OWNER'S MANUAL

LOW-PROFILE & SEMI-PORTABLE DOCK LIFT



ACTUAL PRODUCT MAY NOT APPEAR EXACTLY AS SHOWN

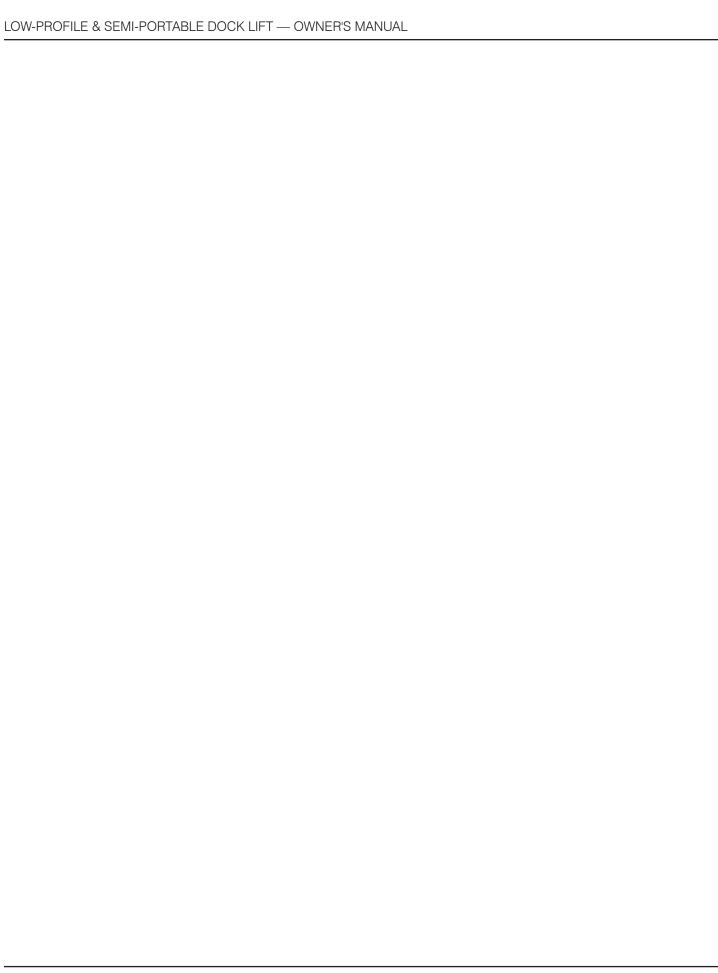
MARNING

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 bodily injury or death.



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1.0 ABOUT THE LOW-PROFILE & SEMI-PORTABLE DOCK LIFT WITH CONTROLS

The Blue Giant Low-profile & Semi-portable Hydraulic Dock Lift is a high performance system. The Low-profile & Semi-portable Hydraulic Dock Lift Series provides loading/unloading options when a facility must handle a variety of trailer or vehicle heights. The deck is constructed with beams welded at dynamic impact points to provide a sturdy deck support. Hydraulic components increase operating efficiency, operator safety, and reduce maintenance requirements.

The Two Push Button Control Station controls an independent hydraulic dock lift via by UP and DOWN push button controls.

1.10WNER'S PURCHASE RECORD

Please record information for future inquiries and to validate warranty. See "2.1 WARRANTY INFORMATION" on page 6.

| Dealer: | Date in Service: | | | | |
|----------------|------------------|--|--|--|--|
| | Number of Units: | | | | |
| Serial Number: | Door #: | | | | |
| Serial Number: | Door #: | | | | |
| Serial Number: | Door #: | | | | |
| Serial Number: | Door #: | | | | |
| Serial Number: | Door #: | | | | |
| Serial Number: | Door #: | | | | |
| Serial Number: | Door #: | | | | |
| Serial Number: | Door #: | | | | |
| Serial Number: | Door #: | | | | |

The manufacturer offers a full line of dock lifts, dock levelers, dock safety equipment, accessories, ergonomic equipment, scissor lift equipment, seals and shelters, and industrial trucks. Concurrent with a continuing product improvement program, specifications are subject to change without notice (See "2.2 EXCLUSION OF LIABILITY" on page 6). Please contact the your Blue Giant Dealer for latest information. Some features illustrated may be optional in certain market areas.

| NOTICE | |
|--|--|
| See "9.0 DECAL IDENTIFICATION AND LOCATION" on page 31 for serial number location. | |

2.0 INTRODUCTION

The following is a quick reference to important procedures that must be followed while using the dock lift system. It is not intended to cover, or suggest that it does cover, all procedures necessary to ensure safe operation. All owners and operators should be aware of and abide by all workplace safety regulations applicable to the inspection and operation of the dock lift. These laws and regulations include but are not limited to:

- The Occupational Safety and Health Act
- Canada Occupational Health and Safety Regulations
- Occupational Safety and Health Acts for Individual States (USA), Provinces, or Territories.
- ANSI standard MH29.1

For additional information on these regulations as well as industry standards that may apply to this product, please contact:

American National Standards Institute (ANSI)

1430 Broadway

New York, NY 10018 Telephone: 212.642.4900

www.ansi.org

Lift Manufacturers Product Group (LIFT)

A Product Section of Material Handling Industry of America

A Division of Material Handling Industry

8720 Red Oak Blvd, Suite 201

Charlotte, NC, 28217-3992

Telephone: 704.676.1190

www.mhi.org/lift



American National Standards Institute

2.1 WARRANTY INFORMATION

Thank you for purchasing Blue Giant products. We appreciate your business, and are confident that our product will serve you for many years to come. In the event that you experience a problem with our product, our Customer Support Team is here to support the Blue Giant Product(s) that you have purchased.

To validate warranty on recently purchased equipment, please complete and submit your information with our on-line Warranty Registration at www.BlueGiant.com.

For more information about Blue Giant Warranty Support, please contact your Blue Giant Dealer. You may also visit www.BlueGiant.com or phone 1.800.872.2583.

NOTE: All products must be registered to qualify for warranty.

| DEALER INFORMATION | ı |
|--------------------|---|
| Name: | |
| Contact: | |
| Telephone: | |

2.2 EXCLUSION OF LIABILITY

To the maximum extent permitted by applicable law, the manufacturer assumes no liability for damage or injury to persons or property that occur as a result of use of the dock lift equipment. Furthermore, to the maximum extent permitted by applicable law, the manufacturer does not assume any liability for lost profits, operating downtimes, consequential, indirect, incidental, special, exemplary, punitive or enhanced damages, or similar losses, whether incurred by owner, authorized users and other third parties. By use of the dock lift equipment, owner assumes all risk of liability for damage or injury to persons or property that occur as a result of use of the dock lift equipment, including, with respect to owner, authorized users and other third parties.

The manufacturer reserves the right to make changes at any time to the modules, components, and accessories, concurrent with its continuing product improvements and development program. Specifications, operating instructions, and illustrations included in this manual are subject to change without advance notice. As the dock lift equipment is a highly customizable product, please contact the

manufacturer by telephone at 1.800.872.2583 for the latest information.

2.3 MANUFACTURER'S NOTE

The dock lift equipment has been carefully inspected and tested at the manufacturer's plant prior to shipment, but **MUST be checked** upon receipt for transport damage. Any observed transport damage is to be listed on the signed copy of the freight document. There are many configurations or custom designs whose specifications may not be fully reflected in this manual. Contact your Blue Giant Dealer to obtain the General Arrangement drawing for application specific designs.

Notify the freight forwarder and the dealer of any damage WITHIN 24 HOURS.

2.4 OWNER'S RESPONSIBILITY

The dock lift equipment needs to be maintained and inspected by the owner to verify its safe condition for operation.

- 1. The owner should recognize the inherent danger of the interface between the dock lift equipment and the freight carrier. The owner should, therefore, train and instruct operators in the safe use of the dock lift equipment and accessories in accordance with the manufacturer's recommendations.
- 2. The owner should thoroughly familiarize themselves with the following procedures and specifications as referenced in this manual, and request immediate replacement of all manufacturer-supplied documents that are missing, damaged, or otherwise illegible.
 Owners shall apply sound principles of safety, training, inspection, maintenance, and expected operating environment toward their dock lift equipment usage and maintenance requirements.
 - Commissioning instructions
 - · Operating instructions
 - · Daily maintenance procedures checklist
 - Inspections procedures
 - · Recommended spare parts lists
 - Upon receipt of any newly purchased dock lift equipment, the owner shall verify the presence of owner's manuals, operating placards, and any other documentation necessary for training dock personnel how to use the equipment safely and effectively.
- 3. All Blue Giant dock lift equipment shall undergo regularly scheduled planned maintenance. Maintenance requirements will vary according to usage frequency and application, so the owner shall contact with their authorized Blue Giant distributor for schedule recommendation. Written records of the performance of these procedures shall be kept as per warranty requirements and per local state or provincial requirements. Please see"7.0 MAINTENANCE" on page 17.
- 4. Any dock lift equipment that is structurally damaged, experiencing performance irregularities, or has been potentially compromised shall be removed from service until a trained and authorized manufacturer's representative can conduct an inspection and perform any necessary repairs.
- 5. As with any piece of machinery, dock lift equipment requires routine maintenance, lubrication, and adjustments. Recommended procedures are itemized in the Planned Maintenance Program (PMP) checklist included in installation and technical manuals. It is recommended that for anything other than the basic maintenance procedures outlined in this manual, please contact your Blue Giant Dealer.
- 6. The owner shall ensure that all nameplates and safety labels are in place and legible, and that the appropriate manuals are provided to authorized users. Replacement nameplates, safety labels, and manuals are available through the Blue Giant Aftermarket Department. See "9.0 DECAL IDENTIFICATION AND LOCATION" on page 31 in this manual for more information.
- 7. The owner or a trained and authorized representative shall verify that all freight carrier brakes have been applied and a vehicle restraint and/or wheel chocks properly engaged before cross-docking procedures begin. For safety reasons, trailers must be held securely in place to avoid accidental separation from the loading dock.
- 8. Unless specifically agreed to in writing by Blue Giant Equipment Corporation at the time of order (and prior to manufacture), all Blue Giant dock lift equipment is sold as a complete offering and must not be altered or added to in any manner (which includes configuration and function) without written permission from an authorized manufacturer's representative. These changes shall also satisfy all safety recommendations of the original equipment manufacturer for the particular application of the dock lift equipment.
- 9. If, at the request of the owner, Blue Giant does not supply all or some of the dock lift equipment power unit and/or control panel components, the owner shall assume responsibility for any and all operational and safety issues associated with the resulting configuration.
- 10. The owner must adhere to the load classification information provided on the product nameplate. Failure to do so will void product

LOW-PROFILE & SEMI-PORTABLE DOCK LIFT — OWNER'S MANUAL

warranty and can result in serious injury, including death.

- 11. Operational placard must be visible from equipment location and permanently attached to a wall or structure.
- 12. The owner shall ensure that inspections are performed to the lifting device as prescribed by law or regulation.

3.0 SAFETY MESSAGE COLOR IDENTIFICATION

This manual includes color-coded safety messages that clarify instructions and specify areas where potential hazard exists. To reduce the possibility of equipment damage and serious injury or death, please follow the instructions and understand the warnings contained in the messages. If warning decals become damaged or missing, replace them immediately. Avoid accidents by recognizing dangerous procedures or situations before they occur.

⚠ DANGER

Serious injury or death will likely occur if the instructions are not followed.

MARNING

Serious injury or death may occur if the instructions are not followed.

A CAUTION

Instructions marked caution concern safe operating procedure. Failure to comply may result in personal injury.

NOTICE

Procedures marked notice must be followed in order to reduce damage to machinery.

3.1 OPERATIONAL SAFETY WARNINGS

These are safety warnings that may be part of a procedure or hardware warning decal.

A DANGER

- Do not enter the pit area below the dock lift.
- BEFORE BEGINNING ANY SERVICE PROCEDURES:
 - Disconnect the power and follow all lockout / tagout procedures, as per OSHA requirements. Refer to wiring diagrams.
- Never operate a broken or damaged dock lift. Repair immediately by a qualified service technician.
- All loads must be centered and secured from rolling off the platform. Loose or unbalanced loads are dangerous.
- While transferring load across lip to truck bed or finished floor, be aware of potential fall risks from table and lip edges.

MARNING

- The lip hinge is a hazardous pinch point. Do not use fingers or hands to remove foreign materials.
- Hinged lips may drop unexpectedly, keep people and objects clear of the area immediately under or near the lip.
- Post safety warnings and barricade working area around the dock lift and at ground level (if pit opens to driveway) to reduce unauthorized use of the dock lift during maintenance/service.
- Dock Lift operator must be present during all steps of this procedure and keep an unobstructed view of dock lift to ensure safe operation. Never leave the dock lift unattended in the raised position.
- Never leave loads sitting on the dock lift.
- Do not use the dock lift if the lip's full width is not fully supported by at least four (4) inches (100 mm) of the vehicle load bed or floor.
- Do not operate the dock lift beyond its rated capacity. Before load transfers, verify the load does not exceed the single axle rolling load maximum rating as found on nameplate of the dock lift.
- Do not drive or walk onto the truck until it is parked against the dock bumpers and the wheels are chocked, or the vehicle restraint has been fully engaged.
- Never attempt to lift or hold the lip out by hand unless instructed by this manual and using caution. Serious personal injury could occur.
- Never remove the wheel chocks until loading/ unloading is finished and the truck driver has been given permission to depart.

A CAUTION

- Only trained personnel should operate or service this equipment.
- Do not operate the dock equipment until the transport vehicle is parked against the dock bumpers.
- Always park the dock lift equipment after use.
- Conduct routine inspections and maintenance. Failure to do so could cause equipment damage and or personal injury.
- Always contact your Blue Giant Dealer immediately if a malfunction occurs.

NOTICE

- Do not ground welding equipment to any electrical components.
- Do not attach welder as ground to dock lift platform when welding on base frame assembly. Attach welder ground to base frame assembly only.
- Do not allow the drill to go too deeply when drilling holes in the control box. Damage to the control systems may occur.
- Never use air to blow debris from control box. Use a vacuum to remove debris from control box.
- Do not connect green ground lead into control box until all welding has been completed.
- Always keep the work area clean and free of litter.
- Always clean all side openings of dirt and debris.
- Always clean all dirt and debris from the lip hinge.
- Always clean up dry and liquid spills immediately after they occur.
- Always maintain proper lighting in the work area.
- If a procedure is not clearly defined in this manual, contact your Blue Giant Dealer.

4.0 LOCKOUT / TAGOUT PROCEDURE AND RULES

In accordance with the rules and regulations of the Occupational Safety and Health Administration (OSHA) and/or local jurisdiction, all affected employees must be notified that the machine or equipment will be shut down and locked out to perform repair or maintenance work.

The work area must be checked to verify that all personnel have been removed or safely repositioned.

The machine or equipment power supply shall be locked in the OFF position or disconnected from the energy source.

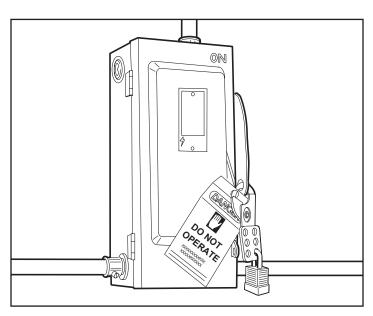
Blue Giant strongly recommends that only OSHA-approved and/or local jurisdiction lockout devices and procedures be utilized.

The energy isolating device must bear a prominent warning tag indicating that work is being done on the equipment and the name of the authorized employee responsible for the lockout.

It is mandatory that tagout notices shall NOT be susceptible to deterioration or illegibility due to weather conditions, exposure to chemicals and/or moisture.

AWARNING

Always lockout and tagout any power source before performing any work on any electrical devices or electrical controls according to OSHA regulations and approved local electrical codes. Refer to wiring diagrams.



An example of lockout / tagout. Verify and comply with local codes/ regulatory requirements.

4.1 ELECTROSTATIC SENSITIVE DEVICE PROTECTION POLICY

This policy applies to static sensitive electronic products primarily printed circuit boards (PCBs) and sensors. Switches, relay, lamps and wire are not sensitive and do not apply.

If welding near ESD components, correctly protect and ground all necessary equipment.

ATTENTION OBSERVE PRECAUTIONS FOR HANDLING **ELECTROSTATIC** SENSITIVE DEVICES

DO NOT DISCARD. Any components shipped back to Blue Giant must be in their original packaging (along with completed RGA form taped to the OUTSIDE of the static bag) or warranty may be voided. 038-850E

- Prior to handling PCBs, wear a static grounding wrist strap and clip it to an electrical ground. The metal plate on the inside of the wristband must be in contact with the wearers skin.
- PCBs should never be handed to other personnel or set down anywhere.
- Place PCBs in black ESD shielding bags for return or storage. Only one PCB or sensor should be placed in a static bag. Attach paperwork and other items to the outside with adhesive pouches or elastic bands.
- The control boxes protect the PCBs inside from static, and should not be used to store manuals or other accessories.

5.0 CONTROL STATION OPERATION

Depending on the specific installation, the control station may be mounted on a guard rail attached to the dock lift, on a separate guard post, or on an adjacent wall. See "8.0 OPERATING INSTRUCTIONS" on page 22 for more information.

5.1 PUSH BUTTON CONTROLS

This section describes the push button controls to operate the dock lift. For further options, see "13.2 SAFETY FEATURES" on page 43

DANGER

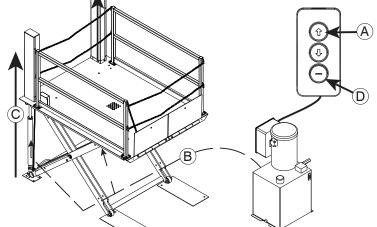
- While dock lift is moving, keep people and objects clear of areas under the platform and in the immediate dock lift area.
- Fully read and understand the dock lift operation. Practice safe load transfer methods. If you do NOT understand the complete dock lift operating procedure and safe load transfer methods (i.e. safe braking during transfer), refer to the Owner/Operator regarding local regulatory/jurisdictional and facility requirements.
- While transferring load across lip to truck bed or finished floor, be aware of potential fall risks from table and lip edges.

WARNING

- The operator(s) must be present during all steps of this procedure.
- The operator(s) must keep an unobstructed view of dock lift, any operation light/horn/bell, and other operators to ensure safe operation.
- Only one (1) rider/operator is permitted on the deck when dock lift is in motion.
- Do not exceed (rated/lifting) capacity or load classification of dock lift as listed on the manufacturer/product nameplate. Capacity includes: forklift/manual equipment, pallet(s), material(s)/goods, operator, and any other objects on the deck/platform. See "2.4 OWNER'S RESPONSIBILITY" on page 7. For nameplate location, see "9.0 DECAL IDENTIFICATION AND LOCATION" on page
- To avoid bodily injury, stand clear of dock lift while it is moving.
- Do not stand on, manually force, or apply weight to hinged lip unless it is supported by the ground or by a 4 in. (100 mm) minimum overlap with trailer bed.
- Never attempt to stand or apply weight to hinged lip if supported solely by lip chains.
- Hinged lips may drop unexpectedly, keep people and objects clear of the area immediately under or near the lip.
- All hinged lips must be in the raised position and chained to an on deck guardrail or post while the dock lift is in motion.
- All personnel restraint chains must be engaged, on the guard rail hooks, across any open sections of the deck while the dock lift is in motion.

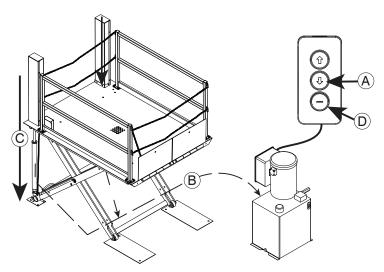
UP push button

The UP push button control starts the hydraulic Powerpack to apply pressure via the lift cylinders and raise the deck of the dock lift at a safe speed.



| Callout | Description | | | |
|---------|---|--|--|--|
| A | Press the UP push button | | | |
| В | Powerpack delivers oil to cylinders increasing hydraulic pressure | | | |
| С | Direction of Deck travel | | | |
| D | Key Interlock (if present) | | | |

• DOWN push button
The DOWN push button control opens the hydraulic pressure release valve to drain oil back into the oil reserve of the Powerpack. This causes the dock lift to lower at a controlled and safe speed.



| Callout | Description |
|---------|--|
| А | Press the DOWN push button |
| В | Powerpack releases oil back into reservoir and releases hydraulic pressure |
| С | Direction of Deck travel |
| D | Key Interlock (if present) |

6.0 SERVICE STAND SET-UP

This section describes the different functions of the Service Stand. These procedures require at least temporary electrical power for the Powerpack to raise and lower the dock lift.

6.1 ENGAGING THE DOCK LIFT SERVICE STAND

The Service Stand is engaged to perform servicing, repair, or diagnostic testing under the dock lift.

DANGER

- Failure to properly secure the dock lift deck prior to working underneath it may result in bodily injury, or death.
- Engage the Service Stand before working. If it cannot be successfully engaged, contact your Blue Giant Dealer.
- Never engage the Service Stand on the rolling end of the dock lift.

WARNING

- Post safety warnings and barricade work area at dock and ground level. Notify all affected personnel that work is being performed on the unit and follow proper lock-out procedure. Verify that power to the unit has been completely cut off and cannot be turned back on accidentally, as per OSHA requirement.
- It is recommended that this procedure be performed with assistance.
- Head protection and other applicable PPE is recommended when working under or around the raised deck.
- Service Stand must be used when working under the lift. (i.e. more than cleaning or visually inspecting)
- Install Service Stand only when the unit is sufficiently raised.

A CAUTION

It is recommended that this procedure be performed with assistance.

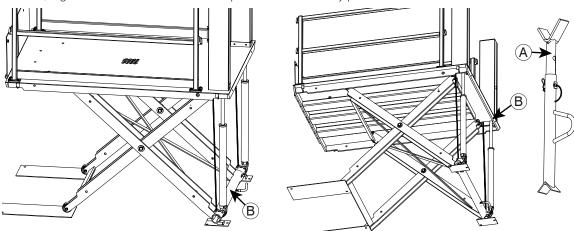
The dock lift MUST use Service Stand, during under-dock inspections or repairs / maintenance. If the rated capacity of the dock lift is 10,000 lbs (4536 kg) or greater, OR have a deck length longer than 108 in. (2743 mm), a second Service Stand must be used. Verify the number of Service Stands required before attempting to secure the deck.

To apply the Service Stand, one person raises the deck while another puts the Service Stand in place.

It is recommended that a retrieval tool be used when retrieving items beneath the dock.

This is a two person operation.

- Set the Service Stand for the required length, if it is adjustable.
- Slide the Service Stand in the vertical position between a lower frame cross beam and a lift deck edge/cross beam on the same side. Do NOT stand or hold any body parts under the lift is fully secured by the Service Stand.
- Test the firmness of the Service Stand as it holds the dock lift, if necessary use additional suitable blocking.
- Verify any Lockout/Tagout conditions or that the Powerpack is not electrically powered.



| Callout | Description |
|---------|---|
| A | Service Stand Part# 796-710-1; adjustable length 26 in. to 45 in. |
| В | Engage Service Stand here for fixed end top and bottom |

6.2 DISENGAGING THE DOCK LIFT SERVICE STAND

The Service Stand is disengaged after servicing, repair, or diagnostic testing under the dock lift.

A DANGER

- Failure to properly secure the dock lift deck prior to working underneath it may result in bodily injury, or death.
- Engage the Service Stand before working. If it cannot be successfully engaged, contact your Blue Giant Dealer.
- Never engage the Service Stand on the rolling end of the dock lift.

MARNING

- Post safety warnings and barricade work area at dock and ground level. Notify all affected personnel that work is being performed
 on the unit and follow proper lock-out procedure. Verify that power to the unit has been completely cut off and cannot be turned
 back on accidentally, as per OSHA requirement.
- It is recommended that this procedure be performed with assistance.
- Head protection and other applicable PPE is recommended when working under or around the raised deck.
- Service Stand must be used when working under the lift. (i.e. more than cleaning or visually inspecting)
- Install Service Stand only when the unit is sufficiently raised.

A CAUTION

It is recommended that this procedure be performed with assistance.

Verify the number of Service Stand(s) required before attempting to secure the deck.

- 1. When all work is completed and the area around the lift is cleared, an authorized person shall inform all affected personnel before removing the lock out and tag out from the electrical connections to the dock lift hydraulic Powerpack.
- 2. Press the **UP** push button to gently raise the lift off of the Service Stand.
- 3. Remove the Service Stand from the lift then inspect Service Stand for any damage.
- 4. Press the **DOWN** push button to lower the dock lift to ground or lowest height position then release the button.

7.0 MAINTENANCE

Develop a planned or scheduled maintenance plan to keep the dock lift in good operating order.

DANGER

- Failure to properly secure the dock lift deck prior to working underneath it may result in bodily injury, or death.
- Engage the Service Stand before working. If both cannot be successfully engaged, contact your Blue Giant Dealer.

WARNING

- Do not attempt to install, make repairs, or adjustments. Only a trained and authorized service technician should perform the installation process, make repairs, or make adjustments. Contact your Blue Giant Dealer for assistance.
- Do not service this equipment until you have read and understood all of the safety information and instructions contained herein. Failure to adhere to recommended safety practices in this manual and on the dock lift equipment warning labels could result in death or serious injury.
- Do not conduct maintenance or repairs until adequate barriers have been placed to keep warehouse and vehicle traffic away from the work area.
- Before doing any electrical work, verify that the power is disconnected and properly tagged or locked out.
- When conducting maintenance, use only Blue Giant approved lubricants. Improper lubrication or adjustments may cause operational problems.

7.1 PLANNED MAINTENANCE PROGRAM (PMP)

In addition to the Daily Maintenance Procedures (DMP), the manufacturer recommends (and local government regulations may require) that a Planned Maintenance Program (PMP) and safety inspection program be performed by a trained and authorized service technician on a regular basis to ensure the equipment is in safe operating condition. The PMP will provide an opportunity to make a thorough inspection of the safety and operating condition of the dock lift. Necessary adjustments and repairs can be done during the PMP, which will increase the life of components and reduce unscheduled downtime.

Recommended procedures for a periodic planned maintenance program that covers inspections, operational checks, cleaning, lubrication, and minor adjustments are outlined in the Owner's Manual for this product. Contact your Blue Giant Dealer regarding for assistance with a planned maintenance program by offering trained service personnel with expertise in dock lift maintenance requirements.

7.2 OPERATOR DAILY INSPECTION

The dock lift shall always be examined by the operator PRIOR TO ANY USE to verify that it is safe to operate.

The manufacturer recommends scanning to storage or making multiple photocopies of the DMP Checklist. The operator should fill out this form to keep a daily record of operation and maintenance issues. See "7.7 DAILY MAINTENANCE PROCEDURES (DMP) CHECKLIST" on page 19.

7.3 ROUTINE SERVICING AND MAINTENANCE

Regular maintenance and care of the dock lift is very important for operator safety, operation efficiency and cost. A faulty dock lift is a potential source of danger to the operator, and to other personnel working near it. As with all quality equipment, keep the dock lift in good operating condition by following the recommended schedule of maintenance. Failure to properly maintain or operate the dock lift within its rated load classification can void the manufacturer warranty.

7.4 PLANNED MAINTENANCE PROGRAM INTERVALS

Arrange for a qualified dock lift repair technician to perform regularly scheduled planned maintenance on your dock lift every three months for single shift operations or monthly for multi-shift operations. Call your authorized manufacturer / dealer for further details.

7.5 MAINTENANCE SEQUENCE

Follow this procedure for maintenance of the dock lift.

- Cleaning, including under lift and/or in pit area.
- Visual inspection of all components.
- Lubrication, as required (by a trained service technician only).

- Test operate all functions.
- Adjustments, if required (by a trained service technician only).
- If installed, check for missing or damaged dock bumpers. 6.
- Record inspection details and findings for owners' files.

7.6 CHECKING ROLLERS / BEARINGS

Each set of rollers and bearings needs to be inspected. This procedure requires at least two persons (one service technician plus one other person) to perform and a 5 foot crowbar.

DANGER

- Failure to properly secure the dock lift deck prior to working underneath it may result in bodily injury, or death.
- Engage the Service Stand before working. If it cannot be successfully engaged, contact your Blue Giant Dealer.

WARNING

- Do not attempt to install, make repairs or adjustments. Only a trained and authorized service technician should perform the installation process. Contact your Blue Giant Dealer.
- Do not service this equipment until you have read and understood all of the safety information and instructions contained herein. Failure to adhere to recommended safety practices in this manual and on the dock equipment warning labels could result in death or serious injury.
- Do not conduct maintenance or repairs until adequate barriers have been placed to keep warehouse and vehicle traffic away from the work area.
- Before doing any electrical work, verify that the power is disconnected and properly tagged or locked out.
- When conducting maintenance, use only Blue Giant approved lubricants. Improper lubrication or adjustments may cause operational problems.
- Without a load on the dock lift, raise the dock lift to sufficient height to deploy the Service Stand.
- Deploy the Service Stand to brace the lower frame and the lift deck edge. See "6.1 ENGAGING THE SERVICE STAND" on page 15.
- With the dock lift secure, use the 5 foot crowbar to manually pry up the lower cross beam nearest to the roller bearing to be inspected. 3.
- The service technician will inspect the rollers / bearings and verify that it spins freely and smoothly. If not, replace the rollers / bearings as required.
- Lower the rollers / bearings. 5.
- With the dock lift secure, use the 5 foot crowbar to manually pry down the upper cross beam nearest to the roller bearing to be inspected.
- 7. Inspect the upper rollers / bearings and verify that it spins freely and smoothly. If not, replace the rollers / bearings as required.
- When the inspection is complete. Follow the procedures to disengage the Service Stand. See "6.2 DISENGAGING THE SERVICE STAND" on page 16.

7.7 DAILY MAINTENANCE PROCEDURES (DMP) CHECKLIST

Use checklist to aid the daily maintenance inspection.

DANGER

- When repairing or conducting maintenance procedures on electrical components, perform lockout / tagout steps according to OSHA regulations and approved electrical codes.
- Prior to inspection, place adequate barriers to reduce unauthorized personnel and vehicle traffic from entering the work area.

CAUTION

All repairs and maintenance work are to be conducted by trained and authorized personnel ONLY.

Forward this checklist to the person responsible for dock equipment maintenance. See "Owner's Purchase Record" for Date in Service.

INSTRUCTIONS: Indicate "OK for USE" with a check mark ✓ in the appropriate box of each inspection point. Indicate "NOT OK for USE" with an x in the appropriate box of each inspection point.

| EVERY DAY (MAY BE PERFORMED BY OWNER OR ATTENDANT): | |
|---|---|
| Remove any debris that may have accumulated around the dock equipment and sweep any debris out of the lip hinge (if equipped). | |
| ☐ Verify complication-free operation of the dock equipment and the interior and exterior lights system (if installed). | |
| ☐ Verify that outside signage is present and legible (if equipped). | |
| Remove any potential trip hazards from around the dock area. | |
| ☐ Verify that dock bumpers/risers/extensions are in working condition (if equipped). | |
| ☐ Check curb angles for irregularities (e.g. concrete cracks). | |
| ☐ Verify that the overhead door is functioning correctly (if equipped). | |
| ☐ Verify that instructional caution and danger labels are present and legible on the product. Replace if necessary. | |
| ☐ Verify that vehicle restraint or wheel chocks at minimum are present and in working condition. | |
| ☐ Verify that lip chain(s) and personnel restraint chains (2 per opening) are present and that the hooks or clasps are not damaged. | |
| ☐ Verify that the bolted guardrails and posts are not damaged or missing. Inspect for damaged mid-rails or bottom kick plates. | |
| ☐ Verify that the push button station is not damaged and electrical cord is not frayed or has exposed wires. | |
| ☐ Verify if the hydraulic system has any leaks (oil drops/pooling), loose fittings, or cracked/rotted/sliced hoses. | |
| ☐ Verify if the dock lift has developed a tilt, any visible damage, or produces unusual noises while moving. | |
| ☐ Verify complication free operation of the equipment through a complete cycle (refer to Operation Placard). | |
| | _ |
| | _ |
| | |
| PRINT, SCAN TO STORAGE, OR PHOTOCOPY THIS CHECKLIST AND FILL OUT REGULARLY FOR YOUR RECORDS | |
| Explain faults briefly in the space provided below: | |
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| BLUE GIANT ® |
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| DI LIE CLANT FOUIDMENT CODDODATION |

| BLUE GIANT EQUIPMENT CORPORATION | | | | DEALER: | | | | | | | | | |
|---|------------|---------------|--|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|----|--|
| PLANNED MAINTENANCE PROGRAM - PM | | | MP CHECKLIST | | | | DOC | | | | OCK LIFTS | | |
| Customer: | | | | | | | SWO# | | | | | | |
| Location: | | | | | | | Date: | | | | | | |
| Contact: | | Telepho | ne: | | | | Inspect | ed By: | | | | | |
| Signature: | | Model / | Model / Serial #: | | | | Voltage: | | | Phase: HP: | |): | |
| NOTE TO TECHNICIAN: ALL ITEMS ON LIST MUST BE VERIFIED AND CHECKED. ITEMS WITH AN * REQUILUBRICATION. | IRE | Dock / Door # | | Dock / Door # | | Dock / Door # | | Dock / Door # | | Dock / Door # | | | |
| Barricade area | | | | | | | | | | | | | |
| Disconnect power per OSHA requirements | 3 | | | | | | | | | | | | |
| Clean debris from in and around dock lift | | <u> </u> | | | | | | | | | | | |
| Mark the following with one of the following ✓ = GOOD | g: | Dock / | Doo | r # | Dock / Door # | | Dock / Door # | | Dock / Door # | | Dock / Door # | | |
| x = COMMENTS / REQUIRES REPAIR | | | , | × | | × | | × | | × | | × | |
| Driver warning sign | | | | | | | | | | | | | |
| Pit or mount area | | | | | | | | | | | | | |
| Lip hinge * (If present) | | | | | | | | | | | | | |
| Drain (If equipped) | | | | | | | | | | | | | |
| Guard rails / pockets / mounts (If equipped | d) | | | | | | | | | | | | |
| Control / motion beacon / audible warnings (If equip.) | | | | | | | | | | | | | |
| Wire harness / cables | | | | | | | | | | | | | |
| Hydraulic hose assembly | | | | | | | | | | | | | |
| Cylinder | | | | | | | | | | | | | |
| Structural damage | | | | | | | | | | | | | |
| Safety trip bars (If present) | | | | | | | | | | | | | |
| Electrical connectors | | | | | | | | | | | | | |
| Lowering speed flow control (If present) | | | | | | | | | | | | | |
| Chains | | | | | | | | | | | | | |
| Leg rollers | | | | | | | | | | | | | |
| Scissor pin bushings * | | | | | | | | | | | | | |
| Service Stand | | | | | | | | | | | | | |
| Dock bumpers | | | | | | | | | | | | | |
| Check that operational placard present and legible | | | | | | | | | | | | | |
| Complete operating cycle by checking lights for proper sequence, both inside and outside if so equipped | | | | | | | | | | | | | |
| Unit Certified for Maximum Lift Capacity | Dock / Doc | or # | # Comments (for items marked with an X): | | | | | | | | | | |
| | | | | | | | | | | | | | |

The noted equipment has been checked, inspected and serviced by a trained technician.

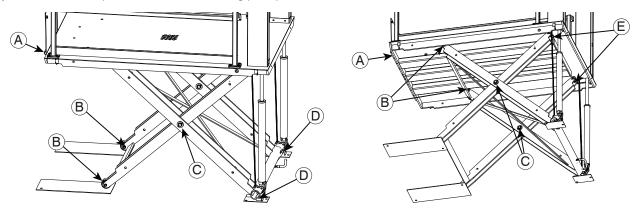
7.8 LUBRICATION POINTS AND POWERPACK RESERVOIR LEVEL

Only trained technicians should lubricate the dock lift and fill the Powerpack reservoir. Contact your Blue Giant Dealer regarding oil options.

WARNING

- Do not attempt to install, make repairs, or adjustments. Only a trained and authorized service technician should perform the installation process. Contact your Blue Giant Dealer.
- Do not service this equipment until you have read and understood all of the safety information and instructions contained herein. Failure to adhere to recommended safety practices in this manual and on the dock equipment warning labels could result in death or serious injury.
- Do not conduct maintenance or repairs until adequate barriers have been placed to keep warehouse and vehicle traffic away from the work area.
- Before doing any electrical work, make certain the power is disconnected and properly tagged or locked out, in accordance with OSHA regulations and approved electrical codes.
- When conducting maintenance, use only Blue Giant approved lubricants. Improper lubrication or adjustments may cause operational problems.

Apply lubricate at these points and on the matching pivot points on other side.



| Callouts | Description |
|----------|-----------------------|
| Α | Lip Hinge |
| В | Roller Pivots |
| С | Center Scissor Pivots |
| D | Frame / Leg Pivots |
| Е | Deck / Leg Pivots |

- Deploy the Service Stand to brace the lower frame and the dock lift edge. See "6.1 ENGAGING THE SERVICE STAND" on page 15.
- 2. Apply lubrication at the points shown in the illustration.

NOTE: It is recommended to use an oil can with an extended nozzle.

- Inspect and top up Powerpack reservoir,
 - If Powerpack is self-contained, inspect and fill the reservoir as required while dock lift has the Service Stand deployed. Do not overfill because overflow may occur when the deck is lowered.
 - If Powerpack is a remote model, inspect and fill reservoir while dock lift is in the lowered position.
- When the inspection is complete. Follow the procedures to disengage the Service Stand. See "6.2 DISENGAGING THE SERVICE STAND" on page 16.

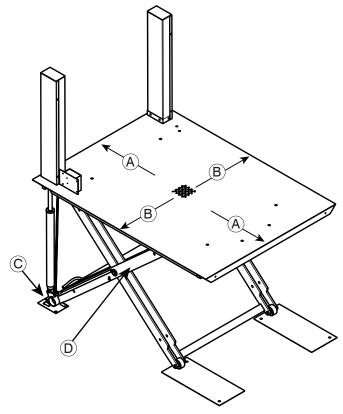
8.0 OPERATING INSTRUCTIONS

Follow the safe operating instructions to ensure personnel, load, and equipment safety.

8.1 LOAD TRANSFER

When transferring loads onto and off of a dock lift, the transfer vehicle and cargo weight distribution should NEVER exceed the maximum single axle load value on the weight rating decal. The dock lift weight rating decal lists the maximum single axle load values for travel along the length or width of the table. When transferring along the width of deck, always keep the weight evenly distributed on the deck section between the scissor legs (along Callout B).

NOTE: Illustration simplified for clarity; never operate unit without guard rails, lip(s) and all chains setup in full restraint positions.



| Callouts | Description | |
|----------|---|--|
| А | Transfer route along the length of the deck. See weight rating decal for specific loads. | |
| В | Transfer route along the width of the deck and always on the deck section between the scissor legs. See weight capacity decal for specific loads. | |
| С | Side C. | |
| D | Location of nameplate decal with load transfer capacity. | |

8.2 RAISING DOCK LIFT

This section describes the process for raising the dock lift. See "5.1 PUSH BUTTON CONTROLS" on page 13 for detailed instructions regarding dock lift controls.

DANGER

- While dock lift is moving, keep people and objects clear of areas under the platform and in the immediate dock lift area.
- Fully read and understand the dock lift operation. Practice safe load transfer methods. If you do NOT understand the complete dock lift operating procedure and safe load transfer methods (i.e. safe braking during transfer), refer to the Owner/Operator regarding local regulatory/jurisdictional and facility requirements.
- While transferring load across lip to truck bed or finished floor, be aware of potential fall risks from table and lip edges.

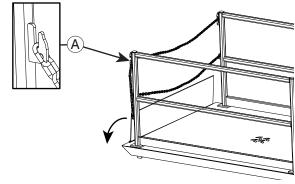
MARNING

- The operator(s) must be present during all steps of this procedure.
- The operator(s) must keep an unobstructed view of dock lift, any operation light/horn/bell, and other operators to ensure safe operation.
- Only one (1) rider/operator is permitted on the deck when dock lift is in motion.
- Do not exceed (rated/lifting) capacity or load classification of lift as listed on the manufacturer/product nameplate. Capacity includes: forklift/manual equipment, pallet(s), material(s)/goods, operator, and any other objects on the deck/platform. See "2.4 OWNER'S RESPONSIBILITY" on page 7. For nameplate location, see "9.0 DECAL IDENTIFICATION AND LOCATION" on page
- To avoid bodily injury, stand clear of dock lift while it is moving.
- Do not stand on, manually force, or apply weight to hinged lip unless it is supported by the ground or by a 4 in. (100 mm) minimum overlap with trailer bed.
- Never attempt to stand or apply weight to hinged lip if supported solely by lip chains.
- Hinged lips may drop unexpectedly, keep people and objects clear of the area immediately under or near the lip.
- All hinged lips must be in the raised position and chained to an on deck guardrail or post while the dock lift is in motion.
- All personnel restraint chains must be engaged, on the guard rail hooks, across any open sections of the deck while the dock lift is in motion.

Read and understand these instructions and safety rules before operating lift:

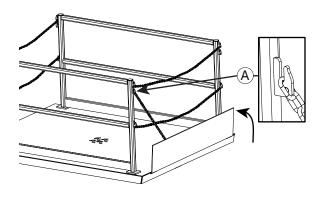
- · Before using dock lift, inspect it for proper operation and condition. If any unsafe condition exists, remove unit from service until repairs are made.
- Before using dock lift, inspect all safety devices (such as guard rails, personnel restraint chains, and toe guards) to verify that they are in place and functioning properly.
- Prior to placing a load on dock lift, read and understand the rated capacity of the unit, as labeled on the nameplate attached to the side of the deck assembly. The rated dock lift capacity is the maximum uniformly distributed load permitted for the unit. The unit capacity is down rated for rolling loads or loads concentrated on the lift end(s) or side(s). The down rated capacities are labeled on the nameplate.
- 1. Verify that the dock lift is readied for use. For example, the electrical power is **ON** to the Powerpack and the lift is in the lowered position without a lockout/tagout.
- Verify that the trailer is properly aligned to lift, restrained or chocked, and the trailer door is open.
- If present, verify that any entry (or building) side lip is unchained and manually lowered to the ground.

| Callout | Description |
|---------|---|
| | Unhook lip chain on entry or building side. |



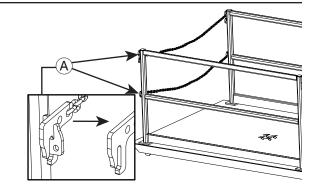
Verify that any exit (or trailer) side lip is chained and raised.

| Callout | Description |
|---------|---|
| | Hook lip chain on exit or trailer side. |

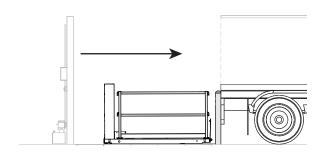


Remove entry (or building) side personnel restraint chains. If present, do the same for any interlock door or gate.

| Callout | Description |
|---------|--|
| А | Unhook personnel restraint chains on the entry or building side. |



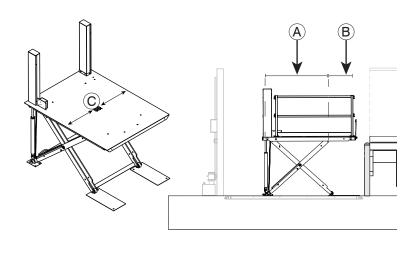
If job required, drive forklift or transfer device onto the deck of the dock lift.



7. Verify that the load is positioned on the deck between where the scissor legs will be in the raised position AND in the lateral (left/right) center of the deck. The center of gravity of the load must be between the two scissor legs otherwise deck tipping may occur during raising of the dock lift.

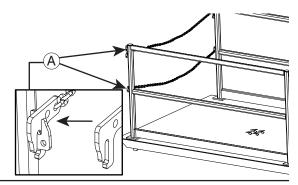
NOTE: Illustration simplified for clarity; never operate unit without guard rails, lip(s) and all chains setup in full restraint positions.

| Callout | Description |
|---------|--|
| А | Center of gravity of load shall be on this deck section, between the scissor legs, during the lift raising. |
| В | Center of gravity of load shall never be on this deck section, outside of the scissor legs, during lift raising. |
| С | Center of gravity of load should be laterally (L/R) centered on the deck. |



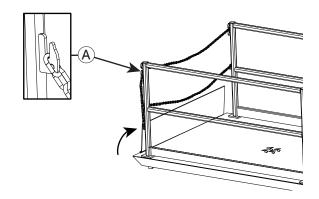
- If job required, park forklift or transfer device. Apply brakes or block transfer device/cart, and lower any load carried.
- Reattach the entry (or building) side personnel restraint chains. If present, do the same for any interlock door or gate on the entry side.

| Callout | Description |
|---------|---|
| | Hook personnel restraint chains, on the entry or building side. |



10. If present, verify that any entry (or building) side lip is manually raised and chained.

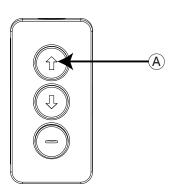
| Callout | Description |
|---------|---|
| | Hook lip chain on the entry or building side. |



11. On lift control, activate the key interlock (if present) then press and hold the **UP** push button to raise the deck.

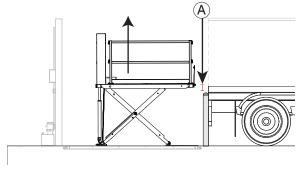
If present, any Powerpack mounted bell, acoustic warning, or visual warning beacon will operate while the lift is in motion.

| Callout | Description |
|---------|-----------------|
| Α | UP push button. |



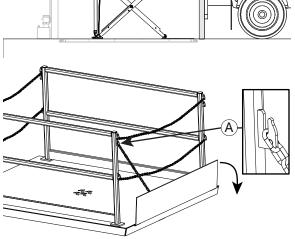
12. When deck is level with or slightly above trailer bed (by one (1) in. (25.4 mm) to two (2) in. (50.8 mm)), release the button. This provides a gentle lip slope that reduces crowning/obstructions or severe gaps. If present, the rolling stop guard will deploy.

| | 1 7 |
|---------|---|
| Callout | Description |
| | One (1) in. (25.4 mm) to two (2) in. (50.8 mm) gap. |



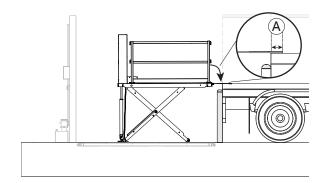
13. On the exit side, unchain and manually lower the lip onto the trailer bed.

| Callout | Description |
|---------|---|
| I . | Unhook lip chain on the exit or trailer side. |



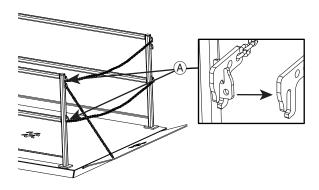
NOTE: Verify that the deck lip has a minimum of four (4) in. (102 mm) of overlap with the trailer bed.

| Callout | Description |
|---------|----------------------------------|
| A | Minimum 4 inch (100 mm) overlap. |

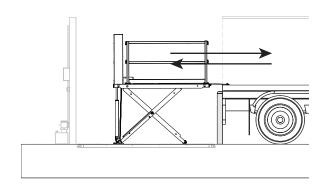


14. Remove exit (or trailer) side personnel restraint chains. If present, do the same for any interlock door or gate on the exit side.

| Callout | Description |
|---------|--|
| А | Unhook personnel restraint chains on the exit or trailer side. |



- 15. If job required, drive forklift or transfer device onto trailer.
- 16. Transfer load.



8.3 LOWERING DOCK LIFT

This section describes the process for lowering the dock lift. See "5.1 PUSH BUTTON CONTROLS" on page 13 for detailed instructions regarding dock lift controls.

DANGER

- While lift is moving, keep people and objects clear of areas under the platform and in the immediate dock lift area.
- Fully read and understand the lift operation. Practice safe load transfer methods. If you do NOT understand the complete dock lift operating procedure and safe load transfer methods (i.e. safe braking during transfer), refer to the Owner/Operator regarding local regulatory/jurisdictional and facility requirements.
- While transferring load across lip to truck bed or finished floor, be aware of potential fall risks from table and lip edges.

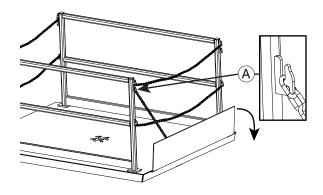
WARNING

- The operator(s) must be present during all steps of this procedure.
- The operator(s) must keep an unobstructed view of dock lift, any operation light/horn/bell, and other operators to ensure safe operation.
- Only one (1) rider/operator is permitted on the deck when dock lift is in motion.
- Do not exceed (rated/lifting) capacity or load classification of dock lift as listed on the manufacturer/product nameplate. Capacity includes: forklift/manual equipment, pallet(s), material(s)/goods, operator, and any other objects on the deck/platform. See "2.4 OWNER'S RESPONSIBILITY" on page 7. For nameplate location, see "9.0 DECAL IDENTIFICATION AND LOCATION" on page
- To avoid bodily injury, stand clear of dock lift while it is moving.
- Do not stand on, manually force, or apply weight to hinged lip unless it is supported by the ground or by a 4 in. (100 mm) minimum overlap with trailer bed.
- Never attempt to stand or apply weight to hinged lip if supported solely by lip chains.
- Hinged lips may drop unexpectedly, keep people and objects clear of the area immediately under or near the lip.
- All hinged lips must be in the raised position and chained to an on deck guardrail or post while the dock lift is in motion.
- All personnel restraint chains must be engaged, on the guard rail hooks, across any open sections of the deck while the dock lift is in motion.

Read and understand these instructions and safety rules before operating dock lift:

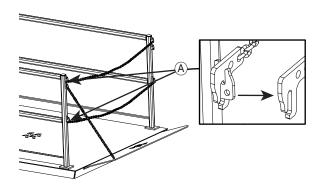
- · Before using dock lift, inspect it for proper operation and condition. If any unsafe condition exists, remove unit from service until repairs are made.
- Before using dock lift, inspect all safety devices (such as guard rails, personnel restraint chains, and toe guards) to verify that they are in place and functioning properly.
- · Prior to placing a load on dock lift, read and understand the rated capacity of the unit, as labeled on the nameplate attached to the side of the deck assembly. The rated dock lift capacity is the maximum uniformly distributed load permitted for the unit. The unit capacity is down rated for rolling loads or loads concentrated on the dock lift end(s) or side(s). The down rated capacities are labeled on the nameplate.
- Verify that the dock lift is readied for use. Power is **ON** and the lift is in the raised position without a lockout/tagout.
- 2. On the exit side, unchain and manually lower the lip.

| Callout | Description | |
|---------|---|--|
| | Unhook lip chain on the exit or trailer side. | |



Remove the exit (or trailer) side personnel restraint chains. If present, do the same for any interlock door or gate on the exit side.

| Callout | Description | | |
|---------|--|--|--|
| А | Unhook personnel restraint chains on the exit or trailer side. | | |



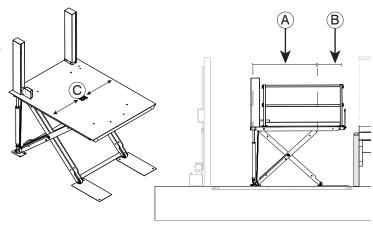
If job required, drive forklift or transfer device onto dock lift deck.

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Verify that the load is positioned on the deck between the scissor legs in the raised position AND in the lateral (left/right) center of the deck. The center of gravity of the load must be between the two scissor legs otherwise deck tipping may occur during the lowering of the lift.

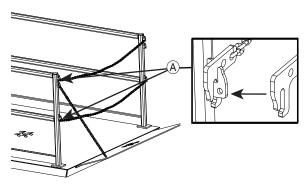
NOTE: Illustration simplified for clarity; never operate unit without guard rails, lip(s) and all chains setup in full restraint positions.

| rection permitted | | | | |
|-------------------|---|--|--|--|
| Callout | Description | | | |
| A | Center of gravity of load shall be on this deck section, between the scissor legs, during the lift lowering. | | | |
| В | Center of gravity of load shall never be on this deck section, outside of the scissor legs, during the lift lowering. | | | |
| С | Center of gravity of load should be laterally (L/R) centered on the deck. | | | |



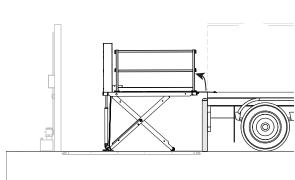
- If job required, park forklift or transfer device. Apply brakes or block transfer device/cart, and lower any load carried.
- Reattach exit (or trailer) side personnel restraint chains. If present, do the same for any interlock door or gate on the exit side.

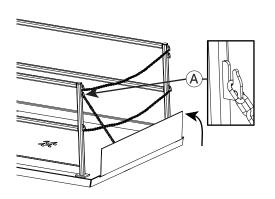
| Callout | Description | |
|---------|--|--|
| | Hook personnel restraint chains on the exit or trailer side. | |



Manually raise the deck lip then reattach the lip chain.

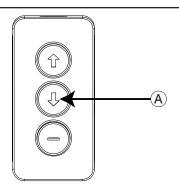
| Callout | Description | |
|---------|---|--|
| | Hook lip chain on the exit or trailer side. | |





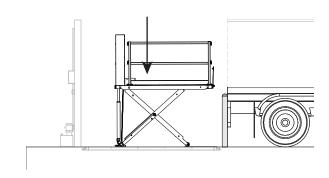
On lift control, activate the key interlock (if present) then press and hold the **DOWN** push button to lower the deck. If present, any Powerpack mounted bell, acoustic warning, or visual warning beacon will operate while the lift is in motion.

| Callout | Description | |
|---------|------------------|--|
| Α | DOWN push button | |



10. When deck is level with the building side floor or stops lowering, release the button.

If present, the rolling stop guard will retract.

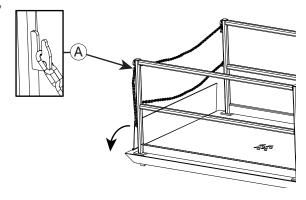


OPTIONS

To transfer from the deck to driveway level using a lip, the deck must be set at the correct height depending on the installation type:

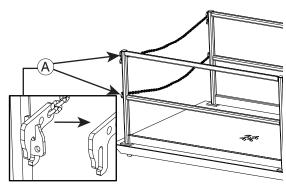
- Pit Mount with recessed lip: lower the deck until it is flush with the floor, as the lip fits into the lip recess cut then release button.
- Pit Mount without recessed lip or Surface Mount: When deck is slightly above the driveway (by one (1) (25.4 mm) to two (2) in. (50.8 mm)) then release the button. This provides a gentle lip slope that reduces crowning/obstructions or severe gaps.
- 11. If present, verify that any entry (or building) side lip is unchained and manually lowered to the ground.

| Callout | Description |
|---------|---|
| 1 | Unhook lip chain on the entry or building side. |

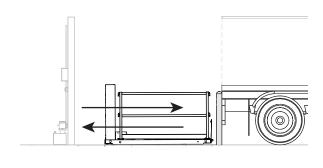


12. Remove entry (or building) side personnel restraint chains. If present, do the same for any interlock door or gate on the entry side.

| Callout | Description | |
|---------|--|--|
| | Unhook personnel restraint chains on the entry or building side. | |

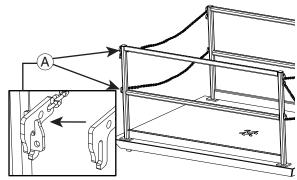


13. If job required, drive forklift or transfer device off of dock lift deck.



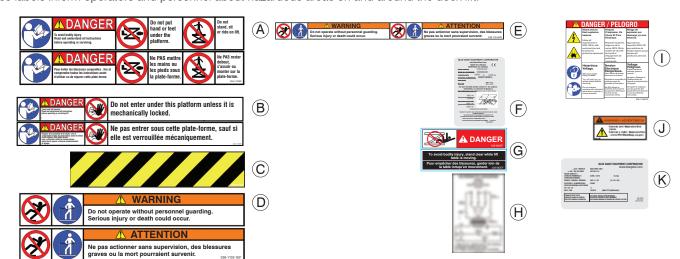
14. If transfer complete, reattach entry (or building) side personnel restraint chains. If present, do the same for any interlock door or gate on the exit side.

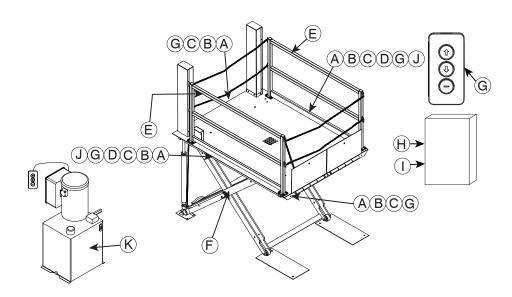
| Callout | Description | | |
|---------|--|--|--|
| | Hook personnel restraint chains on the entry or building side. | | |



9.0 DECAL IDENTIFICATION AND LOCATION

These labels inform operators and personnel about hazardous areas on and around the dock lift.





| Callout | Qty | Part No. | | Description |
|---------|-----------|--------------|-----|--|
| А | 4 | 038-1102 EF | | Warns personnel to read operating instructions before using the dock lift and warn of possible bodily injury |
| | | | ES | |
| В | 4 | 038-1101 | EF | Warns personnel to employ the Service Stand before working on and under the lift table |
| | | ES | | |
| С | 4 | 038-237 | | Safety Stripe tape to alert personnel of hazardous areas and edges (i.e. toe guards, edges) |
| D | 2 | 038-1103 1EF | | Warns personnel to use the original guard rails and other safety features when operating the lift. (i.e. Interlock |
| | | | 1ES | gate) (Located on the deck sides) |
| E | _ . , | | 2EF | Warns personnel to use the original guard rails and other safety features when operating the lift. (i.e. Interlock |
| | guardrail | 2ES | | gate) (Located on the original guard rails) |
| F | 2 | 038-1106EFS | | Nameplate to identify the dock lift, serial number, and load transfer capacities |
| G | 5 | 038-082 EF | | Warns personnel to stand clear of dock lift and the immediate area while it is in operation. Each decal has |
| | | | ES | an image half and a text half. Each half may be applied horizontally (side to side) along the table edge or vertically (one above another) along the table edge, depending on space available. |
| Н | 1 | 114-308 | | Wiring diagram for facility hookup (Keep in electrical box) (Sample only shown) |

LOW-PROFILE & SEMI-PORTABLE DOCK LIFT — OWNER'S MANUAL

| Callout | Qty | Part No. | Description |
|---------|-----|-------------|---|
| I | 1 | 038-1105EFS | Reminds personnel to lock out the electrical feeds before attempting work on the lift (on exterior of electrical box) |
| J | 2 | 038-1097ES | Proposition 65 Cancer and Reproductive Harm Warning - California only |
| K | 1 | 038-1107EFS | Rated dock capacity and electrics (Located on Powerpack) |

9.1 OPERATION PLACARD

The Operation Placard (Part. No. 038-545E) is to be wall mounted near the dock lift controls. A duplicate is provided on the following page.

A WARNING

APPLIES TO BLUE GIANT SCISSOR LIFTS

Do not operate this scissor lift without proper training and authorization.

READ AND UNDERSTAND THE FOLLOWING:

The instructions and warnings on this placard and in the owner's manual.

The warnings on the scissor lift decals.

Do NOT go under the scissor lift platform to clean or perform routine maintenance unless the Maintenance Strut and Service Stand are safely and securely engaged.

Prior to using the scissor lift:

- Verify that all safety devices (guard rails, restraint chains, toe guards, and warning bells-if equipped) are in place and functioning properly.
- Operate the scissor lift through one complete lift / lower cycle and verify its proper operation. Inspect the scissor lift for signs of structural damage or mechanical malfunction. If damage is observed or the unit fails to operate properly, remove them from service and notify maintenance personnel immediately.

Do NOT exceed the capacity as stated on the nameplate.

Ensure that the scissor lift serial nameplate is present and legible.

Do NOT leave the control station where it can be accidently operated or damaged.

Be aware that lift capacity may be reduced when loads are rolled over the platform sides or edges. Refer to the nameplate for reduced capacity under these conditions.

If loads are mobile, secure them in a fixed position before operating the scissor lift.

Lift operator(s) must be present during all steps of operation.

Lift operator(s) must keep an unobstructed view of lift, any operation light/horn/bell, and other operators to ensure safe operation.

Ensure that all personnel near the scissor lift are aware that it is being operated.

Keep objects, control cables, spills, possible trip hazards, and debris away from around or under the scissor lift platform/lip and its travel path.

If the scissor lift is equipped with a hinged bridge(s), the bridge must overlap the trailer bed by a minimum of 4" (102mm) before use. Do not use the bridge if it is supported solely by the lifting chain.

Hinged lips may drop unexpectedly, keep people and objects clear of the area immediately under or near the lip.

If maintenance or service is required:

- Only authorized service personnel shall provide maintenance / service on the lift.
- Follow approved lockout procedures.
- Do NOT work on or under the lift without properly engaging the lift's maintenance strut. Blue Giant recommends the use of a secondary means (serivce stand) of securing the scissor lift while preforming repairs under the deck.
- The lift shall not be modified or altered without written approval from an authorized Blue Giant representative.
- Maintain records of repairs and preventive maintenance reports.

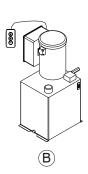


10.0 EQUIPMENT COMPONENT ILLUSTRATIONS

This section displays the various hardware components.

10.1 COMPONENTS AS SHIPPED CHECKLIST

This section displays the shipped hardware components.







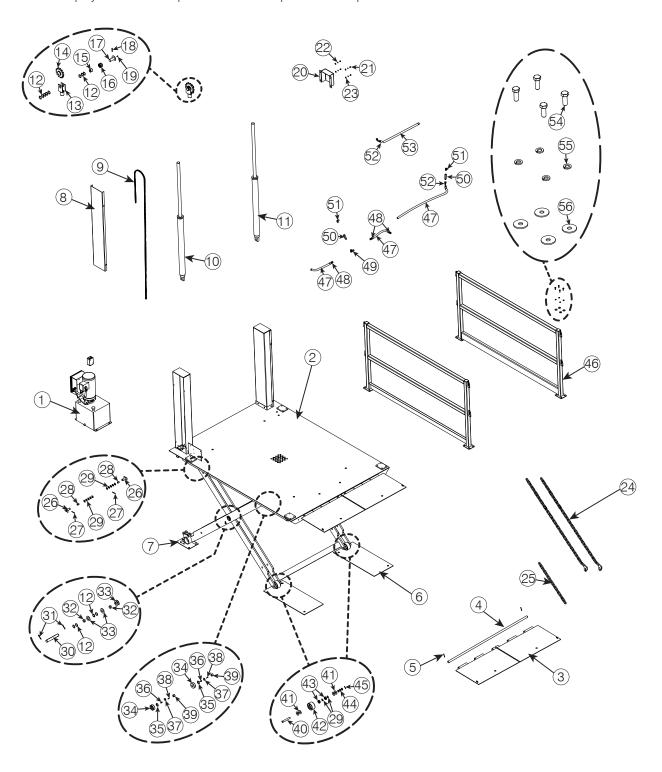




| ~ | CALLOUT | QTY. | PART NO. | DESCRIPTION | APPROX. WEIGHT | |
|---|---------|------|-----------------|---|-----------------|---|
| | Α | 1 | Model Dependent | Dock Lift | Varies by Model | |
| | В | 1 | Model Dependent | Remote Powerpack with Push Button Control Pendant | Varies by Model | |
| | С | 1 | 038-545E | Operation/Warning Placard | _ | _ |
| | D | 1 | 038-589EI | Installation Manual | _ | _ |
| | E | 1 | 038-589E | Owner's Manual | _ | _ |
| | F | 1 | 038-589EPL | Parts List | _ | _ |

10.2 MECHANICAL ASSEMBLY

This exploded view displays common components of the Low-profile & Semi-portable Dock Lift.



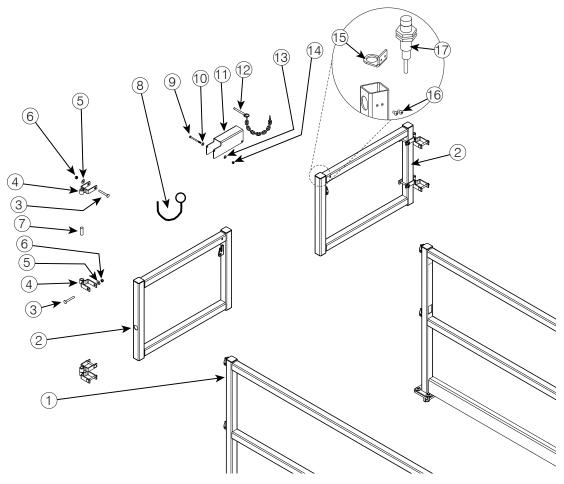
| ITEM | QTY | PART NO. | DESCRIPTION |
|------|-----|-----------------|---|
| 1 | 1 | Varies on Model | HYDRAULIC POWERPACK |
| 2 | 1 | Varies on Model | DECK WELD |
| 3 | 1 | Varies on Model | LIP PLATE WELDMENT |
| 4 | 1 | Varies on Model | LIP HINGE TUBE |
| 5 | 1 | 013-625 | LIP PIN |
| 6 | 2 | 105-487 | WEAR PLATE 32in X 14in X 1/4in THK |
| 7 | 2 | 796-926 | CRADLE PLATE 7"X 10"X 3/16" ED/SP |
| 8 | 2 | 103-806 | CYLINDER POST COVER |
| 9 | 2 | 090-051 | CHAIN #35, McMASTER # 7210K125 |
| 10 | 1 | 786-720 | CYLINDER ASSY (LEFT) 4-5# 2-1/2" DIA X 29.919 STROKE |
| 11 | 1 | 786-721 | CYLINDER ASSY (RIGHT) 4-5# 2-1/2" DIA X 29.919 STROKE |
| 12 | 24 | 105-882 | WASHER, FLAT 1-5/16in ID X 1-3/4in OD X 1/16in THK |
| 13 | 2 | 797-504 | BRACKET (4X3X3/8) |
| 14 | 2 | 105-645-1 | SPROCKET RAMTOP ASSEMBLY - MODIFIED |
| 15 | 2 | 018-649 | SHAFT LINER, 1-1/4ID X 1-1/2OD X 1-1/4W |
| 16 | 2 | 018-650 | NEEDLE ROLLER BEARING,1-1/2 SHAFT, 1-1/4W |
| 17 | 2 | 797-451-1 | PIN CROSS HEAD 1-1/4"OD X 3L, GREASE |
| 18 | 2 | 013-012 | SPRING PIN Ø1/4" X 2"L ZN PLATED |
| 19 | 2 | 019-500 | NIPPLE STRAIGHT GREASE 1/4" |
| 20 | 1 | 801-798 | COVER, 8 3/4in L X 7in W X 3in H |
| 21 | 4 | 010-148 | SCREW,CAP,HEX HD,1/4-20x0.375X0.375,-,NP |
| 22 | 4 | 012-202 | WASHER,LOCK,SPG,REGULAR,1/4,PREFERRED |
| 23 | 4 | 012-210 | WASHER,FLAT,ZN PLD,1/4,PREFERRED |

| ITEM | QTY | PART NO. | DESCRIPTION |
|------|-----------------|-----------------|---|
| 24 | Varies on Model | Varies on Model | LIP CHAIN |
| 25 | Varies on Model | Varies on Model | PERSONNEL RESTRAINT CHAIN(S) |
| 26 | 4 | 797-445 | FLANGE PIN ASSY 2" X 1-3/16" X 7GA |
| 27 | 4 | 013-012 | PIN,SPRING,SLOTTED,1/4X2,PREFERRED |
| 28 | 4 | 018-001 | BUSHING 3/4"ID X 7/8"OD X 3/4"L |
| 29 | 20 | 105-879 | WASHER,SHIM,3/4X1 3/16X1/16,NP |
| 30 | 2 | 103-935 | CENTER PIN 1-1/4in OD X 8-5/8in L |
| 31 | 4 | 013-082 | PIN,COTTER,1/4X2,PREFERRED |
| 32 | 4 | 018-025 | BUSHING FIBERGLIDE 1-1/4"ID X 1-13/32"OD X 3/4"L - CJS-2012 |
| 33 | 8 | 012-216 | WASHER, FLAT 1-5/16in ID X 2-3/4in OD X 5/32in THK |
| 34 | 4 | 105-225 | SCISSOR ROLLER 3"OD X 1"W |
| 35 | 4 | 106-389 | "WASHER, SPACER,1 ID X 1-3/4 OD X 1/16 THK" |
| 36 | 4 | 010-037 | HHCS 5/16-18 UNC X 3/4" GR5 |
| 37 | 4 | 107-038 | WASHER ROLLER 11/32"ID X 1-3/8"OD X 3/16"THK |
| 38 | 4 | 013-005 | SPRING PIN, 5/32in OD X 1in L |
| 39 | 4 | 018-051 | BUSHING FIBERGLIDE 1"ID X 1-1/8"OD X 3/4"L |
| 40 | 2 | 106-170 | AXLE, LOAD ROLLER 3/4in OD X 5-1/4in L |
| 41 | 8 | 012-214 | WASHER 3/4DIAx2ODx9/64THK |
| 42 | 2 | 100-103 | 4in OD LOAD WHEEL |
| 43 | 4 | 018-500 | BALL BEARING 3/4"ID X 1-5/8"OD X 7/16" |
| 44 | 6 | 105-880 | WASHER SPACER 1-3/16" OD X 3/4" ID X 1/8"THK |
| 45 | 2 | 013-011 | SPRING PIN 1/4in DIA X 1-3/8in L |
| 46 | Varies on Order | Varies on Model | GUARD RAIL |

| ITEM | QTY | PART NO. | DESCRIPTION |
|------|-----|--------------|---------------------------------------|
| 47 | 3 | 090-838-0120 | HOSE, #6 HIGH PRESSURE |
| 48 | 3 | 034-636 | SAE 37 DEG STRAIGHT SWIVEL |
| 49 | 1 | 034-579 | FITTING,TEE,JIC,MALE UNION,06-06-08 |
| 50 | 2 | 033-663 | VELOCITY FUSE 7.5 GPM |
| 51 | 2 | 034-599 | FITTING 90 6MP-4MP |
| 52 | 2 | 034-706 | FITTING |
| 53 | 1 | 090-385 | EMT, CONDUIT, 3/4X37 |
| 54 | 16 | 010-039 | HFBOLT 0.375-16x1x1-N |
| 54 | 16 | 012-201 | WASHER,LOCK,SPG,REGULAR,3/8,PREFERRED |
| 56 | 16 | 012-252 | WASHER,FLAT,3/8X1 1/4X1/10,PREFERRED |

GATE MECHANICAL ASSEMBLY

This exploded view displays common components of the dock lift.

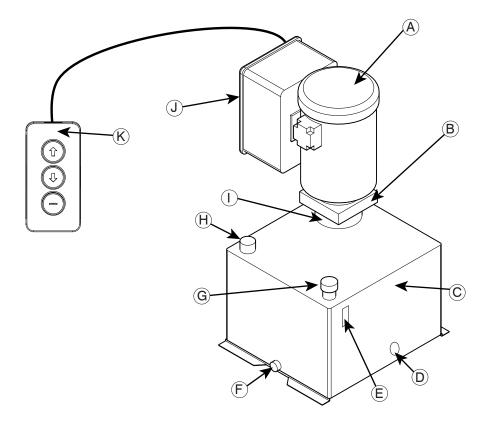


| ITEM | QTY | PART NO. | DESCRIPTION |
|------|-----------------|-----------------|---|
| 1 | Varies on Model | 2002783 | GUARD RAIL |
| 2 | 2 | Varies on Model | GATE |
| 3 | 8 | 014-075 | BOLT,CARRIAGE,3/8-16X3,NP |
| 4 | 4 | 2005978 | BRACKET, SQ. POST 2IN, FEMALE, 9GA |
| 5 | 16 | 012-252 | WASHER,FLAT,3/8,PREFERRED |
| 6 | 8 | 011-507 | NUT,HEX,3/8-16,PREFERRED |
| 7 | 4 | 2012452 | PIVOT PIN 5/8"D X 2"L |
| 8 | 1 | 013-632 | LANYARD, LOOP TO LOOP 12L |
| 9 | 1 | 011-141 | CAPSCREW, HEX HEAD, ZINC PLATE |
| 10 | 2 | 012-210 | WASHER,FLAT,ZN PLD,1/4,PREFERRED |
| 11 | 1 | 2005997-03 | LATCH, LOOP OVER GATE |
| 12 | 1 | 013-605 | PIN |
| 13 | 2 | 012-210 | WASHER,FLAT,ZN PLD,1/4,PREFERRED |
| 14 | 1 | 011-545 | NUT,HEX,NYLON,LOCK,1/4-20,PREFERRED |
| 15 | 1 | 2017380 | BRACKET, GATE SENSOR (Option) |
| 16 | 2 | 011-027 | SCREW, MACHINE P/H, ZP (Option) |
| 17 | 1 | 028-207-1 | PROXIMITY SENSOR, M18, 2-WIRE, M12 (Option) |

11.0 POWERPACK PART IDENTIFICATION

The assembly and parts of the Powerpack (Pit or Remote) are listed below for easy reference.

Refer to the electrical drawings for specific wiring requirements



| ITEM | QTY | DESCRIPTION |
|------|-----|----------------------------------|
| | 1 | Powerpack 3 HP |
| | 1 | Powerpack 5 HP |
| | 1 | Powerpack 7.5 HP |
| | 1 | Powerpack 10 HP |
| А | 1 | Motor |
| В | 1 | Manifold |
| С | 1 | Tank/Reservoir |
| D | 1 | Heater Port |
| E | 1 | Sight Glass Oil Level (Optional) |
| F | 1 | Drain |
| G | 1 | Tank/Reservoir Filler Breather |
| Н | 1 | Filler / Vent Hole |
| I | 1 | Pump (not shown) |
| J | 1 | Control Box |
| K | 1 | Push Button Control Pendant |

12.0 TROUBLESHOOTING

Use this section to help diagnose issues if the dock lift is not operating as specified.

DANGER

- Failure to properly secure the dock liftjust deck prior to working underneath it may result in bodily injury, or death.
- Engage the Service Stand before working. If both cannot be successfully engaged, contact your Blue Giant Dealer.

WARNING

- Do not attempt to install, make repairs, or adjustments. Only a trained and authorized service technician should perform the installation process, make repairs, or make adjustments. Contact your Blue Giant Dealer for assistance.
- Do not service this equipment until you have read and understood all of the safety information and instructions contained herein. Failure to adhere to recommended safety practices in this manual and on the dock lift equipment warning labels could result in death or serious injury.
- Do not conduct maintenance or repairs until adequate barriers have been placed to keep warehouse and vehicle traffic away from the work area.
- Before doing any electrical work, verify that the power is disconnected and properly tagged or locked out, in accordance with OSHA regulations and approved electrical codes.
- When conducting maintenance, use only Blue Giant approved lubricants. Improper lubrication or adjustments may cause operational problems.

The following description of operating principles is intended as a guide when trouble shooting and making adjustments or repairs. If no fault can be found and equipment fails to operate properly, contact your Blue Giant Dealer.

- Pressing the **UP** push button energizes the pump which supplies fluid under pressure to cylinder for lifting deck. A check valve (inside pump) prevents any back flow of oil through pump when it is shut off.
- Pressing the **DOWN** push button opens the solenoid lowering valve which allows fluid from cylinder to return to reservoir. Optional: the lowering speed controlled by a load lowering valve. Otherwise, the lowering speed is factory set for safe lowering and normally requires no further adjustment.
- A limit switch is used to control upward travel, it is electrically connected in series with the UP push button switch on a single push button station.
- Upward travel of the deck is limited by mechanical stops on the leg roller tracks of the lower frame (in some cases internal stops within cylinders are used to limit travel). These stops should never be used to position deck at intended raised height.
- Safety trip bars (optional) actuate limit switches which cut off power to solenoid lowering valve. Lowering valve closes and table stops descending. Adjustment is achieved by moving limit switch actuating arm. There should be between 1/4 in. (6 mm) and 1 in. (25 mm) vertical movement of trip bar to actuate any of trip bar switches and must be set to comply with MH29.1 standards.

| PROBLEM | PROBLEM CAUSED |
|--|---|
| Deck will not raise. | Foreign material lodged between side of deck and pit wall. Remove and discard foreign material as required. Equipment or goods parked on dock lift deck. Remove and test operate the lift. Verify dock lift capacity before resuming. Low hydraulic oil fluid in power unit. Damaged hose or other oil leak, repair and refill with approved hydraulic oil as required. Incorrect motor rotation: three phase power supply only. Contact qualified personnel to correct. Fuse and / or overload blown. Check fuse and / or overload reset. Filter may have blockages. Clean or replace suction filter. Valve may have blockages. Replace / repair if necessary. Pump not running at correct system pressure. Replace / repair if necessary. UP push button/open circuit. Check for open circuit in UP limit set improperly contact block or broken wire in harness. Wrong voltage. Check line voltage to nameplate voltage. Motor connected to high voltage connection on lower voltage feed. Check motor connection to nameplate. Control fuse blown. Replace. Interlock devices. Check all switches. Shipping bolts not removed. Remove. Hydraulic hose pinched. Check hose. |
| Lift table does not maintain steady height. | Oil leak may be present. Repair leak. Motor check valve is defective. Replace, if necessary. Down solenoid valve is defective. Replace, if necessary. |
| Lift table locked in "UP" position. When DOWN button is pushed, a click can be heard. | Velocity fuse locked. Contact your Blue Giant Dealer. If equipped, lowering speed valve closed. Open to set proper lowering speed. |
| Deck will not lower. No clicking sound heard when a button is pressed. | DOWN push button broken / open circuit. Check for open circuit in contact block, broken wire in harness, safety trip bar circuit (if equipped). Scissor leg bushings seized. Lowering valve defective. Replace. |

| PROBLEM | PROBLEM CAUSED |
|---|--|
| Deck raises slowly. | Pressure relief bypassing. Foreign material lodged between ball and seat. Contact your Blue Giant Dealer. Faulty Power Pack. Replace Power Pack. Weight overload. Remove weight to until load matches nameplate weight capacity rating. |
| Lip (if present) does not lower. | Lip plate bent causing hinge to bind. Repair and lubricate as required. Foreign material lodged in the lip hinge area. Clean thoroughly as required. Chain too short. Replace. |
| Lip will not lift. | Tubes dirty. Clean. Spring assist lip spring is damaged or missing. Replace spring. Chain is too long. Shorten chain. |
| Deck will not begin to raise immediately when motor begins to run. Usually occurs only after the deck cylinder hose has been replaced with a new hose that was not pre-filled with oil. | Air is trapped in the deck lifting cylinder. Bleed off the air. |
| Deck will not raise when UP push button is operated. Motor does not attempt to run, no sound is heard from motor/Powerpack/control box. | No power supply to control box. Trace electrical feed. Thermal overload tripped open. Reset. Faulty control box component (e.g. fuse, touch button, contactor, transformer). Repair/Replace. |
| Deck will not raise when push button is operated. Motor attempts to run, but power supply breaker switch trips to off position | Power supply circuit is overloaded by other equipment or components being used on a branch circuit controlled by the same breaker switch. The power supply line circuit must be upgraded to meet the requirements of the power unit. Wrong size feed supplied to Powerpack. |
| Deck lowering speed is too slow or too fast. | Deck speed not set correctly. Lowering speed adjustment required, if equipped. |
| Deck raises partially and stops. Motor continues to run and power unit makes more noise than normal | Oil level in reservoir is low. Fill oil reservoir with approved hydraulic oil. |
| Deck raises more slowly than normal and level in reservoir is normal | Pilot operated to close Check Valve (9) will not close. Replace. Faulty Powerpack. Replace. |
| Deck will not lower from fully raised position. Lip does lower | The fall-safe velocity fuse located at the bottom of the deck cylinder is in the locked or closed position. Replace. |

13.0 OPTIONAL EQUIPMENT

These components are available as additional options for the dock lift.

13.1 CUSTOM LIP CONFIGURATIONS

Dock Lift lips are available in several material types and actuation.

- Lip size and configuration extended length and multiple lips
- Aluminum lips
- Split lips
- Taper lip and custom shaped lips

13.2 SAFETY FEATURES

These features provide greater personnel protection and operating awareness.

- Layout options for floor and/or deck mounting of bolted guard rails
- · Keyed lock and E-Stop push button options on push button controls. Keyed lock provides greater security and access control. E-Stop provides protection for personnel and material.
- Warning bell to indicate dock lift in motion.
- Warning horn, with adjustable volume control, on Powerpack to indicate dock lift in motion.
- Flashing amber warning beacon on Powerpack to indicate dock lift in motion.
- · Factory set up travel limit switch limits the maximum vertical elevation of the dock lift.
- Accordion safety skirting acts as a barrier to keep under the dock lift clean and provide personnel awareness.
- Mechanical roll-off barrier to reduce incidents of personnel or material going off the dock lift during transfer.
- · Electric trip bars that stops the dock lift if any obstructions are sensed during lowering.
- · Swing gates, interlock swing gates, and folding gates to secure the transfer ends of the dock lift.

13.3 CONVENIENCE FEATURES

These features provide a benefit of easy maintenance, re-location, or use.

- Remote, post mounted, or bolted guard rail mounted push button controls permits greater convenience.
- Extension cord for push button controls. Cord length permits greater range of movement.
- · Coiled cord for push button controls. Cord reduces slacking and drooping.
- Twist plug cord for push button controls. Cord can be removed for storage and security.
- 24 VAC for faster facility integration.
- Return line oil filter to extend life parts and consumables.
- Low temperature oil improves lift function in colder environments.
- Immersion heater for oil reservoir improves lift function in colder environments.
- 3 HP to 10 HP remote power packs for different speed options.

