

XPS STACKER OWNER'S MANUAL



WARNING

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

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

Receipt Inspection

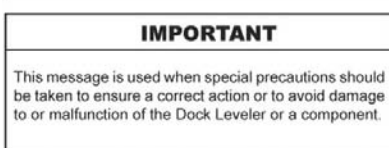
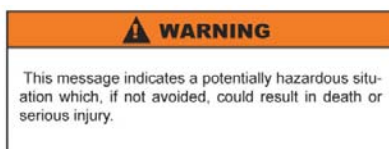
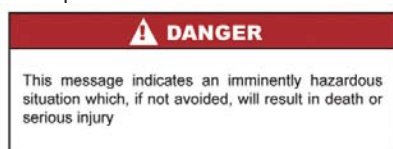
This equipment was thoroughly inspected and tested prior to leaving the factory. Before placing the equipment in service it should be thoroughly checked for damage or loss occurring in transit. If any such damage or loss is evident, a claim must be made against the carrier.

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

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Safety Signs and Safety Messages

Improper operation can cause accidents. Don't take chances with incorrect or damaged equipment. Read and understand the procedures for safe operation and maintenance outlined in this manual. Do not hesitate to ask for help. Stay alert! Follow safety rules, regulations, and procedures. Avoid accidents by recognizing dangerous procedures or situations before they occur. Safety signs and messages are placed in this manual to provide instructions and identify specific areas where potential hazards exist and special precautions should be taken. Know and understand the meaning of these instructions, signs, and messages. Damage to the equipment, death, or serious injury to you or other persons may result if these messages are not followed. If warning decals are damaged, they must be replaced. Contact your Distributor for replacements.



A) Introduction

The following is intended to be a quick reference to some of the important procedures to follow while using this stacker. It is not intended to cover, or suggest that it does cover, all procedures required to be followed to ensure safe operation. Operators should be aware of and abide by all workplace safety regulations that may apply to the operation of this stacker. These laws and regulations include but are not limited to:

- Occupational Safety and Health Act (USA).
- Occupational Safety and Health Acts for Individual States (USA)
- Canadian Material Handling Regulations.

In addition to these regulations, industry standards such as the American National Standards Institute (ANSI) "ASME B56.10 Safety Standard for Manually Propelled High Lift Industrial Trucks" apply to this equipment. To obtain a copy of this standard, contact the Sales Department:

American National Standards Institute
1430 Broadway, New York, NY 10018
or call: (212) 642-4900

B) Safety Instructions

- Do not operate this truck unless you have been trained and authorized to do so.
- Do not ride truck and do not carry passengers.
- Do not operate this truck until you have checked its condition (refer to "Pre-Operation Inspection" section of this manual).
- Report the need for truck repairs to your supervisor. Do not operate truck. Neglect may cause a minor repair to become a major service problem or cause truck to become unsafe.
- This truck is intended for use on smooth level surfaces only. Do not use on ramps or grades, rough or broken floors.
- 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. Be sure load is centered on forks (along the length and width of the load) and the load center (marked on name-plate) is not exceeded.
- Do not handle unstable or loosely stacked loads. Use special care when handling long, high or wide loads to avoid tipping, loss of load or striking personnel or objects.
- Always look in direction of travel. Keep a clear view and when load obstructs visibility, travel with load lowered.
- Watch swing clearance when turning near walls, racks, pillars or other obstacles.
- Observe applicable traffic regulations and yield right of way to pedestrians
- Before you leave the truck, fully lower forks to ground and set parking brake.

Pre-Operation Instructions

- Open battery cover and check wiring harness and hydraulic hoses for damage or loose connections.
- Open the battery compartment and check that all connections are tight. Check that batteries have not been damaged. Charge battery(s) for one shift. Refer to Battery Maintenance Instructions.
- Refer to Safety and Operating Instructions and check that stacker 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.

NOTE:

During initial cylinder assembly, hydraulic fluid is used to lubricate all components. This assembly fluid may be present, or accumulated in upper head nut portion of cylinder during break-in period or normal use. A small amount of fluid in this area is normal and should not be mistaken for cylinder seal leakage.



Pre-Operation Inspection

Workplace safety regulations require that all trucks be inspected before each shift. Follow inspection point list below to complete this check. If anything is found to be wrong with truck, then it must be taken out of operation. Do not use a truck which fails this inspection.



DANGER

Disconnect battery before attempting removal of imbedded materials.

Inspection Point List:

1) Safety Equipment

- **Load backrest (if equipped)**
 - is backrest in place, is there any damage which weakens it.
- **Warning decals** - make sure all decals are in place and readable.
- **Mast safety screen** - is it in place and free of obvious damage?

2) General Operation:

- **Parking brake** - test brake for proper braking.
- **Lift/lower control** - operate lift function to full lift height. Listen and watch for unusual sounds or jerky motions. Operate lower control until forks are fully lowered. Listen and watch for unusual sounds or jerky motions. Throughout inspection, look for signs of hydraulic fluid leaks

3) Forks and Fork Carriage:

- Inspect forks for cracks, wear and alignment. Obvious damage fails inspection. Maximum allowable fork blade wear is 10% of fork back (vertical member of fork).
- Fork carriage - carriage is part of truck to which forks attach. Inspect carriage for cracks, damage or wear.

4) Wheels:

- All tires must be inspected for cuts, breaks, signs of debonding (coming away from rim).
- Material imbedded in tires or axles must be removed (i.e., steel shavings, string, plastic wrap etc.)

Battery and Charger Information



CAUTION

Do not operate stacker while the charge is plugged in. Failure to follow this instruction may result in damage to the stacker.

The care and maintenance of the battery is very important to efficient equipment operation and maximum battery life.

Battery electrolyte level should be checked before each charge of the battery. The level should be maintained at one-half inch above plates or just below the lower lip of the filler hole at all times. If low, add distilled water preferably at the end of the charge. Do not overfill.

Always keep vent plugs tightly in place when cleaning battery. When properly watered and charged, the battery will remain clean and dry. All that is necessary is to brush or blow off any dust or dirt which may accumulate on it.

However, if electrolyte has spilled it should be neutralized with a solution of baking soda and water. Then rinse the battery with cool water from a low pressure hose to remove the soda and water. If battery stays wet consistently, it may be an indication of overcharging or overfilling.

The equipment is supplied with a 110 volt/1/60 cycle AC charger that when plugged into a 110 volt outlet will automatically charge the battery to its proper level.

Do not operate stacker while the charge is plugged in. Failure to follow this instruction may result in damage to the stacker.

Operating Instructions

XPS Series Stackers (manually propelled, power lift).

Refer to the photograph and instructions below to control the stacker.

a) Travel

Securely grasp steering handles with both hands and push or pull stacker to move or position. If stacker is equipped with an optional steering handle, move and steer stacker by pushing or pulling on handle. Be sure to keep feet clear of machine at all times.

b) Lift / Lower

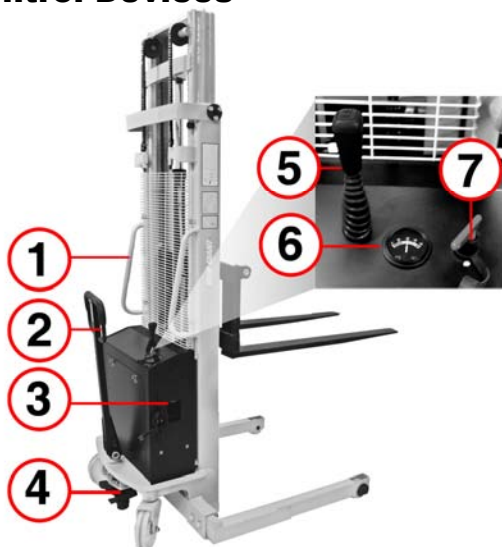
To raise forks, pull back on control lever. To lower forks, push forward on control lever.

c) Parking

To engage parking brake, push down on brake actuator until lever locks in lower most position. To release brake, pull up on brake actuator.

Control Devices

1. Positioning Handles
2. Steering Handle
3. Battery Charger Plug Location
4. Foot Brake
5. Lift / Lower
6. Battery Gauge
7. On / Off Key



Straddle Adjustment

To adjust the straddles on the stacker, remove the weight of the machine from the straddles by lifting / jacking under the straddle tube. Heat the four set screws to remove any "Loctite" that was applied during assembly. Turn set screws counterclockwise to loosen tension from the straddles. Slide straddles to desired setting. Apply small amount of "Loctite" #271 to set screws and tighten. Remove lifting / jacking device.

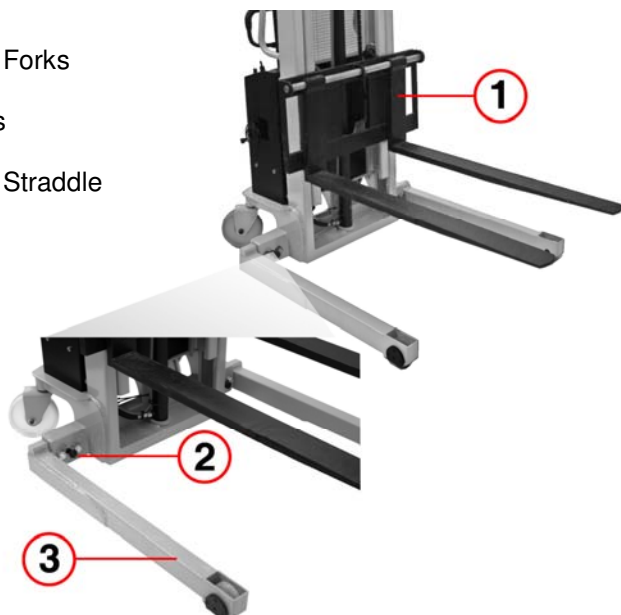


WARNING

The spread between the straddle legs must not be:

- Less than 25% of the stackers maximum lift
- More than 50" (1270 mm)

1. Adjustable Forks
2. Set Screws
3. Adjustable Straddle



Planned Maintenance

Planned maintenance is a program in which inspection, minor adjustments and lubrication are performed on a schedule and systematic basis. A solid PM program should incorporate a method of record keeping which enables you to better determine PM schedules and enables you to track the maintenance cost per machine.

An effective PM program should incorporate two procedures:

- 1) A pre-operation check by the driver or maintenance personnel at the beginning of each shift
- 2) A planned maintenance routine based on operating hours, with the interval being determined by operating conditions.

Records will tell you how often PM should be done. If an operation is clean and / or involves low operating time per day, a PM interval can be extended. If an operation is extremely dirty and / or involves high operating time per day, the PM interval may have to be reduced. Thus the PM interval can be tailored to answer the needs of the operation.

If the PM is religiously followed, needs for repair, major adjustment and component replacement will be discovered automatically and such work will be done as needed.

The PM Objective:

- 1) To reduce costly unscheduled downtime.
- 2) Reduce maintenance costs.
- 3) Increase equipment productivity.
- 4) Above all, to increase personal safety of operators and other personnel

Inspection intervals outlined are for normal conditions. More frequent inspections are necessary for adverse conditions such as: temperature extremes, several operators, dusty atmosphere, etc.

Inspection Intervals



WARNING

Disconnect the battery before attempting inspection or service.

Daily: Operating Controls
 Battery

Quarterly: Electrical Systems
 Hydraulic Systems
 Mechanical Parts

Lubrication: (based on single shift, normal usage).

Every Month:

Apply engine oil (SAE 10) to all pivot points including the lifting chains. Lubricate the mast channels with a good quality grease (Valvoline #614 or equivalent).

Every 6 Months:

Check oil level in the hydraulic power pack. Remove breather cap and add approved oil until oil is level with bottom of filler hole (be sure lift is in the fully lowered position).
Clean and reinstall the breather cap.

The hydraulic oil should be changed after the truck has been in service for three months then every six months thereafter. Remove reservoir, discard used oil and clean reservoir. Clean and inspect the strainer on the fluid pick up tube. Reinstall reservoir and add oil until oil is level with bottom of filter hose (be sure the lift is in the fully lowered position). Use only good quality hydraulic oil with a viscosity equivalent to SAE 10 or SAE 20 hydraulic oils.

Approved oils are:

Esso Polar 32; Shell Tellus 29; Gulf Harmony 48AW or Dextron II transmission fluid or equal.

ELECTRIC MANUAL STACKER**XPS-22 SERIES**

Item	Description	Qty.	Part No.
1	Frame	1	7001221001
2	Net Cover	1	7001221002
3	left leg	1	7001221003
4	Handle	1	7001221004
5	Snap Ring	2	7001221005
6	Bearing 6006-2Z	2	7001221006
7	Spacing Bush	2	7001221007
8	Tapered Roller bearing 32006x2	2	7001221008
9	Push Cover	2	7001221009
10	Snap Ring	2	7001221010
11	Left Rear Wheel Rack	1	7001221011
12	Washer	2	7001221012
13	Spacing Bush	2	7001221013
14	Steer Wheel	2	7001221014
15	Bearing 6204-2Z	4	7001221015
16	Axle pin	2	7001221016
17	Washer	2	7001221017
18	Nut	2	7001221018
19	Snap ring	1	7001221019
20	Pin	1	7001221020
21	Crank Unit	1	7001221021
22	Spacing Bush	1	7001221022
23	Bearing 6205-2Z	2	7001221023
24	Steering Axle	1	7001221024
25	Connecting lever	1	7001221025
26	Snap Ring	2	7001221026
27	Left Torsional Spring	1	7001221027
28	Oil less bearing	2	7001221028
29	Right Torsional Spring	1	7001221029
30	Axle pin	1	7001221030
31	Washer	2	7001221031
32	Snap Ring	2	7001221032
33	Nut	1	7001221033
34	Spring washer	1	7001221034
35	Plane washer	1	7001221035
36	Rubber Pad	1	7001221036
37	Push Cover	1	7001221037
38	Stopper	1	7001221038

Item	Description	Qty.	Part No.
39	Plane washer	4	7001221039
40	Spring washer	4	7001221040
41	Bolt	4	7001221041
42	Right Rear Wheel Rack	1	7001221042
43	Bolt	2	7001221043
44	Nut	2	7001221044
45	Right leg	1	7001221045
46	Bolt	4	7001221046
47	Snap Ring	4	7001221047
48	Bearing 6204-2Z	4	7001221048
49	Load Wheel	2	7001221049
50	Spacing Bush	4	7001221050
51	Axle Pin	2	7001221051
52	Snap Ring	2	7001221052
53	Snap Ring	2	7001221053
54	Bearing 6206	2	7001221054
55	Roller	2	7001221055
56	Steel Bead	2	7001221056
57	Bolt	4	7001221057
58	Bolt	4	7001221058
59	Flat	4	7001221059
60	Washer	4	7001221060
61	Bolt	4	7001221061
62	Nut	4	7001221062
63	Nut	2	7001221063
64	Bolt	2	7001221064
65	Nut	2	7001221065
66	Spring	2	7001221066
67	Steel Bead	2	7001221067
68	Steel Bead	2	7001221068
69	Bolt	4	7001221069
70	Bolt	6	7001221070
71	Washer	6	7001221071
72	Bearing Seat	2	7001221072
73	Bearing	2	7001221073
74	Roller	2	7001221074
75	Snap Ring	2	7001221075
76	Nut	2	7001221076
77	Chain Joint	2	7001221077

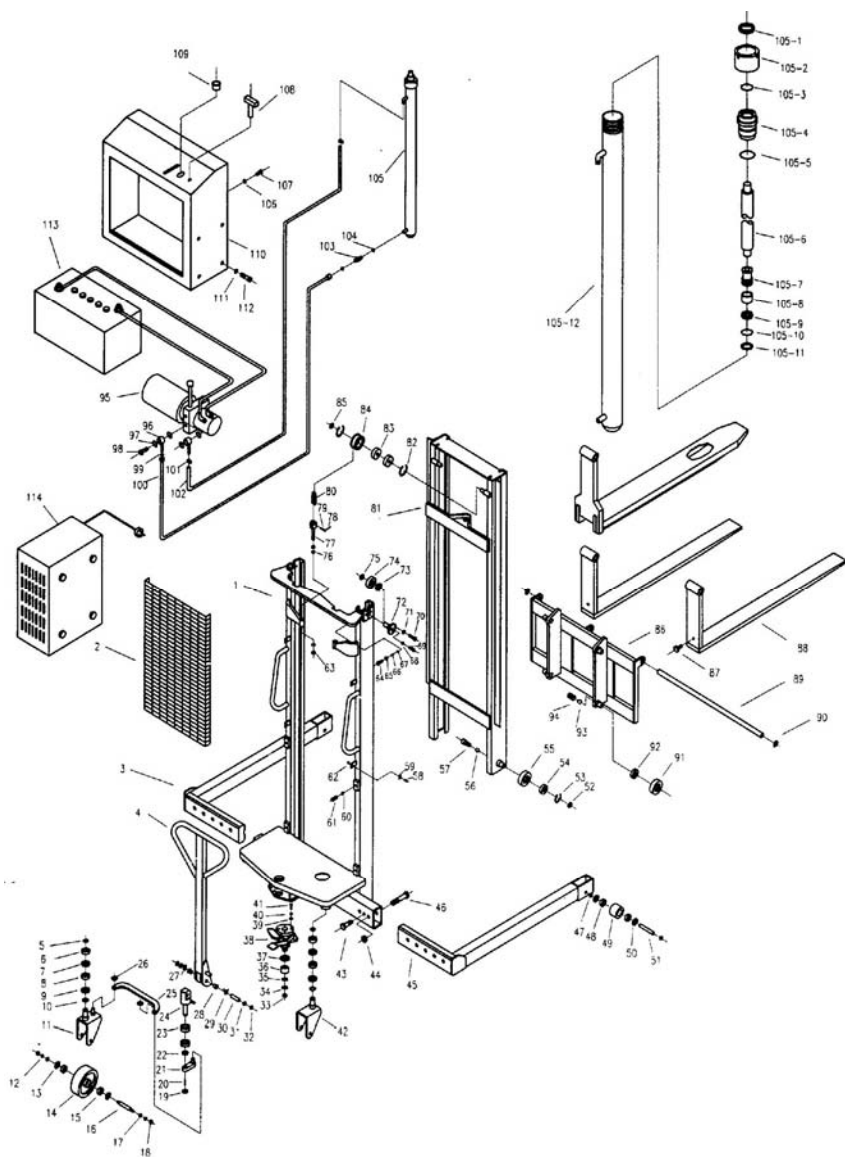
Item	Description	Qty.	Part No.
78	Split Cotter	2	7001221078
79	Chain Pin	2	7001221079
80	Chain	2	7001221080
81	Inner Mast	1	7001221081
82	Snap Ring	4	7001221082
83	Bearing 6205	4	7001221083
84	Carrier Wheel	2	7001221084
85	Snap Ring	2	7001221085
86	Fork Arm Carrier	1	7001221086
87	Adjustable Bolt	2	7001221087
88	Fork Arm	2	7001221088
89	Pilot	1	7001221089
90	Snap Ring	2	7001221090
91	Roller	4	7001221091
92	Bearing 6206	4	7001221092
93	Steel Bead	4	7001221093
94	Bolt	4	7001221094
95	Motor Pump	1	7001221095
96	Adjustable Pipe fitting	1	7001221096
97	Composite Washer	4	7001221097
98	Link Bolt	2	7001221098
99	O-ring	1	7001221099
100	Input oil pipe	1	7001221100
101	Clamp	2	7001221101
102	Output oil pipe	1	7001221102

Item	Description	Qty.	Part No.
103	Connector	1	7001221103
104	Composite washer	1	7001221104
105	Cylinder	1	7001221105
105-1	Dust seal ring	1	7001211051
105-2	Top nut	1	7001211052
105-3	O-ring	1	7001211053
105-4	Gilding bush	1	7001211054
105-5	O-ring	1	7001211055
105-6	Piston Rod	1	7001211056
105-7	Piston	1	7001211057
105-8	Supporting Ring	1	7001211058
105-9	Yx Seal Ring	1	7001211059
105-10	O-ring	1	7001211060
105-11	Snap Ring	1	7001211061
105-12	Cylinder Body	1	7001211062
106	Washer	2	7001221106
107	Bolt	2	7001221107
108	Key to Electric Switch	1	7001221108
109	Volt Meter	1	7001221109
110	Electrical Box	1	7001221110
111	Nut	4	7001221111
112	Bolt	4	7001221112
113	Battery	1	7001221113
114	Charger	1	7001221114

Complete Assembly Parts List

Description	Qty.	Part No.
Left Rear Wheel Assembly (650kg Capacity)	1	7001202011
Right Rear Wheel Assembly (650kg Capacity)	1	7001201041
Left Rear Wheel Assembly (1000kg Capacity)	1	7001202012
Right Rear Wheel Assembly (100kg Capacity)	1	7001201042
Handle Assembly	1	7001201001
Brake Assembly	1	7001201038
Operate Handle (without valve)	1	7001101095
Operate Handle (with valve)	1	7002101095
Cylinder Seal Kits (650kg Capacity)	1	7001231162
Cylinder Seal Kits (1000kg Capacity)	1	7001231262
Cylinder Seal Kits (1500kg Capacity)	1	7001231362

ELECTRIC MANUAL STACKER XPS-22 SERIES



Warranty Industrial Trucks

The Manufacturer's Warranty covers the following Product Classes, each of which is covered under special conditions where major components are concerned (if applicable) specific to each class.

Electric-powered Walkie Stacker
Electric-powered Pallet Truck
Manually-Propelled/Power Lift Stacker

WARRANTY CONDITIONS

The manufacturer warrants to the original purchaser its Industrial Truck equipment to be free from defective material and workmanship under normal use. All warranty coverage is to commence from the date of receipt by first user or sixty (60) days after date of shipment from factory, whichever comes first. The said equipment must be properly operated and maintained, by trained personnel, in compliance with the manufacturer's recommendations with regards to rated capacities, duty cycle limitations, grade limitations and/or design specific application(s) agreed upon at the point of sale, in order to be entitled to the benefits of this warranty.

Pre-Delivery Inspection, adjustment, lubrication and other maintenance are not covered under this warranty and are the sole responsibility of the authorized dealer and/or end user. The Warranty Registration Form must be completed in full and returned to the manufacturer within sixty (60) days of receipt in order for the warranty to be deemed valid.

The manufacturer shall remedy any defects deemed covered under this warranty by replacing or repairing any defective equipment or parts while incurring reasonable expenses for all parts, labor and freight unless otherwise stated herein. Freight expenses for shipping repair/replacement parts will be incurred under conditions of standard shipping terms. Any overnight or special freight requirements will be billed to the end user, or authorized dealer/distributor as recognized by the manufacturer.

Any Original Equipment Manufactured (OEM) part that is replaced during the Warranty time period will be either; further covered for the remainder of the Warranty time period, or for a further 90 days; whichever is longer.

WARRANTY TIME PERIODS:

Parts or components which fail under normal usage and are proven to be defective will be deemed eligible for repair or replacement (providing no special conditions apply, as stated below) providing the failure occurs within

the Warranty Time Period of a given Product Class as stated below. Replacement parts will be supplied F.O.B. factory.

Manually Propelled/Power Lift Stacker

Structural (Lift) - Covered for one (1) year or the first 2000 hours of operation, whichever occurs first.

Components include: Weldments, castings and lift chains.

Hydraulics (Lift) - Covered for the first six (6) months or the first 1000 hours of operation, whichever occurs first.

Components include: Lift motor (excluding brushes), pump, wiring harnesses, valves, oil seals, hydraulic cylinders, and hydraulic hoses.

High Wear - Covered for parts, labor and freight, for the first ninety (90) days or first 500 hours of operation, whichever occurs first.

Components include: Drive and lift motor brushes, contactors, switches, resistors, wheels, tires, bearings, bushings, axles, connectors, fasteners, and any parts not listed above.

Batteries and Battery Chargers: Covered only by the Battery and Battery Charger manufacturer's Warranty.

WARRANTY IS VOID IF:

- 1) The Warranty Registration Form is not completed in full and returned to the manufacturer within sixty (60) days of receipt.
- 2) The original purchaser does not notify the manufacturer of the defect within ninety (90) days after the defect has been detected.
- 3) Equipment is modified in any manner not approved by the manufacturer.
- 4) Equipment has been operated:
 - beyond its rated capacity,
 - in excess of its determined duty cycle,
 - or operated in excess of its determined maximum grade,
 - or combination of the above therein, which can directly be attributed to be the cause of failure.
- 5) Equipment is used in abrasive or corrosive conditions, or conditions of excessive cold or moisture without having been factory specified to be engineered to withstand such conditions.

THE FOLLOWING ARE NOT COVERED UNDER WARRANTY:

- 1) Adjustments, including Pre-delivery Inspection. 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, or neglect.
- Shipping damage. (Claim must be made with the freight carrier.)

THE MANUFACTURER 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.

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 SPARE PARTS CONTACT BLUE GIANT

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

NOTES:



85 Heart Lake Road South
Brampton, Ontario, Canada L6W 3K2
Phone: 905-457-3900 • Fax: 905-457-2313
www.BlueGiant.com

BLUE GIANT EQUIPMENT CORPORATION

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