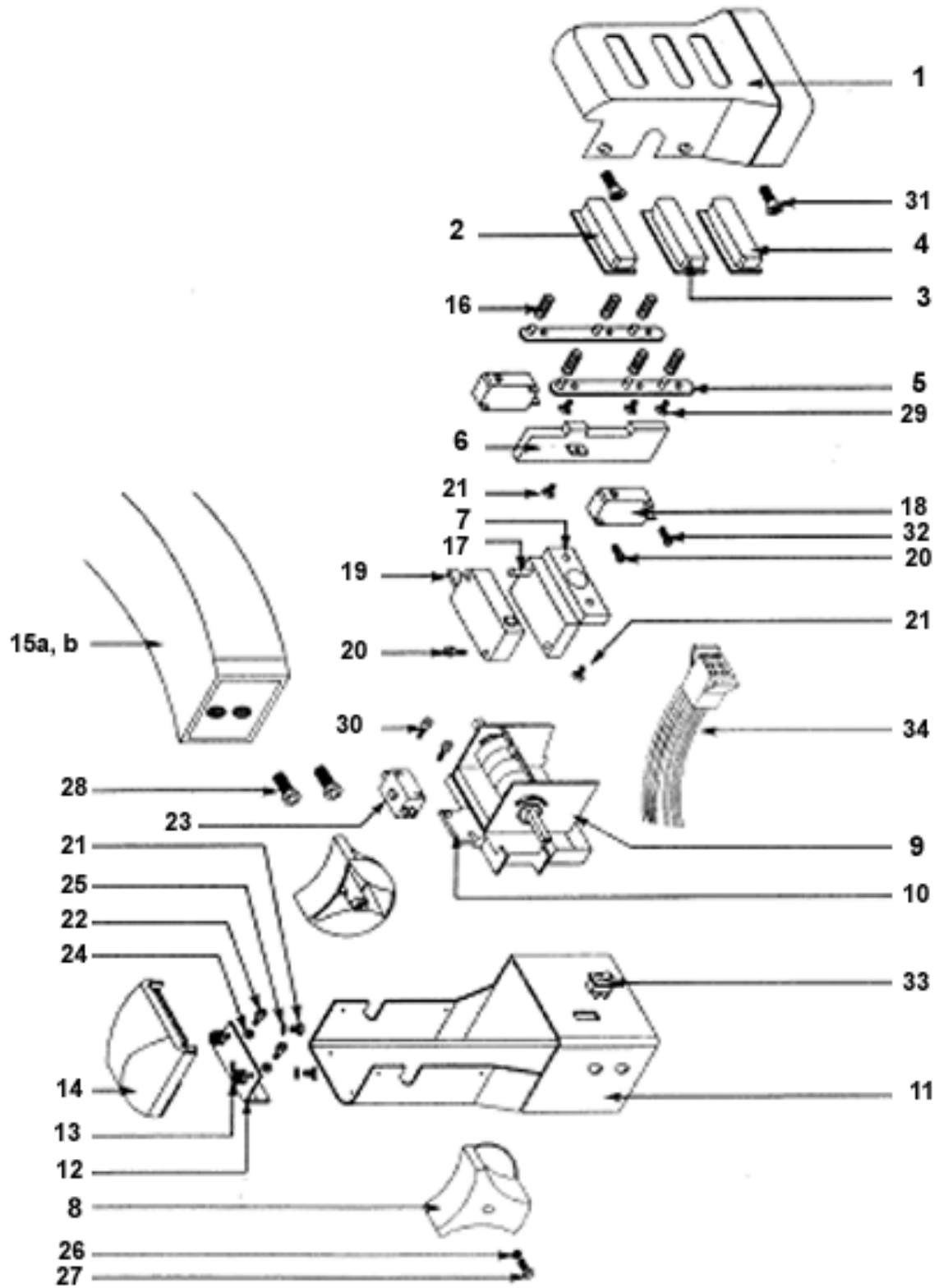
## **Control / Arm Handle Assembly**





### General Assembly Parts List

Item	Qty	Part No.	Description
1	1	907-5042	Handle (Control) Weldment
2	1	2819451	Control Head Assembly (BGS / BGP-45)
2	1	907-0105	Control Head Assembly (BGS / BGL)
3	4	29CM820ER	Hex Flange Screw
4	2	2393833	Nut Pal Trw
5	2	27CM820ER	Capscrew – Socket
6	2	018-051-99	Fiberglide Bushing
7	1	2822377	Cover Plate
8	1	030-031-99	P-Clip
9	1	011-002-99	Large Slotted Head Screw
10	1	907-5047	Wiring Harness Assembly (BGS / BGP-45) Not Shown
10	1	907-5048	Wiring Harness Assembly (BGN / BGL) Not Shown
11	1	2345332	Ignition Key Switch
12	1	104-0009-1	Spring Mounting Pin
13	2	013-125-99	External Circlip
14	1	2812432	Plug



## General Assembly Parts List

Item	Qty	Part No.	Description
1	1	929442	Cover, Plastic (BGS / BGP)
1	1	907-0184	Cover, Plastic ( BGL)
2	1	929443	Button, LIFT
3	1	929444	Button, LOWER
4	1	929445	Button, HORN
5	2	929446	Bracket, Spring Retaining
6	1	929441	Bracket, LOWER / HORN Switch
7	1	929465	Bracket, LIFT SWITCH c/w Pin
8	2	929461	Butterfly (Black)
9	1	929452	Throttle, Electronic
10	1	929464	Bracket, Throttle Support
10	1	930805	Bracket, Throttle Support
11	1	929451	Housing
12	1	929458	Bracket, E/R
13	2	929455	Spring, E/R Button
14	1	929457	Button, E/R
15	2	929450	Grip
16	6	929447	Spring, Lift / Lower / Horn Button
17	1	N/A	Pin, Lift Switch (included with #7)
18	2	929437	Switch, Lower / Horn
19	1	929438	Switch, Lift
20	4	929439	Screw, Switch Mounting
21	5	929453	Screw, E/R & Switch Bracket Mounting
22	2	3GM506	Screw, E/R Bracket
23	1	929462	Switch, E/R
24	2	1EM50E	Washer, E/R Bracket
25	2	929456	Washer, Wide, E/R Bracket
26	2	10EM30	Washer, Star
27	2	13GM3010	Screw, Throttle
28	2 – 4	3GM812	Screw, Grip
29	6	929454	Screw, Button Spring Bracket
30	2	929463	Screw, E/R Switch
31	4	929448	Screw, Cover
32	1	929440	Screw, Horn Switch Mounting
33	1	2819457	Switch, Rocker (Turtle / Rabbit)
34	1	929460	Harness, Wire

## **Warranty Policy**

### **Walkie Lift Truck**

### **BGL Series**

BLUE GIANT warrants to the original purchaser its self-propelled equipment to be free from defective factory material and workmanship. All warranties begin on the date of delivery to the first user or the sixtieth (60) day after date of shipment, whichever comes first.

Parts or components which fall under normal usage within the following specified time periods and are proven to be defective will be repaired or replaced by BLUE GIANT without charge for parts or labor unless stated otherwise herein. Replacement parts will be supplied F.O.B. factory.

#### **WARRANTY TIME PERIODS:**

- 1.) **TWO (2) YEARS OR 4000 HRS. OPERATION WHICHEVER OCCURS FIRST.**  
Transmission, and brakes.
- 2.) **ONE (1) YEAR OR 2000 HRS. OPERATION WHICHEVER OCCURS FIRST.**  
Drive motor (except brushes), and electronic speed controller.
- 3.) **SIX (6) MONTHS OR 1000 HRS. OPERATION WHICHEVER OCCURS FIRST.**  
Lift motors (except brushes), pumps, wiring harnesses, drive belts, valves, oil seals, hydraulic cylinders, hydraulic hoses, SCR controls, lift chains, weldments, and castings.
- 4.) **NINETY (90) DAYS OR 500 HRS. OPERATION WHICHEVER OCCURS FIRST.**  
Motor brushes, contactors, switches, resistors, wheels, tires, bearings, bushings, axles, connectors, fasteners, any parts not listed above.

Batteries and battery chargers are guaranteed by their manufacturer; NOT BLUE GIANT.  
Please consult BLUE GIANT for nearest manufacturer's representative.

#### **WARRANTY IS VOID IF:**

- 1.) Warranty validation form is not completed and returned to BLUE GIANT.
- 2.) Equipment has been modified or repaired in any manner not approved by BLUE GIANT.
- 3.) Equipment is overloaded beyond rated capacity.
- 4.) Equipment is used in abrasive conditions, corrosive conditions, freezers or excessive moisture unless equipped with an appropriate protection package. When equipped with a protection package the warranty shall be limited to ninety (90) days on all components.

#### **THE FOLLOWING ARE NOT COVERED UNDER WARRANTY:**

- 1.) Adjustments, including initial field set-up. Adjustments are considered part of normal maintenance procedures.
- 2.) Repairs required as a result of:
  - Failure to follow maintenance and/or lubrication procedures specified in the owner's manual.
  - Abuse, willful damage, accident, neglect or wear items.
  - Shipping damage. (Claim must be made with freight carrier.)
  - Fuses, light bulbs.

**BLUE GIANT DOES NOT ASSUME RESPONSIBILITY OR LIABILITY FOR INCIDENTAL, CONSEQUENTIAL OR SPECIAL DAMAGES, OR FOR LOSS OF PROFIT OR DAMAGE TO TRADE OR BUSINESS WHICH RESULTS FROM THE EQUIPMENT.**

**THE ABOVE WARRANTIES ARE IN LIEU OF ANY OTHER WARRANTIES, EITHER EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION CONTAINED HEREIN.**

**BLUE GIANT EQUIPMENT CORPORATION**

[www.BLUEGIANT.com](http://www.BLUEGIANT.com)

Warranty: Part #038-660E



**BLUE GIANT EQUIPMENT CORPORATION**



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BLUE GIANT offers a full line of Dock Levelers, Dock Safety Equipment, Accessories, Ergonomic and Scissor Lift Equipment, and Industrial Trucks. Concurrent with our continuing product improvement program, specifications are subject to change without notice. Please contact BLUE GIANT for latest information. Some features illustrated may be optional in certain market areas.

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Issue Date: 12/12/03 (Part #038-596E) Rev.1-PP