# **OWNER'S MANUAL**

# AIR-POWERED DOCK LEVELER



ACTUAL PRODUCT MAY NOT APPEAR EXACTLY AS SHOWN

# **A**WARNING

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



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# 1.0 ABOUT THE AIR-POWERED DOCK LEVELER WITH CONTROLS

The Air-Powered Dock Leveler combines Blue Giant's advanced, environmentally friendly air lifting system with the same durable structural design that has made Blue Giant a global leader in the design, manufacture, and distribution of loading dock systems. Supported by a minimum of eight heavy-duty J-beams, the Air-Powered Dock Leveler has a high-volume, low-pressure (HVLP) air lifting system that is both easy and ergonomic to operate. When activated via the single push-button control station, the air bag inflates, raising the deck and deploying the lip. After the button is released, the bag deflates, allowing the deck to lower smoothly onto the trailer bed. The Air-Powered Dock Leveler operates safely and efficiently under the toughest conditions: temperature extremes, heavy usage, and exposure to caustic substances. The deck compensates laterally when under load to allow a smooth cross-docking transition, minimizing the risk of worker injury and cargo or equipment damage. Mechanical fall-safe legs limit platform free-fall, providing an added degree of protection at the loading dock.

### 1.1 OWNER'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 levelers, dock safety equipment, accessories, ergonomic and scissor lift equipment, seals and shelters, and industrial trucks. Concurrent with a continuing product improvement program, specifications are subject to change without notice (See Section 2.2 "Exclusion of Liability" of this manual). Please contact the manufacturer for latest information. Some features illustrated may be optional in certain market areas.

### **NOTICE**

See "10.0 DECAL IDENTIFICATION AND LOCATION" on page 29 for serial number location.

## 2.0 INTRODUCTION

The following is a quick reference to important procedures that must be followed while using the Loading Dock Equipment. It is not intended to cover, or suggest that it does cover, all procedures necessary to ensure safe operation. All operators should be aware of and abide by all workplace safety regulations applicable to the operation of the Loading Dock. 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)

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



Loading Dock Equipment Manufacturers

A Product Section of Material Handling Industry of America

A Division of Material Handling Industry

8720 Red Oak Blvd, Suite 201

LOADING DOCK EQUIPMENT MANUFACTURE

Charlotte, NC, 28217-3992 Telephone: 704.676.1190 www.mhi.org/lodem

# 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.

NOTE. All products must be registered to quality for warranty.
DEALER INFORMATION
Name:
Contact:
Telephone:

### 2.2 EXCLUSION OF LIABILITY

The manufacturer assumes no liability for damage or injury to persons or property which occur as a result of defects or faults in or incorrect use of the Loading Dock Equipment. The manufacturer also assumes no liability for lost profits, operating downtimes, or similar indirect losses incurred by the purchaser. Injury to third parties, irrespective of its nature, is not subject to compensation.

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 notice. Please contact manufacturer for the latest information.

### 2.3 MANUFACTURER'S NOTE

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

- The owner should recognize the inherent danger of the interface between the dock equipment and the freight carrier. The owner should, therefore, train and instruct operators in the safe use of the dock equipment and accessories in accordance with the manufacturer's recommendations.
- 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 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 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 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. Dock 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 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 "10.0 DECAL IDENTIFICATION AND LOCATION" on page 29 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 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 equipment.
- 9. If, at the request of the owner, Blue Giant does not supply all or some of the dock 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 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 leveler 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 leveler.
- 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 leveler. Repair immediately by a qualified service technician.
- Loose or unbalanced loads are dangerous.
- While transferring load across lip to transport vehicle bed or finished floor, be aware of potential fall risks from the deck 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 leveler and at ground level (if pit opens to driveway) to reduce unauthorized use of the leveler during maintenance/service.
- Leveler operator must be present during all steps of this procedure and keep an unobstructed view of leveler to ensure safe operation. Never leave the dock leveler unattended in the raised position.
- Never leave loads sitting on the dock leveler.
- Do not use the dock leveler 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 leveler 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 leveler.
- 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 move leveler 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 leveler 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 leveler 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.

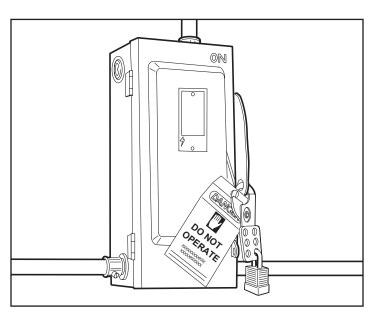
Blue Giant strongly recommends that only OSHA-approved and/or local jurisdiction lockout devices and procedures be utilized.

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.

## **A**WARNING

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.

# 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.

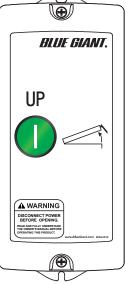
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- 1. Prior to handling PCBs, wear a static grounding wrist strap and clip it to an electrical ground. The metal plate on the inside of the wristband must be in contact with the wearers skin.
- 2. PCBs should never be handed to other personnel or set down anywhere.
- 3. 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.
- 4. 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**

Controls one individual dock leveler only, equipped with a constant-pressure 'UP' button. See "8.0 OPERATING INSTRUCTIONS" on page 21 for more information.

**NOTE:** Contactors come standard with control box.



### 5.1 PUSH BUTTON CONTROLS

'UP' button activates the dock leveler when pressed and held.

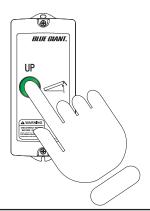
# **DANGER**

- While leveler is moving, keep people and objects clear of areas under the platform and in the immediate leveler area.
- Fully read and understand the leveler operation. Practice safe load transfer methods. If you do NOT understand the complete
  leveler 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 transport vehicle bed or finished floor, be aware of potential fall risks from deck and lip edges.

# **A**WARNING

- Leveler operator(s) must be present during all steps of this procedure.
- Leveler operator(s) must keep an unobstructed view of leveler, and other operators to ensure safe operation.
- Do not exceed (rated) capacity or load classification of leveler 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 "10.0 DECAL IDENTIFICATION AND LOCATION" on page 29.
- To avoid bodily injury, stand clear of leveler 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.

**NOTE:** Press and hold the pushbutton.



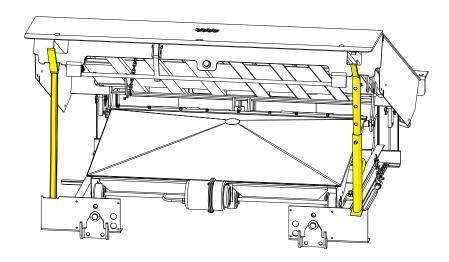
### 6.0 DOCK LEVELER STRUT AND STAND SET-UP

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

This dock comes with a one-piece maintenance stand that must be used during under-dock inspections or repairs / maintenance.

The V-shaped groove ensures safe headboard and lip support.

To apply the maintenance stand, one person raises the deck while another puts the stand in place and verifies that the deck and lip support. See the following procedures.



Maintenance Strut

Service Stand

Engaged Maintenance Strut (part # 2000659-1) and Service Stand (part # 796-711).

### **6.1 ENGAGING THE MAINTENANCE STRUT**

This section describes the deployment of the leveler Maintenance Strut.

# **DANGER**

- Failure to properly secure the dock leveler deck prior to working underneath it may result in bodily injury or death.
- Engage the Maintenance Strut before visual inspecting or cleaning under the deck. If the strut cannot be successfully engaged, contact your Blue Giant Dealer.

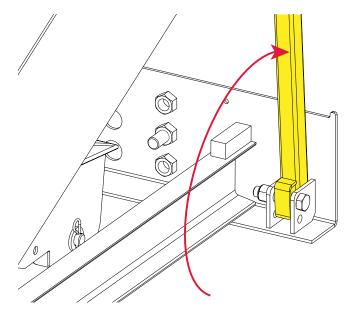
# **WARNING**

- 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.
- Head protection and other applicable PPE is recommended when working under or around the raised deck.
- Service Stand must be used with the Maintenance Strut when working under the leveler. (i.e. more than cleaning or visually
- Install Service Stand only when the Maintenance Strut is fully deployed.

# **CAUTION**

- It is recommended that a retrieval tool be used when retrieving or replacing the Maintenance Strut from its stored position
- It is recommended that this procedure be performed with assistance.
- Examine the Maintenance Strut for damage or if it is missing. Contact your Blue Giant Dealer for service or repair, as required.
- Clear any load or debris on the leveler's deck. 2.
- When the area around the dock leveler is clear of personnel, equipment, and materials, press and hold the **UP** push button to raise the leveler to a point where it is safe to deploy Maintenance Strut then release the push button.
- Flip or move the Maintenance Strut into the locked position. Only reach in far enough with a body part to move the Maintenance Strut.

**NOTE:** Reverse side of Maintenance Strut shown for clarity.



- Release the **UP** push button to lower the leveler until the Maintenance Strut is fully braced against the lower frame of the leveler.
- When the Maintenance Strut is fully braced and holding the leveler in position, an authorized person shall lock out and tag out the electrical connections to the leveler hydraulic Powerpack.
- 7. If safe to do so, use an extension tool to clear any debris or material from under the leveler.
- Inspect the leveler without being near, on, or placing yourself/anyone under the leveler (and pit, if present).

## 6.2 DISENGAGING THE MAINTENANCE STRUT

The Maintenance Strut is disengaged after a cleaning or visual inspection is completed under the dock leveler.

# DANGER

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

# **WARNING**

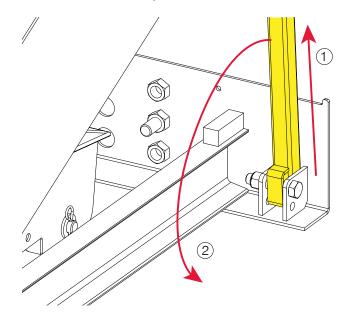
- Post safety warnings and barricade work area at dock and ground level. Notify all affected personnel that work is being performed on the unit and follow proper lock-out procedure. Verify that power to the unit has been completely cut off and cannot be turned back on accidentally, as per OSHA requirement.
- Head protection and other applicable PPE is recommended when working under or around the raised deck.
- Service Stand must be used with the Maintenance Strut when working under the leveler. (i.e. more than cleaning or visually inspecting)
- Install Service Stand only when the Maintenance Strut is fully deployed.
- Do not stand in the pathway of the dock leveler during the disengagement process in case the dock falls unexpectedly.

# **A** CAUTION

- It is recommended that a retrieval tool be used when retrieving or replacing the Maintenance Strut from its stored position
- It is recommended that this procedure be performed with assistance.

- After verifying that it is safe to disengage the maintenance stand, have someone press **UP** push button to gently raise the leveler off of the Maintenance Strut.
- 2. Once the deck and lip are clear of the maintenance strut, carefully lift up then push the maintenance strut back into the pit.

NOTE: Reverse side of Maintenance Strut shown for clarity.



- Do not stand in the pathway of the dock leveler during the disengagement process in case the dock falls unexpectedly. Examine the Maintenance Strut for damage or if it is missing. Contact your Blue Giant Dealer for service or repair, as required.
- When all work is completed and the area around the leveler is cleared, an authorized person shall inform all affected personnel before removing the lock out and tag out from the electrical connections.

# 6.3 ENGAGING THE SERVICE STAND

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

# **DANGER**

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

# **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 with the Maintenance Strut when working under the leveler. (i.e. more than cleaning or visually inspecting)
- Install Maintenance Strut and secondary Service Stand only when the unit is sufficiently raised.

# **A** CAUTION

- It is recommended that a retrieval tool be used when retrieving or replacing the Maintenance Strut from its stored position
- It is recommended that this procedure be performed with assistance.

The dock leveler may be equipped with a one (1) or two (2) Maintenance Strut(s) that MUST be used in conjunction with one (1) Service Stand, during under-dock inspections or repairs / maintenance. If the rated capacity of the dock leveler is 10,000 lbs (4536 kg) or greater, OR have a deck length longer than 108 in. (2743 mm), a second Maintenance Strut (or a second Service Stand) must be used. Verify the number of Service Stands required before attempting to secure the deck. (Blue Giant Part # 796-710)

### AIR-POWERED DOCK LEVELER —OWNER'S MANUAL

It is recommended that a retrieval tool be used when retrieving the Maintenance Strut from its stored position beneath the dock. This is a two person operation.

- 1. Set the Service Stand for the required length, if it is adjustable.
- 2. Follow the procedure to engage the Maintenance Strut before attempting to set up the Service Stand.
- 3. When the Maintenance Strut is full braced against the lower frame of the leveler, slide the Service Stand in the vertical position between a lower frame cross beam and a leveler deck edge/cross beam on the same side. Do NOT stand or hold any body parts under the leveler is fully secured by the Service Stand.
- 4. Test the firmness of the Service Stand as it holds the dock leveler, if necessary use additional suitable blocking if Maintenance Strut is inoperable.
- 5. Verify any Lockout/Tagout conditions or that the Powerpack is not electrically powered. When all work is completed and the area around the leveler is cleared, an authorized person shall inform all affected personnel before removing the lock out and tag out from the electrical connections.

### 6.4 DISENGAGING THE SERVICE STAND

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

# **A** DANGER

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

# **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.
- Head protection and other applicable PPE is recommended when working under or around the raised deck.
- Service Stand must be used with the Maintenance Strut when working under the leveler. (i.e. more than cleaning or visually inspecting)
- Install Maintenance Strut and secondary Service Stand only when the unit is sufficiently raised.
- Do not stand in the pathway of the dock leveler during the disengagement process in case the dock falls unexpectedly.

# **A** CAUTION

- It is recommended that a retrieval tool be used when retrieving or replacing the Maintenance Strut from its stored position.
- It is recommended that this procedure be performed with assistance.

The dock leveler may be equipped with a one (or two) piece Maintenance Strut(s) that must be used, in conjunction with a Service Stand, during under-dock inspections or repairs / maintenance.

Depending on dock leveler size and capacity, a second Maintenance Strut may be used. 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 leveler is cleared, an authorized person shall inform all affected personnel before removing the lock out and tag out from the electrical connections to the leveler hydraulic Powerpack.
- 2. Have one person press and hold the **UP** push button to gently raise the leveler off of the Maintenance Strut and Service Stand.
- 3. Remove the Service Stand from the leveler then inspect Service Stand for any damage.
- 4. Follow the procedure to disengage the Maintenance Strut then leave it in the stored position. Use an extension tool (i.e. broom handle or wood) to move the Maintenance Strut. As much as possible, never reach in with a body part to move the Maintenance Strut.
- 5. Examine the Maintenance Strut for damage or if it is missing. Contact your Blue Giant Dealer for service or repair, as required.
- 6. When all work is completed and the area around the leveler is cleared, an authorized person shall inform all affected personnel before removing the lock out and tag out from the electrical connections.

### **7.0 MAINTENANCE**

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

# **DANGER**

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

# **A**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 leveler 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 leveler. 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 leveler maintenance requirements.

### 7.2 OPERATOR DAILY INSPECTION

The dock leveler 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 "7.6 DAILY MAINTENANCE PROCEDURES (DMP) CHECKLIST" on page 19.

### 7.3 ROUTINE SERVICING AND MAINTENANCE

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

### 7.4 PLANNED MAINTENANCE PROGRAM INTERVALS

Arrange for a qualified dock leveler repair technician to perform regularly scheduled planned maintenance on your dock leveler 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 leveler.

- 1. Cleaning, including under leveler and/or in pit area.
- 2. Visual inspection of all components.

### AIR-POWERED DOCK LEVELER —OWNER'S MANUAL

- 3. Lubrication, as required (by a trained service technician only).
- Test operate all functions. 4.
- Adjustments, if required (by a trained service technician only). 5.
- If installed, check for missing or damaged dock bumpers. 6.
- Record inspection details and findings for owners' files.

Blue Giant has the following hydraulic oils available:

PART NO.	DESCRIPTION
091-031	Standard hydraulic oil, MV22
090-624	Hydraulic arctic oil, MV15
091-286	Hydraulic biodegradable oil, BIO 40

NOTICE
Use of other oil products may damage equipment

Transportation laws classify these oils as hazardous material, so they cannot be shipped to customers. Pick-up purchases only. If assistance is needed to locate a source of hydraulic oil for Blue Giant dock equipment, contact a local Blue Giant dealer.

# 7.6 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.

# **A**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.
□ 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).
Check backframe 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 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 complication-free operation of the SP1 / SP2 / Blue Genius™ Control Panel (whichever is equipped)
☐ Verify if the dock leveler 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).
☐ Verify that the Maintenance Strut is functional.
SCAN TO STORAGE OR PHOTOCOPY THIS CHECKLIST AND FILL OUT REGULARLY FOR YOUR RECORDS.
Explain faults briefly in the space provided below:



Customer:						SWO#					
Location:						Date:					
Contact:	Telepho	ne:			Inspect	ed By:					
Signature:	Model /	Serial #:			Voltage:		Phase:		HP:		
NOTE TO TECHNICIAN: ALL ITEMS ON LIST MUST BE VERIFIED AND CHECKED. LUBRICATE ITEMS WITH *		Dock / Door #		Dock / Door #		Dock / Door #		Dock / Door #		Dock / Door #	
Barricade area											
Disconnect power per OSHA requirements											
Clean debris from in and around dock leveler											
Clear debris from dock leveler hinges											
Remove any debris preventing leveler operation											
Mark the following with ✓ or X or N/A  ✓ = GOOD /  X = COMMENTS / REQUIRES REPAIR	•	×	V	x	•	×	•	×	•	×	
Driver warning sign											
Pit area / curb angles											
Deck rear hinges / front lip hinges*											
Deck strut											
Sensors / switches secure and in good condition											
Deck pivots and pins *											
Lip shock absorber / clevis and pins*											
Structural welds (deck, lip, tubes, frame)											
Fail-Safe Tension Spring				-							
Safety skirts											
Wiring / controls electrical connections											
Leaks: connections / hoses / airbag											
Dock bumpers / extensions / foundation wall											
Home position sensor / switch											
Operational placard present and legible											
Wheel chock  If equipped, complete operating cycle by checking lights for proper sequence, both inside and outside including exterior driver warning sign											
Dock / Door # Comments (for ite	ms mar	ked wi	th an 、	·):							

Part # 038-1193E

### 8.0 OPERATING INSTRUCTIONS

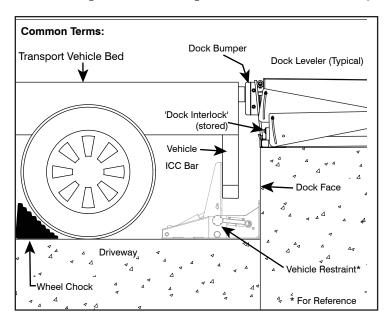
Follow the safe operating instructions to ensure personnel, load, and equipment safety.

### 8.1 FUNCTIONAL DESCRIPTION

The Dock Leveler Dock Leveler serves as a bridge between a loading dock floor and a transport vehicle bed. The leveler's upper deck plate, complete with a hinged, vertically hanging lip, is in a shallow pit at the edge of the dock, flush with the dock's edge and the floor surface.

After the door has been opened, the rear of a transport vehicle is parked and restrained in place against the outer wall of the loading dock, in working alignment with the dock leveler. To activate the dock leveler, press the 'UP' button on the control station. The air bag will inflate, raising the deck.

Once the lip extends, release the button. The bag will deflate, allowing the deck to lower onto the transport vehicle bed.



# 8.2 DEPLOYING THE DOCK LEVELER LOADING/UNLOADING

This section describes the process for raising the leveler. See "5.1 PUSH BUTTON CONTROLS" on page 12 for detailed instructions regarding dock leveler controls.

# **⚠** DANGER

- While leveler is moving, keep people and objects clear of areas under the platform and in the immediate leveler area.
- Fully read and understand the leveler operation. Practice safe load transfer methods. If you do NOT understand the complete leveler 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 transport vehicle bed or finished floor, be aware of potential fall risks from the deck and lip edges

# **MARNING**

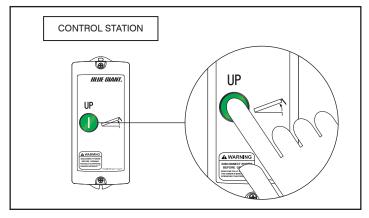
- Dock leveler operator(s) must be present during all steps of this procedure and must keep an unobstructed view of leveler, any operation light, and other operators to ensure safe operation.
- Do not exceed (rated) capacity or load classification of leveler as listed on the manufacturer/product nameplate. 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 "10.0 DECAL IDENTIFICATION AND LOCATION" on page 29.
- Do not operate this leveler unless you have been trained and authorized to do so, and have read and understood all of the safety information and instructions contained herein.
- Verify visually on the Blue Genius Control Panel and around the dock area that all doors (facility, trailer, or vehicle), paths, and interlocks (if present) required for load transfer are fully open, unobstructed, and functioning BEFORE operating the dock leveler. Do not enter the area around, under, or be on the dock leveler if it is in motion.
- Do not operate this leveler until you have checked its condition. Report the need for repairs to your supervisor immediately and do not operate the unit until repairs are made. Neglect may cause a minor repair to become a major service problem and cause the leveler to become unsafe.
- Confirm brakes have been set and air has been removed from the air-ride suspension (if applicable).
- Never try to lift or move any part of the dock leveler manually.
- Do not drive on the leveler unless the lip is securely on the transport vehicle bed and has a minimum of 4" (102mm) overlap on its surface.
- Do not exceed 4 mph when driving over the dock leveler.
- Do not drive over edges of the leveler and / or dock bumper blocks (bumpers blocks are not structural)

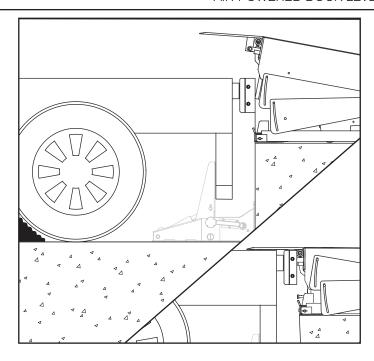
Read and understand these instructions and safety rules before operating leveler:

- Before using leveler, inspect it for proper operation and condition. If any unsafe condition exists, remove unit from service until
  repairs are made.
- Before using leveler, inspect all safety devices (such as toe guards, fall-safe legs) to verify that they are in place and functioning properly.
- Prior to placing a load on dock leveler, read and understand the rated capacity of the unit, as labeled on the nameplate attached to the side of the deck assembly. The rated leveler capacity is the maximum uniformly distributed load permitted for the unit.

### a. Deck level or at greater height

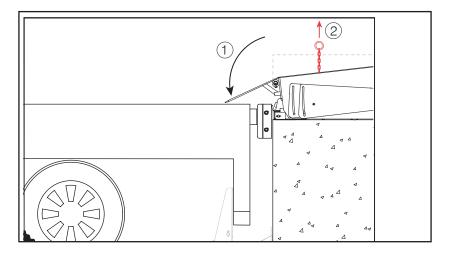
- Verify that the leveler is readied for use. For example, the electrical power is **ON** to the leveler is in the lowered position without a lockout/tagout.
- 2. Verify that the trailer is properly aligned to leveler, restrained **AND/OR** chocked, and the trailer door is open.
- 3. Raise the dock leveler by press and holding the '**UP**' button. If the button is still pressed while the dock is in its fully raised position, the lip will then deploy.
- 4. When lip is fully deployed, release holding '**UP**' button then the dock leveler will then descend with the deployed lip on the vehicle load bed. When the dock has fully deployed on the load bed, loading and unloading may commence.
- 5. After ensuring that there is a minimum overlap of 4" (102mm) between the dock leveler lip and the transport vehicle bed, begin loading or unloading.





### a. Deck below level height

- 1. After the truck has been chocked **AND/OR** restrained in place, press and hold the '**UP**' push button until the lip fully deploys.
- When the lip has fully deployed, release the 'UP' push button.
- 3. While the deck is lowering to 1in. (25.4 mm) or more below the horizontal level and the lip will make 4in. (102 mm) contact on the transport vehicle bed, pull the fall-safe disengaging chain on the deck to temporarily retract the fall-safe legs.
  - NOTE: See Air-Powered Dock Leveler Installation Manual (Part#038-1206EI) or site papers for Operating Ranges.
- When below level loading is complete, press and hold the 'UP' button until the deck is raised and the lip is fully clear of transport vehicle bed.
- Release the 'UP' button until the lip clears the night lock and then release. The deck will fall back into the stored position.



### 8.2 STORING THE DOCK LEVELER

This section describes the process for returning the leveler to the stored position. See "5.1 PUSH BUTTON CONTROLS" on page 12 for detailed instructions regarding dock leveler controls.

# DANGER

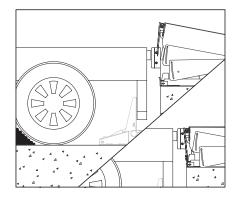
- While leveler is moving, keep people and objects clear of areas under the platform and in the immediate leveler area.
- Fully read and understand the leveler operation. Practice safe load transfer methods. If you do NOT understand the complete leveler operating procedure and safe load transfer methods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

# **MARNING**

- Dock leveler operator(s) must be present during all steps of this procedure and must keep an unobstructed view of leveler, any operation light, and other operators to ensure safe operation.
- Do not exceed (rated) capacity or load classification of leveler 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 "10.0 DECAL IDENTIFICATION AND LOCATION" on page 29.
- Do not operate this leveler unless you have been trained and authorized to do so, and have read and understood all of the safety information and instructions contained herein.
- Verify visually on the Blue Genius Control Panel and around the dock area that all doors (facility, trailer, or vehicle), paths, and interlocks (if present) required for load transfer are fully open, unobstructed, and functioning BEFORE operating the dock leveler. Do not enter the area around, under, or be on the dock leveler if it is in motion.
- Do not operate this leveler until you have checked its condition. Report the need for repairs to your supervisor immediately and do not operate the unit until repairs are made. Neglect may cause a minor repair to become a major service problem and cause the leveler to become unsafe.
- Confirm brakes have been set and air has been removed from the air-ride suspension (if applicable).
- Never try to lift or move any part of the dock leveler manually.
- Do not drive on the leveler unless the lip is securely on the transport vehicle bed and has a minimum of 4" (102mm) overlap on its surface.
- Do not exceed 4 mph when driving over the dock leveler.
- Do not drive over edges of the leveler and / or dock bumper blocks (bumpers blocks are not structural)

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

- · Before using leveler, inspect it for proper operation and condition. If any unsafe condition exists, remove unit from service until repairs are made.
- Before using leveler, inspect all safety devices (such as toe guards, fall-safe legs) to verify that they are in place and functioning properly.
- Prior to placing a load on leveler, read and understand the rated capacity of the unit, as labeled on the nameplate attached to the side of the deck assembly. The rated leveler capacity is the maximum uniformly distributed load permitted for the unit.
- To store the dock leveler, press and hold the 'UP' button. The dock will raise and the lip will retract.
- When the lip has fully retracted, release the button. The dock will resume the stored position with the lip in the night lock.
- Disengage the vehicle restraint (if applicable) and / or remove the wheel chocks, allowing the truck to depart.



### 8.3 END LOADING

This section describes the process for end loading. See "5.1 PUSH BUTTON CONTROLS" on page 12 for detailed instructions regarding dock leveler controls.

# **DANGER**

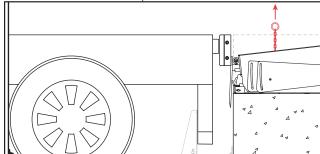
- While leveler is moving, keep people and objects clear of areas under the platform and in the immediate leveler area.
- Fully read and understand the leveler operation. Practice safe load transfer methods. If you do NOT understand the complete leveler operating procedure and safe load transfer methods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

## WARNING

- Dock leveler operator(s) must be present during all steps of this procedure and must keep an unobstructed view of leveler, any operation light, and other operators to ensure safe operation.
- Do not exceed (rated) capacity or load classification of leveler 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 "10.0 DECAL IDENTIFICATION AND LOCATION" on page 29.
- Do not operate this leveler unless you have been trained and authorized to do so, and have read and understood all of the safety information and instructions contained herein.
- Verify visually on the Blue Genius Control Panel and around the dock area that all doors (facility, trailer, or vehicle), paths, and interlocks (if present) required for load transfer are fully open, unobstructed, and functioning BEFORE operating the dock leveler. Do not enter the area around, under, or be on the dock leveler if it is in motion.
- Do not operate this leveler until you have checked its condition. Report the need for repairs to your supervisor immediately and do not operate the unit until repairs are made. Neglect may cause a minor repair to become a major service problem and cause the leveler to become unsafe.
- Confirm brakes have been set and air has been removed from the air-ride suspension (if applicable).
- Never try to lift or move any part of the dock leveler manually.
- Do not drive on the leveler unless the lip is securely on the transport vehicle bed and has a minimum of 4" (102mm) overlap on its surface.
- Do not exceed 4 mph when driving over the dock leveler.
- Do not drive over edges of the leveler and / or dock bumper blocks (bumpers blocks are not structural)

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

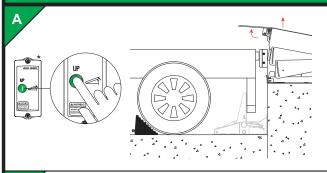
- Before using dock leveler, inspect it for proper operation and condition. If any unsafe condition exists, remove unit from service until repairs are made.
- Before using leveler, inspect all safety devices (such as toe guards, fall-safe legs) to verify that they are in place and functioning properly.
- Prior to placing a load on leveler, read and understand the rated capacity of the unit, as labeled on the nameplate attached to the side of the deck assembly. The rated leveler capacity is the maximum uniformly distributed load permitted for the unit.
- After the truck has been chocked AND/OR restrained in place, press and hold the 'UP' push button until the lip clears the night lock by approximately 6-10" (150-255mm).
- When the lip has cleared the lip keepers, release the 'UP' push button.
- While the deck is lowering, pull the fall-safe disengaging chain on the deck to partially extend the lip and to lower to the below level position, with the lip hanging between the dock face and the transport vehicle bed.



When end loading is complete, resume normal leveler operation by pressing and hold the 'UP' button until the deck is raised and the lip is fully clear of the night locks. The deck will fall back into the stored position.

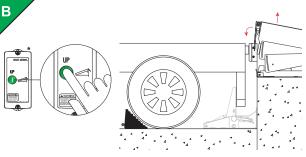
# **OPERATING INSTRUCTIONS**

Only for Single Push Button Dock Levelers





- Raise the leveler by pressing the 'UP' button. Continue holding the 'UP' button until the leveler is in its fully raised position, at which time the lip will deploy.
- Release the 'UP' button once the lip has fully deployed. The leveler will then descend with the deployed lip on the vehicle load bed. When the leveler has fully deployed on the load bed, loading and unloading may commence.





### STORING THE DOCK LEVELER

- 1. To store the leveler, press the 'UP' button. The leveler will raise and the lip will retract.
- 2. When the lip has fully retracted, release the button. The leveler will lower into the stored position with the lip in the home position.

\*Actual control station may not appear exactly as shown

### **BELOW LEVEL / END LOADING**

- A. HYDRAULIC LEVELER ONLY: Raise the dock leveler by pressing the 'UP' button. Continue holding the 'UP' button until the dock is in its fully raised position. Release the 'UP' button once the lip has partially deployed (2-3") and let the leveler lower to the below level position, with the lip hanging between the dock face and the truck bed.
- B. AIR-POWERED LEVELER ONLY: Raise the dock leveler by pressing the 'UP' button. Release the 'UP' button when the lip clears the lip keepers by 10". While the deck is lowering, pull the fall-safe disengaging chain on the deck to partially extend the lip and to lower to the below level position.

Note: When below level loading, the lip must deploy before pulling the fall-safe disengaging chain so the lip will contact the transport vehicle bed.

# **A DANGER**

- 1. Only trained and authorized personnel may operate this dock leveler.
- 2. Read, understand, and follow the instructions on this document.
- 3. Prior to using the dock leveler:
  - · Ensure that the dock leveler is free and clear of all debris, snow and ice.
  - Ensure that all personnel near the dock leveler are aware that it is being
  - · Operate the dock leveler through one complete cycle to confirm that it is functioning properly. If the dock leveler is equipped with a communications package, confirm that the lights are working as required
  - Inspect unit for signs of structural damage or mechanical malfunction. If damage is observed or the restraint fails to operate properly, remove it from service and notify maintenance personnel immediately.

- · Confirm that the transport vehicle has been properly restrained.
- 4. When using the dock leveler:
  - · Keep hands and feet clear of pinch points.
  - · If the dock leveler is equipped with a light communication package, load and unload on green only.
  - Do not exceed the rated capacity as indicated on the serial plate.
  - · Do not leave equipment or material unattended on the dock leveler.
  - · Keep a safe distance from both edges.
  - · If dock leveler fails to operate as outlined in the accompanying manual's operating instructions, refer to the Troubleshooting section.
- 5. If service or maintenance is required:
  - Only authorized service personnel shall maintain or service the unit.

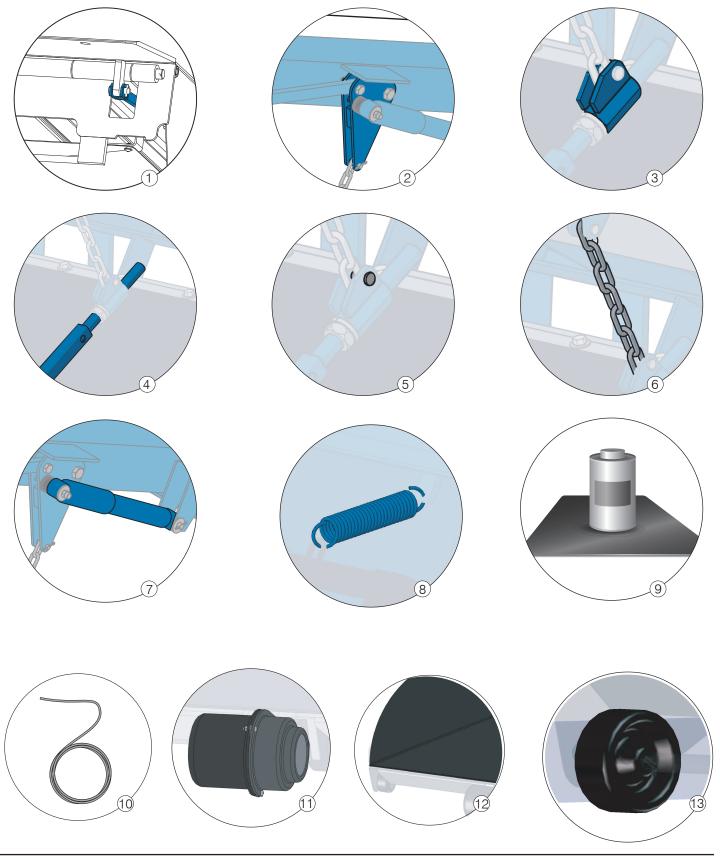
APPLIES TO ALL DOCK LEVELERS

RIIIF GIANT www.BlueGiant.com

038-757E

# 9.0 RECOMMENDED PARTS

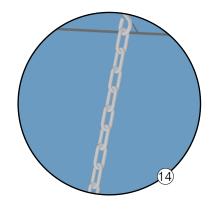
# 9.1 STANDARD OPERATIONAL COMPONENTS



REPLACEMENT PARTS DOCK LEVELER DOCK LEVELER										
ITEM	PART NO.	DESCRIPTION	QTY REQ'D	ITEM	PART NO.	DESCRIPTION			QTY REQ'D	
1	20233325	Push Rod, Lip Deploy	1	9	080-900-1	Patch Kit (includes 1 pc of 60" x 36" vinyl and glue)			1	
2	100137, 1001307-1	Link Plate, Lip Deploy	1	10	R2-40026-1200	Power Cable - 10' L (* Optional)			1	
3	26-011555	Lip Deploy	1			Blowe				
4	26-011558-1	Lower Link Weldment	1	11	26-012925	115V	See Section AIRBAG AND PLATFORM ASSEMBLY for breakdown of parts included		1	
5	013-542	Pin 3/8" Dia. x 1-3/8", Lip Deploy	2		26-012925-1	230V				
6	26-011305	Chain Assembly (6' L)	1		26-013413			6' L		
0	26-011304	Chain Assembly (8 & 10') L	1	12	26-012962	Airbag		8' L	1	
7	200-02397	Shock Absorber	1		26-013389			10' L		
8	017-012	Tension Spring, Fall-Safe	1	13	020-018	Polypropylene Wheel			4	

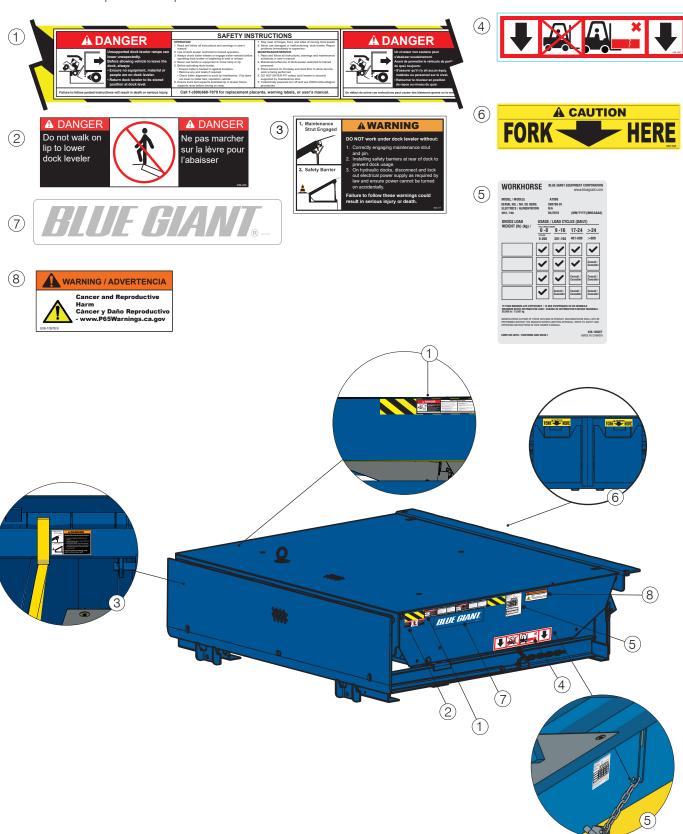
# 9.2 OPTIONAL SUPPORT COMPONENTS

OPTIONAL SUPPORT COMPONENTS FOR Dock Leveler DOCK LEVELER						
ITEM	PART NO.	DESCRIPTION	QTY REQ'D			
14	26-011563	Maintenance Holder for Tray and Bag	1			



# 10.0 DECAL IDENTIFICATION AND LOCATION

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



ITEM	QTY	PART NO.		DESCRIPTION	
1	2	038-226	EF	Danger Dagel Safety Instructions	
	2	036-220	ES	Danger Decal - Safety Instructions	
2	2	038-220	EF	Danger Decel De Net Wells on Lin	
	2	036-220	ES	Danger Decal - Do Not Walk on Lip	
3	1	832-317		Warning Decal - Maintenance Strut	
4	2	038-1047		Warning Decal - Do Not Lift on This Side	
5	2	029 1090	EF	Serial Plate Decal	
5	2	038-1082 ES		Senai Flate Decai	
6	2	038-098		Lift Caution Decal	
7	2	038-017E		Blue Giant Logo Decal	
8	2	038-1097ES		Proposition 65 Decal (as required)	

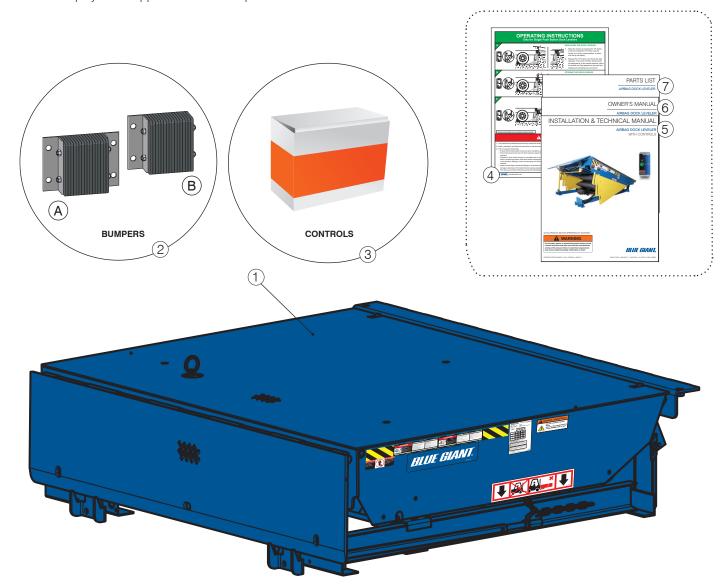
 $EF = English / French \mid ES = English / Spanish$ 

# 11.0 EQUIPMENT COMPONENT ILLUSTRATIONS

This section displays the various hardware components.

# 11.1 COMPONENTS AS SHIPPED CHECKLIST

This section displays the shipped hardware components.



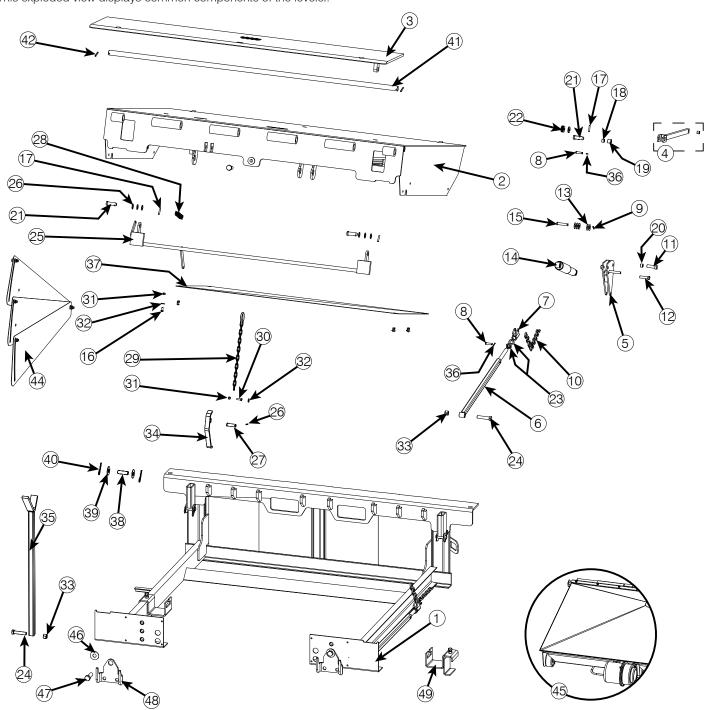
$\sqrt{}$	ITE	M	QTY	PART NO.	DESCRIPTION		APPROX. WEIGHT	
					Dock Leveler Dock Leveler	*See Section "11.4 DECK SIZE		
		1	1	AXXXX-XX*	Dock Leveler Dock Leveler with DLB	AND CAPACITIES" on page 38	Varies by Model	
	A	A DE		DB411	Laminated Bumper, Dual Flange		50 lb	23 kg
	2	В	2	DB411WB	Laminated Bumper, Single Flange		48 lb	22 kg

### AIR-POWERED DOCK LEVELER —OWNER'S MANUAL

$\sqrt{}$	ITEM	QTY	PART NO.		DESCRIPTION	APPROX. WEIGHT	
		1	027-006-L	F	Control Assembly SP1 110–130V Single Phase See Section 12.8	1 lb	0.45 kg
	3			S			
	3	'	027-007-L	F	Control Assembly SP1 208–240V Single Phase See Section 12.8	1 lb	0.45 kg
				S			
	4	1	038-757E		Operation Placard	_	_
	5	1	038-1206EI		Installation Manual	_	_
	6	1	038-1206E		Owner's Manual (this one)	_	_
	7	1	038-1206EPL		Parts List	_	_

# 11.2 MECHANICAL ASSEMBLY

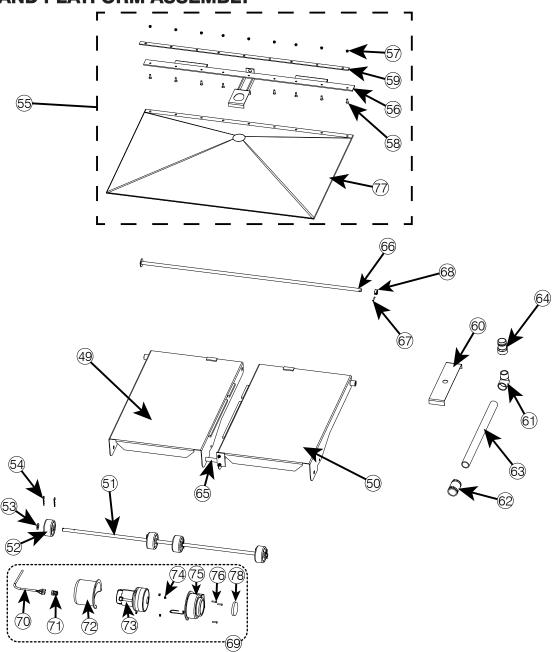
This exploded view displays common components of the leveler.



	QTY.	PART NO.	DESCRIPTION	
1	1	See Section "11.7 FRAME SIZE" on page 42	Frame	
2	1	See Section "11.4 DECK SIZE AND CAPACITIES" on page 38	Deck	
3	1	See Section "11.6 LIP SIZE AND CAPACITIES" on page 40	Lip	
4	1	2023332-1	Push Rod Assembly W, H, & S models	
		1001307	Link Plate Weldment W/ Shock 18-20" Lip	
5	1	1001307-1	Link Plate Weldment W/ Shock 16" Lip	
6	1	26-011558-1	Lower Link Weldment	
7	1	26-011555	Anchor Weldment	
8	1	013-542	Clevis Pin	
9	3	013-020	Cotter Pin	
		26-011305	Chain Assembly (6' L)	
10	1	00.011004	Chain Assembly (8' L)	
		26-011304	Chain Assembly (10' L)	
11	1	011-032	Hhcs 5/8" - 11 Unc X 2" Gr.5	
12	1	010-044	Hhcs 1/2" - 13 Unc X 2"	
13	17	012-212	Flat Spacer Washer 1/2" Bolt Size Zinc Plate	
14	1	200-02397	Shock Absorber, Hydraulic	
15	1	013-171	Clevis Pin, 1/2"Dim X 2-1/2" L	
16	1	011-135	5/16" X 3/4 Lg Hex Socket Button Screw	
17	3	013-625	Spring Pin	
18	1	018-596	Bushing SAE-841 B1012-4	
19	1	018-001	Bushing 3/4in ID X 7/8in OD X 3/4in L	
20	1	018-005	Bushing Bronze Oilite	
21	1	107-196	Clevis Pin 3/4in Od X 1-5/8in L	
22	1	2023332	Push Rod Assembly	
23A	1	011-530	Hex Jam Nut 3/4" - 10 Unc	
23B	1	012-222	Locknut 3/4"	
24	2	010-184	Hfbolt0.625-11x3x1.5,Gr8,Preferred	
25	1	2000403-1	Fall Safe Legs	
26	1	013-066	Split Chain 0.1563x1.25-1	
27	1	013-628	Clevis Pin	
28	1	017-012	Tension Spring 4 1/2" L	
29	1	2000578	Pull Chain	
30	1	010-006	Capscrew Hex Head 5/16"	
31	1	011-543	Nylon Insert Locknuts 5/16" Nylock	
32	1	012-211	Washer Flat 5/16" Bolt Size	
33	1	011-501	Nut Hex Lock Nylon Insert Zinc Plated	
34	1	2000577	Tilt Bracket Weld	

	QTY.	PART NO.	DESCRIPTION	
35	1	2000659-1	Deck Strut	
36	2	013-020	Cotter Pin	
		2023292-1	Top Plate (6' L) Top Plate,Ab,57l Deck	
37	1	2023292	Top Plate (8' L) Top Plate,Ab,81l Deck	
		2023292-2	Top Plate (10' L) Top Plate,Ab,105l Deck	
38	2	26-005610	Pin (Rear Fixed Hinge) 3/4" X 2-1/2"	
39	4	012-214 Washer,Flat,3/4,Preferred		
40	4	013-029 Hairpin Cotter - 11121087		
41	1	See "11.5 LIP SHAFT" on page 39	Lip Shaft	
42	2	013-012	Spring Pin	
		26-013420	Safety Skirt Package (6' L)	
44	2	26-013332	Safety Skirt Package (8' L)	
		26-013571	Safety Skirt Package (10' L)	
45	1	See "11.3 AIRBAG AND PLATFORM ASSEMBLY" on page 36	Air Bag And Platform Assembly	
46	2	010-060	Capscrew, Gr5 Zinc Plated for Shipping Only - Discard after install	
47	2	012-214	Regular Fw 0.75-6 for Shipping Only - Discard after install	
48	2	2000402	Lip Keeper	
49	2	2025602	Air Bag Shipping Bracket Assembly	

# 11.3 AIRBAG AND PLATFORM ASSEMBLY



AIR BAG & PLATFORM ASSY - BLOWER MOTOR INCL.



SIZE		PART NO.		
(LONG)		115V	220V	
6'	Α	2023295-1	2023295-2	
O	В	2023295-3	2023295-4	
8	Α	2023295-5	2023295-6	
0	В	2023295-7	2023295-8	
10	Α	2023295-9	2023295-10	

A: 18" - 21" Frame B: 22" - 23" Frame

ITEM	QTY.	PART NO.		DESCRIPTION				
		18-24in. Frame	22-23in. Frame					
40	1	2023294-1	2023294-3		6' L			
49		2023294-5	2023294-7	LH	8' L			
		2023294-9		— Platform	10' L			
		2023294-2		6' L				
50	1	2023294-6	RH	RH 8'I				
00		2023294-10	2023294-8		10' L			
51	1	2023294-10	 	Wheel Axle	10 L			
52	4	020-		Wheel				
53	2	012-	266	WASHER,FLAT,3/4,S	AE,3/4ID	X 1-1/2OD X 9/64THK,ZINC PLATED		
54	6	013-	028	HAIRPIN COTTER, 7	/16EYE X	2-9/16		
		26-01			6' L	_		
55	1	26-01		Air Bag Assembly	8' L			
	-	26-01		Lleak Diete	10' L			
56	1	26-01		Hook Plate		/40% N. I I. N. I.		
57	9	011-		Hex Self Lock Nuts (				
58	9	011-		SCHCSCREW 0.312	5-18x1x1-	HX-N-4		
59	1	26-01	1267	Airbag Clamp Bar				
	1	26-012			6' L			
60		26-012	Connector Reinforce	Bracket	8' L			
		26-012	26-012978-3		10' L			
61	1	035-	096	Elbow Fitting with Ba	Elbow Fitting with Barb			
62	1	26-00	26-004820			Flex Pipe Coupling		
		091-95		6' L				
63	1	091-95	Pipe		8' L			
		091-95	8-0440	10' L		10' L		
64	1	035-	004	Straight Barb				
65	1	090-38	5-0040	Conduit 3/4x4				
66	1	26-01	3333	Rear Hinge Pin				
67	1	013-	625	Spring Pin				
68	1	26-013	3415-1	Collar				
60		26-01	2925	Blower Motor Assy 1	15V / 1PH	I / 60Hz		
69	1	26-012	925-1	Blower Motor Assy 230V / 1PH / 60Hz				
		26-01				6' L		
77	1	26-01		Airbag		8' L		
ITENA 4	4 00 INIOLUI	26-01 DES PARTS LISTED BELOW:	3389			10' L		
70	1	091-40	9-1200	3/C-14 AWG Cable (	10'   )			
71	1	025-		Cable Gland				
72	1	26-01		Rear Cover				
		031-			115V			
73	1	031-	034	Motor	230V			
74	3	011-	545	Nylon Lock Nut				
75	1	26-013		Rib Cover	Rib Cover			
76	3	010-			Round Head Hex Socket Capscrew			
78	1	035-	210	Fiberglass Air Filter F	ad, 1"Thk			

# 11.4 DECK SIZE AND CAPACITIES

This is a partial list of available Dock Leveler Dock Levelers by size, load class, standard lip, or dock lip barrier (DLB). Contact your Blue Giant Dealer regarding a full list of options.

DECK SIZE (NOMINAL)	CAPACITY	MODEL	PART NO.
	WORKLODOF	4000014	DECK-W-A-STD-72W-57L
Q1 Q1	WORKHORSE	A6006W	DECK-W-A-DLB-72W-57L
			DECK-H-A-STD-72W-57L
6' x 6'	HEAVY	A6006H	DECK-H-A-DLB-72W-57L
			DECK-S-A-STD-72W-57L
	SUPER	A6006S	DECK-S-A-DLB-72W-57L
	WORKLIODSE	ACOONA	DECK-W-A-STD-72W-81L
	WORKHORSE	A6008W	DECK-W-A-DLB-72W-81L
Cl v Ol			DECK-H-A-STD-72W-81L
6' x 8'	HEAVY	A6008H	DECK-H-A-DLB-72W-81L
			DECK-S-A-STD-72W-81L
	SUPER	A6008S	DECK-S-A-DLB-72W-81L
	WORKHORSE		DECK-W-A-STD-72W-105L
		A6010W	DECK-W-A-DLB-72W-105L
6' x 10'	HEAVY	A6010H	DECK-H-A-STD-72W-105L
0 X 10	neav t		DECK-H-A-DLB-72W-105L
	SUPER	A6010S	DECK-S-A-STD-72W-105L
		7.00100	DECK-S-A-DLB-72W-105L
	WORKHORSE	A6606W	DECK-W-A-STD-78W-57L
	WOTHNIOTIOL	71000011	DECK-W-A-DLB-78W-57L
6' 6" x 6'	HEAVY	A6606H	DECK-H-A-STD-78W-57L
00 00		7,000011	DECK-H-A-DLB-78W-57L
	SUPER	A6606S	DECK-S-A-STD-78W-57L
			DECK-S-A-DLB-78W-57L
	WORKHORSE	A6608W	DECK-W-A-STD-78W-81L
	WOTTKI TOTISE	AOOOOV	DECK-W-A-DLB-78W-81L
6' 6" x 8'	HEAVY	A6608H	DECK-H-A-STD-78W-81L
00 00		71000011	DECK-H-A-DLB-78W-81L
	SUPER	A6608S	DECK-S-A-STD-78W-81L
		7.00000	DECK-S-A-DLB-78W-81L
	WORKHORSE	A6610W	DECK-W-A-STD-78W-105L
	WOTHER FORES	AOUTOYY	DECK-W-A-DLB-78W-105L
6' 6" x 10'	HEAVY	A6610H	DECK-H-A-STD-78W-105L
0 0 7 10		7,001011	DECK-H-A-DLB-78W-105L
	SUPER	A6610S	DECK-S-A-STD-78W-105L
			DECK-S-A-DLB-78W-105L

DECK SIZE (NOMINAL)	CAPACITY	MODEL	PART NO.
	WORKHORSE	A7006W	DECK-W-A-STD-83W-57L
	WORKHORSE	A7006W	DECK-W-A-DLB-83W-57L
7' x 6'	HEAVY	A7006H	DECK-H-A-STD-83W-57L
7 8 0	Π <b>ΕΑ</b> V Ι	A7000H	DECK-H-A-DLB-83W-57L
	SUPER	A7006S	DECK-S-A-STD-83W-57L
	SUPEN	A7006S	DECK-S-A-DLB-83W-57L
	WORKHORSE	A7008W	DECK-W-A-STD-83W-81L
			DECK-W-A-DLB-83W-81L
7' x 8'	HEAVY	A7008H	DECK-H-A-STD-83W-81L
/ X 8			DECK-H-A-DLB-83W-81L
	OLIDED	A7008S	DECK-S-A-STD-83W-81L
	SUPER	A70065	DECK-S-A-DLB-83W-81L
	WORKLOBOE	A 704 0\A/	DECK-W-A-STD-83W-105L
	WORKHORSE	A7010W	DECK-W-A-DLB-83W-105L
71 401	LIEANA/	A704011	DECK-H-A-STD-83W-105L
7' x 10'	HEAVY	A7010H	DECK-H-A-DLB-83W-105L
	SUPER	A7010S	DECK-S-A-STD-83W-105L
	SUPER	A70105	DECK-S-A-DLB-83W-105L

# 11.5 LIP SHAFT

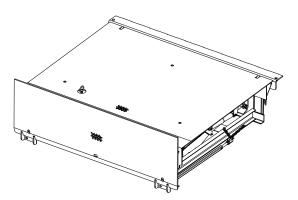
By size and load class

DECK WIDTH (NOMINAL)	LOAD CLASS	PART NO.
	Workhorse (W)	2000456-00
6'	Heavy (H)	2000450-00
	Super (S)	2000456-03
	Workhorse (W)	2000456-01
6' 6"	Heavy (H)	2000450-01
	Super (S)	2000456-04
	Workhorse (W)	0000456.00
7'	Heavy (H)	2000456-02
	Super (S)	2000456-05

# **11.6 LIP SIZE AND CAPACITIES**By size and capacity for full width lip (FW) or tapered lip (TP).

DECK		LENGTH		PART NO.				
DECK WIDTH	CAPACITY			A	A WITH GREASE FITTING	A WITH DLB	A WITH DLB AND GREASE Fitting	
		16"	406mm	LIP-W-A-STD-FW-72W-16L	LIP-W-A-STD-FW-72W-16L-G	LIP-W-A-DLB-FW-72W-16L	LIP-W-A-DLB-FW-72W-16L-G	
		10	400111111	LIP-W-A-STD-TP-72W-16L	LIP-W-A-STD-TP-72W-16L-G	LIP-W-A-DLB-TP-72W-16L	LIP-W-A-DLB-TP-72W-16L-G	
	WORKHORSE	18"	457mm	LIP-W-A-STD-FW-72W-18L	LIP-W-A-STD-FW-72W-18L-G	LIP-W-A-DLB-FW-72W-18L	LIP-W-A-DLB-FW-72W-18L-G	
		10	45/11111	LIP-W-A-STD-TP-72W-18L	LIP-W-A-STD-TP-72W-18L-G	LIP-W-A-DLB-TP-72W-18L	LIP-W-A-DLB-TP-72W-18L-G	
		20"	500mm	LIP-W-A-STD-FW-72W-20L	LIP-W-A-STD-FW-72W-20L-G	LIP-W-A-DLB-FW-72W-20L	LIP-W-A-DLB-FW-72W-20L-G	
		20	508mm	LIP-W-A-STD-TP-72W-20L	LIP-W-A-STD-TP-72W-20L-G	LIP-W-A-DLB-TP-72W-20L	LIP-W-A-DLB-TP-72W-20L-G	
		1.01	400	LIP-H-A-STD-FW-72W-16L	LIP-H-A-STD-FW-72W-16L-G	LIP-H-A-DLB-FW-72W-16L	LIP-H-A-DLB-FW-72W-16L-G	
		16"	406mm	LIP-H-A-STD-TP-72W-16L	LIP-H-A-STD-TP-72W-16L-G	LIP-H-A-DLB-TP-72W-16L	LIP-H-A-DLB-TP-72W-16L-G	
6'	115000	101	457	LIP-H-A-STD-FW-72W-18L	LIP-H-A-STD-FW-72W-18L-G	LIP-H-A-DLB-FW-72W-18L	LIP-H-A-DLB-FW-72W-18L-G	
	HEAVY	18"	457mm	LIP-H-A-STD-TP-72W-18L	LIP-H-A-STD-TP-72W-18L-G	LIP-H-A-DLB-TP-72W-18L	LIP-H-A-DLB-TP-72W-18L-G	
		001	500	LIP-H-A-STD-FW-72W-20L	LIP-H-A-STD-FW-72W-20L-G	LIP-H-A-DLB-FW-72W-20L	LIP-H-A-DLB-FW-72W-20L-G	
		20"	508mm	LIP-H-A-STD-TP-72W-20L	LIP-H-A-STD-TP-72W-20L-G	LIP-H-A-DLB-TP-72W-20L	LIP-H-A-DLB-TP-72W-20L-G	
			400	LIP-S-A-STD-FW-72W-16L	LIP-S-A-STD-FW-72W-16L-G	LIP-S-A-DLB-FW-72W-16L	LIP-S-A-DLB-FW-72W-16L-G	
		16"	406mm	LIP-S-A-STD-TP-72W-16L	LIP-S-A-STD-TP-72W-16L-G	LIP-S-A-DLB-TP-72W-16L	LIP-S-A-DLB-TP-72W-16L-G	
	SUPER	18"	457mm	LIP-S-A-STD-FW-72W-18L	LIP-S-A-STD-FW-72W-16L-G	LIP-S-A-DLB-FW-72W-18L	LIP-S-A-DLB-FW-72W-18L-G	
				LIP-S-A-STD-TP-72W-18L	LIP-S-A-STD-TP-72W-18L-G	LIP-S-A-DLB-TP-72W-18L	LIP-S-A-DLB-TP-72W-18L-G	
		20"	508mm	LIP-S-A-STD-FW-72W-20L	LIP-S-A-STD-FW-72W-20L-G	LIP-S-A-DLB-FW-72W-20L	LIP-S-A-DLB-FW-72W-20L-G	
				LIP-S-A-STD-TP-72W-20L	LIP-S-A-STD-TP-72W-20L-G	LIP-S-A-DLB-TP-72W-20L	LIP-S-A-DLB-TP-72W-20L-G	
		16"	406mm	LIP-W-A-STD-FW-78W-16L	LIP-W-A-STD-FW-78W-16L-G	LIP-W-A-DLB-FW-78W-16L	LIP-W-A-DLB-FW-78W-16L-G	
				LIP-W-A-STD-TP-78W-16L	LIP-W-A-STD-TP-78W-16L-G	LIP-W-A-DLB-TP-78W-16L	LIP-W-A-DLB-TP-78W-16L-G	
	WORKHORSE	18"	457mm	LIP-W-A-STD-FW-78W-18L	LIP-W-A-STD-FW-78W-18L-G	LIP-W-A-DLB-FW-78W-18L	LIP-W-A-DLB-FW-78W-18L-G	
	WORKHORSE			LIP-W-A-STD-TP-78W-18L	LIP-W-A-STD-TP-78W-18L-G	LIP-W-A-DLB-TP-78W-18L	LIP-W-A-DLB-TP-78W-18L-G	
		20"	20" 508mm	LIP-W-A-STD-FW-78W-20L	LIP-W-A-STD-FW-78W-20L-G	LIP-W-A-DLB-FW-78W-20L	LIP-W-A-DLB-FW-78W-20L-G	
				LIP-W-A-STD-TP-78W-20L	LIP-W-A-STD-TP-78W-20L-G	LIP-W-A-DLB-TP-78W-20L	LIP-W-A-DLB-TP-78W-20L-G	
		1.01	400	LIP-H-A-STD-FW-78W-16L	LIP-H-A-STD-FW-78W-16L-G	LIP-H-A-DLB-FW-78W-16L	LIP-H-A-DLB-FW-78W-16L-G	
		16"	406mm	LIP-H-A-STD-TP-78W-16L	LIP-H-A-STD-TP-78W-16L-G	LIP-H-A-DLB-TP-78W-16L	LIP-H-A-DLB-TP-78W-16L-G	
01.011	LIEANO	40"	457	LIP-H-A-STD-FW-78W-18L	LIP-H-A-STD-FW-78W-18L-G	LIP-H-A-DLB-FW-78W-18L	LIP-H-A-DLB-FW-78W-18L-G	
6' 6"	HEAVY	18"	457mm	LIP-H-A-STD-TP-78W-18L	LIP-H-A-STD-TP-78W-18L-G	LIP-H-A-DLB-TP-78W-18L	LIP-H-A-DLB-TP-78W-18L-G	
		00"	500	LIP-H-A-STD-FW-78W-20L	LIP-H-A-STD-FW-78W-20L-G	LIP-H-A-DLB-FW-78W-20L	LIP-H-A-DLB-FW-78W-20L-G	
		20"	508mm	LIP-H-A-STD-TP-78W-20L	LIP-H-A-STD-TP-78W-20L-G	LIP-H-A-DLB-TP-78W-20L	LIP-H-A-DLB-TP-78W-20L-G	
		4.5"	100	LIP-S-A-STD-FW-78W-16L	LIP-S-A-STD-FW-78W-16L-G	LIP-S-A-DLB-FW-78W-16L	LIP-S-A-DLB-FW-78W-16L-G	
		16"	406mm	LIP-S-A-STD-TP-78W-16L	LIP-S-A-STD-TP-78W-16L-G	LIP-S-A-DLB-TP-78W-16L	LIP-S-A-DLB-TP-78W-16L-G	
				LIP-S-A-STD-FW-78W-18L	LIP-S-A-STD-FW-78W-18L-G	LIP-S-A-DLB-FW-78W-18L	LIP-S-A-DLB-FW-78W-18L-G	
	SUPER	18"	457mm	LIP-S-A-STD-TP-78W-18L	LIP-S-A-STD-TP-78W-18L-G	LIP-S-A-DLB-TP-78W-18L	LIP-S-A-DLB-TP-78W-18L-G	
		0.5	500	LIP-S-A-STD-FW-78W-20L	LIP-S-A-STD-FW-78W-20L-G	LIP-S-A-DLB-FW-78W-20L	LIP-S-A-DLB-FW-78W-20L-G	
		20"	508mm	LIP-S-A-STD-TP-78W-20L	LIP-S-A-STD-TP-78W-20L-G	LIP-S-A-DLB-TP-78W-20L	LIP-S-A-DLB-TP-78W-20L-G	

-								
DECK		LENGTH		PART NO.				
WIDTH	CAPACITY			A	A WITH GREASE FITTING	A WITH DLB	A WITH DLB AND GREASE Fitting	
		4.011	406mm	LIP-W-A-STD-FW-83W-16L	LIP-W-A-STD-FW-83W-16L-G	LIP-W-A-DLB-FW-83W-16L	LIP-W-A-DLB-FW-83W-16L-G	
		16"	40011111	LIP-W-A-STD-TP-83W-16L	LIP-W-A-STD-TP-83W-16L-G	LIP-W-A-DLB-TP-83W-16L	LIP-W-A-DLB-TP-83W-16L-G	
	WORKHORSE	18"	457mm	LIP-W-A-STD-FW-83W-18L	LIP-W-A-STD-FW-83W-18L-G	LIP-W-A-DLB-FW-83W-18L	LIP-W-A-DLB-FW-83W-18L-G	
	WORKHORSE	18"	45/11111	LIP-W-A-STD-TP-83W-18L	LIP-W-A-STD-TP-83W-18L-G	LIP-W-A-DLB-TP-83W-18L	LIP-W-A-DLB-TP-83W-18L-G	
		20"	508mm	LIP-W-A-STD-FW-83W-20L	LIP-W-A-STD-FW-83W-20L-G	LIP-W-A-DLB-FW-83W-20L	LIP-W-A-DLB-FW-83W-20L-G	
		20"		LIP-W-A-STD-TP-83W-20L	LIP-W-A-STD-TP-83W-20L-G	LIP-W-A-DLB-TP-83W-20L	LIP-W-A-DLB-TP-83W-20L-G	
		16"	406mm	LIP-H-A-STD-FW-83W-16L	LIP-H-A-STD-FW-83W-16L-G	LIP-H-A-DLB-FW-83W-16L	LIP-H-A-DLB-FW-83W-16L-G	
				LIP-H-A-STD-TP-83W-16L	LIP-H-A-STD-TP-83W-16L-G	LIP-H-A-DLB-TP-83W-16L	LIP-H-A-DLB-TP-83W-16L-G	
7'	HEAVY	18"	457mm	LIP-H-A-STD-FW-83W-18L	LIP-H-A-STD-FW-83W-18L-G	LIP-H-A-DLB-FW-83W-18L	LIP-H-A-DLB-FW-83W-18L-G	
,	HEAVI			LIP-H-A-STD-TP-83W-18L	LIP-H-A-STD-TP-83W-18L-G	LIP-H-A-DLB-TP-83W-18L	LIP-H-A-DLB-TP-83W-18L-G	
		001	20" 508mm	LIP-H-A-STD-FW-83W-20L	LIP-H-A-STD-FW-83W-20L-G	LIP-H-A-DLB-FW-83W-20L	LIP-H-A-DLB-FW-83W-20L-G	
		20		LIP-H-A-STD-TP-83W-20L	LIP-H-A-STD-TP-83W-20L-G	LIP-H-A-DLB-TP-83W-20L	LIP-H-A-DLB-TP-83W-20L-G	
		16"	406mm	LIP-S-A-STD-FW-83W-16L	LIP-S-A-STD-FW-83W-16L-G	LIP-S-A-DLB-FW-83W-16L	LIP-S-A-DLB-FW-83W-16L-G	
		10	406/11/11	LIP-S-A-STD-TP-83W-16L	LIP-S-A-STD-TP-83W-16L-G	LIP-S-A-DLB-TP-83W-16L	LIP-S-A-DLB-TP-83W-16L-G	
	SUPER	18"	457mm	LIP-S-A-STD-FW-83W-18L	LIP-S-A-STD-FW-83W-18L-G	LIP-S-A-DLB-FW-83W-18L	LIP-S-A-DLB-FW-83W-18L-G	
	SUPER	10		LIP-S-A-STD-TP-83W-18L	LIP-S-A-STD-TP-83W-18L-G	LIP-S-A-DLB-TP-83W-18L	LIP-S-A-DLB-TP-83W-18L-G	
		20"	508mm	LIP-S-A-STD-FW-83W-20L	LIP-S-A-STD-FW-83W-20L-G	LIP-S-A-DLB-FW-83W-20L	LIP-S-A-DLB-FW-83W-20L-G	
		20"	0"   508mm	LIP-S-A-STD-TP-83W-20L	LIP-S-A-STD-TP-83W-20L-G	LIP-S-A-DLB-TP-83W-20L	LIP-S-A-DLB-TP-83W-20L-G	



Air-Powered Dock Leveler with Dock Lip Barrier (C

# 11.7 FRAME SIZE

By Size

DECK SIZE (NOMINAL)	LOAD CLASS	PART NO.
	Workhorse (W)	FRAME-H-A-72W-20D-63L
6' x 6'	Heavy (H)	FRAME-H-A-72W-20D-63L
	Super (S)	FRAME-H-A-72W-20D-63L
	Workhorse (W)	FRAME-H-A-72W-20D-87L
6' x 8'	Heavy (H)	FRAME-H-A-72W-20D-87L
	Super (S)	FRAME-H-A-72W-20D-87L
	Workhorse (W)	FRAME-H-A-72W-20D-111L
6' x 10'	Heavy (H)	FRAME-H-A-72W-20D-111L
	Super (S)	FRAME-H-A-72W-20D-111L
	Workhorse (W)	FRAME-H-A-78W-20D-63L
6' 6" x 6'	Heavy (H)	FRAME-H-A-78W-20D-63L
	Super (S)	FRAME-H-A-78W-20D-63L
	Workhorse (W)	FRAME-H-A-78W-20D-87L
6' 6" x 8'	Heavy (H)	FRAME-H-A-78W-20D-87L
	Super (S)	FRAME-H-A-78W-20D-87L
	Workhorse (W)	FRAME-H-A-78W-20D-111L
6' 6" x 10'	Heavy (H)	FRAME-H-A-78W-20D-111L
	Super (S)	FRAME-H-A-78W-20D-111L
	Workhorse (W)	FRAME-H-A-83W-20D-63L
7' x 6'	Heavy (H)	FRAME-H-A-83W-20D-63L
	Super (S)	FRAME-H-A-83W-20D-63L
	Workhorse (W)	FRAME-H-A-83W-20D-87L
7' x 8'	Heavy (H)	FRAME-H-A-83W-20D-87L
	Super (S)	FRAME-H-A-83W-20D-87L
	Workhorse (W)	FRAME-H-A-83W-20D-111L
7' x 10'	Heavy (H)	FRAME-H-A-83W-20D-111L
	Super (S)	FRAME-H-A-83W-20D-111L

# **11.8 STANDARD PIT DIMENSIONS**

NOMINAL S	170	PIT WIDTH	(W)	PIT LENGTH (L)	
NOWINAL 5		IN	MM	IN	MM
6' x 6'	1829 x 1829mm			63	1600
6' x 8'	1829 x 2438mm	74	1880	87	2210
6' x 10'	1829 x 3048mm			111	2819
6' 6" x 6'	1981 x 1829mm			63	1600
6' 6" x 8'	1981 x 2438mm	80	2032	87	2210
6' 6" x 10	1981 x 3048mm			111	2819
7' x 6'	2133 x 1829mm			63	1600
7' x 8'	2133 x 2438mm	85	2159	87	2210
7' x 10'	2133 x 3048mm			111	2819

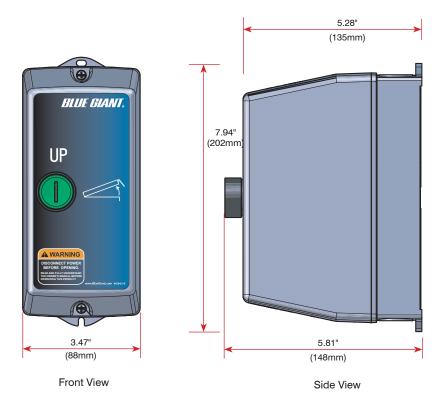
Alternatives available:
• Longer filler
Deeper pits
Other options – consult factory

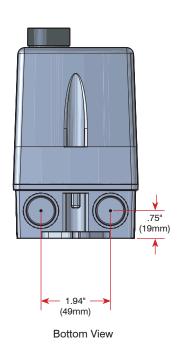
Lip Length:	16", 18", 20" (406, 457, 508mm)		
Standard Frame Depth:	Front: 19.5" (495mm)	Rear: 19" (483mm)	
Standard Pit Depth:	Front (H): 20" (508mm)	Rear (H1): 19.5" (495mm)	

# **12.0 CONTROLS**

The assembly and parts of the controls are listed below for easy reference.

Refer to the electrical drawings for specific wiring requirements





#### COMPLETE CONTROL STATION SINGLE PUSH BUTTON SP1

ITEM	SINGLE PHASE						
	QTY	PART NO.	DESCRIPTION	VOLTAGE RANGE			
1	1	027-006-L	115V / 1PH / 50-60 Hz	110 - 130V			
	1	027-007-L	230V / 1PH / 50-60Hz	208 - 240V			

Decal included (part # 038-251E)

Optional:

#### COMPLETE CONTROL STATION SINGLE PUSH BUTTON SP1 WITH OVERLOAD

ITEM	SINGLE PHASE						
	QTY	PART NO.	DESCRIPTION	VOLTAGE RANGE			
1	1	027-006-LO	115V / 1PH / 50-60 Hz	110 - 130V			
	1	027-007-LO	230V / 1PH / 50-60Hz	208 - 240V			

Decal included (part # 038-251E)

#### 13.0 TROUBLESHOOTING

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

# DANGER

- Failure to properly secure the dock leveler deck prior to working underneath it may result in bodily injury, or death.
- Engage the Maintenance Strut and 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 leveler 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.

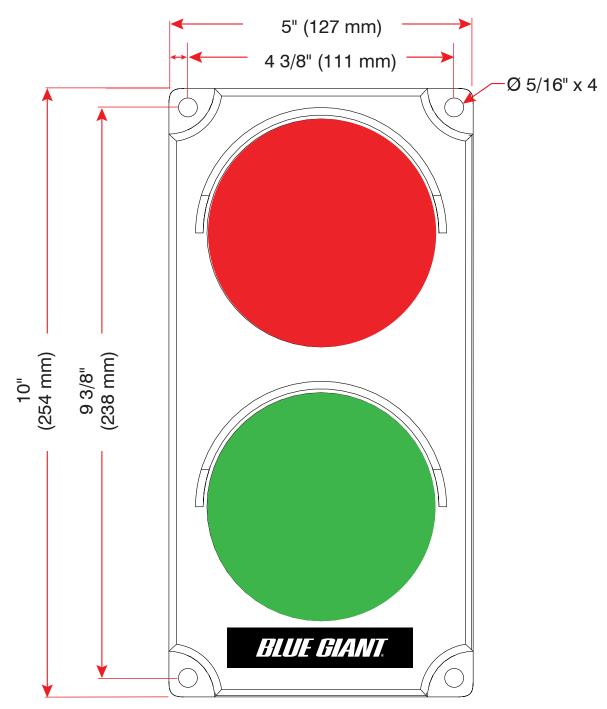
PROBLEM	PROBLEM CAUSE				
	The blower motor may have failed or been mis-wired. Repair or replace as necessary.  In the case of potential mis-wiring, please consult wiring diagram shipped with unit.				
	2. The control station is not functioning properly. Replace if necessary.				
Deck will not raise.	3. Overload relay (optional) may have been tripped. If applicable, investigate and reset.				
Book Will Hot raido.	4. Air bag may have been damaged. Inspect and repair if required.				
	5. Main power feed may be disconnected or a fuse may have blown.				
	Reconnect power and inspect fuses.				
	Blower intake may be blocked. Check and clean if necessary.				
	Debris may have accumulated under the platform. Remove and clean around the pit area.				
Deck will not lower.	2. Maintenance stand may still be engaged. Investigate and disengage.				
	3. Blower intake may be blocked. Check and clean if necessary.				
	Air bag may be damaged. Inspect and repair as required.				
	2. Cargo and other weight sources may be sitting on the deck. Check and remove if necessary.				
Deck raises slowly.	3. Blower intake may be blocked. Check and clean if necessary.				
	4. Blower uncoupled from bag. Check and call for service.				
	5. Inadequate voltage. Check line voltage.				
	Debris may be in the lip hinge. Check the hinge and clean away any dirt or corrosion.				
	Lip deployment mechanism may be damaged. Check and replace if necessary.				
The lip will not extend.	3. Damaged air bag.				
	Blower uncoupled from bag. Check and call for service.				
	<ol> <li>Incorrect voltage. Check line voltage relative to blower motor voltage.</li> </ol>				

### AIR-POWERED DOCK LEVELER —OWNER'S MANUAL

The lip remains in the extended position.	<ol> <li>Lip may be bent or damaged. Apply lubrication, and if necessary replace the lip.</li> <li>The lip deployment mechanism may be damaged. Conduct any necessary repairs and replace parts as needed.</li> <li>Debris may have collected in the lip hinge. Clean and lubricate.</li> </ol>
The lip strikes the rear of the truck as the deck raises, stops, or slows down, and lip does not extend in the locked position.	<ol> <li>Damaged or missing dock bumpers allow the truck to park too close to the leveler.</li> <li>Height difference between the dock and transport vehicle bed may be greater than recommended</li> <li>The lip actuator assembly may be damaged, causing lip to begin extending too early in the cycle. Adjust as necessary.</li> <li>The lip actuator requires adjustment.</li> </ol>

# 14.0 OPTIONAL EXTERIOR DRIVER TRAFFIC LIGHT

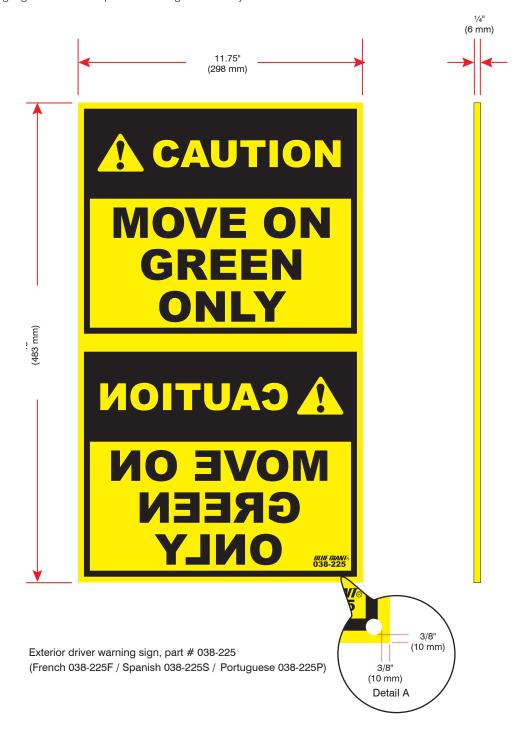
The exterior traffic lights improve loading dock safety.



Exterior driver traffic light, part # 032-806.

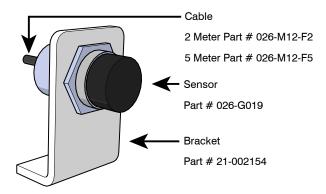
### 14.1 EXTERIOR DRIVER WARNING SIGN

The exterior warning sign for drivers improves loading dock safety.



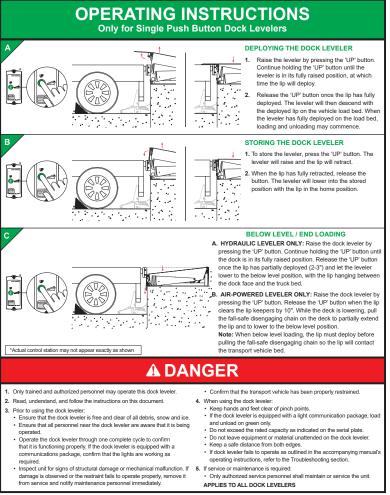
# 14.2 OPTIONAL INTERLOCK SENSOR / OPTIONAL BRACKET

- Ties sequence of vehicle restraint to dock leveler operation
- Loading dock safety is improved with accurate operation sequence
- · Interior traffic light and vehicle restraint release operation relies on interlock capability
- Mounted at parked position of any leveler



#### 14.3 INTERIOR OPERATING INSTRUCTION PLACARD

The interior operating instruction placard for inside dock workers.



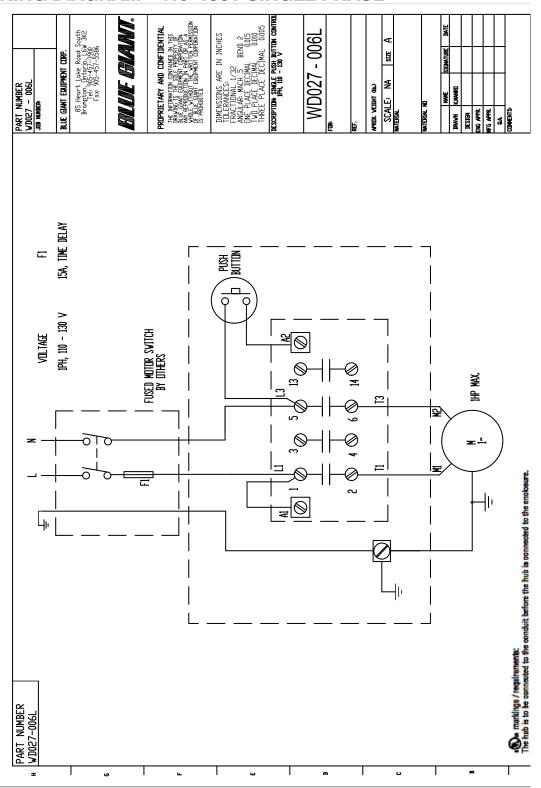
BLUE GIANT. www.BlueGiant.com

# **15.0 WIRING DIAGRAMS**

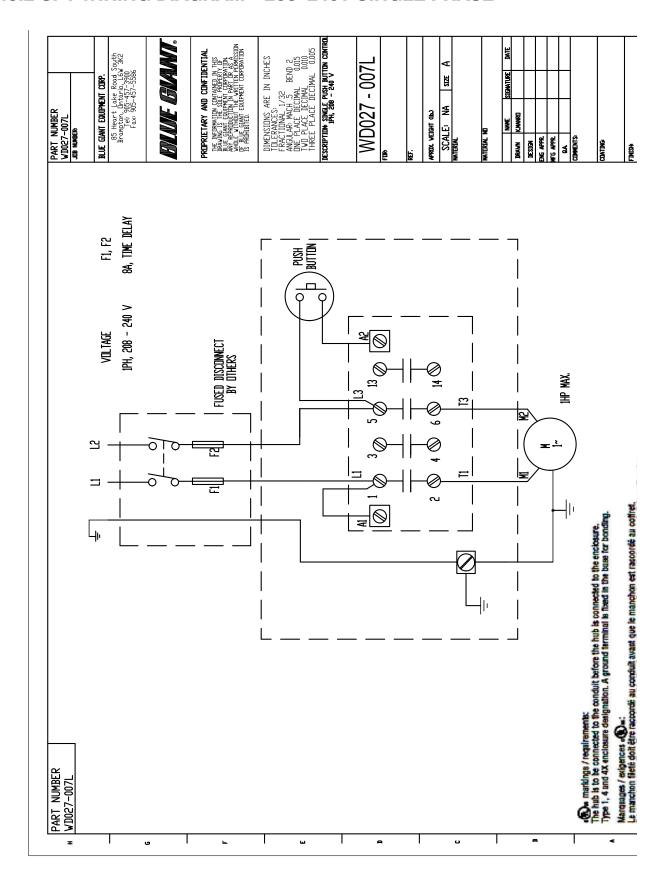
#### NOTICE

The following wiring diagrams are sample configurations only. Wiring diagrams specific to your needs will be provided inside the control panel and/or as part of your submittal package.

# 15.1 SP1 WIRING DIAGRAM—110-130V SINGLE PHASE



# 15.2 SP1 WIRING DIAGRAM—208-240V SINGLE PHASE



# **16.0 ALTERNATIVE CONTROL STATION OPTIONS**

#### NOTICE

The following wiring diagrams are sample configurations only. Wiring diagrams specific to your needs will be provided inside the control panel and/or as part of your submittal package.

Control station upgrades are available for enhanced equipment operation.

The SP2 controls an independent dock leveler via a constant pressure "I" (UP) button and has a running timer that shuts down the motor after a specific interval to prevent excessive motor activity. Overhead door interlock provision terminals protect door from incorrect leveler sequence.

The Blue Genius™ Gold Series I is a microprocessor-based control station with a touch-sensitive 'Deck' button and numeric keypad. The LED menu screen relays real-time prompts and commands for operating and troubleshooting. For added safety, the

Blue Genius™ is available with an optional interior and exterior light communication package, overhead door interlock and expansion capability for future vehicle restraint and overhead door buttons.

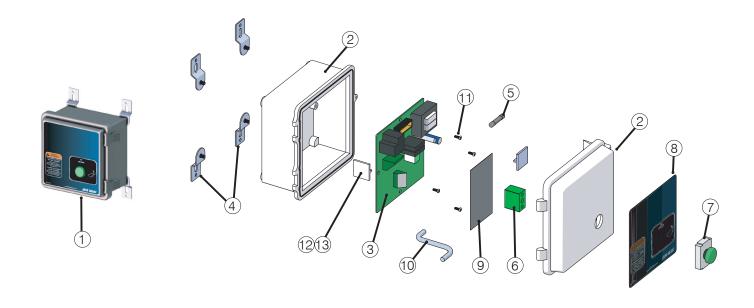




SP2 Control

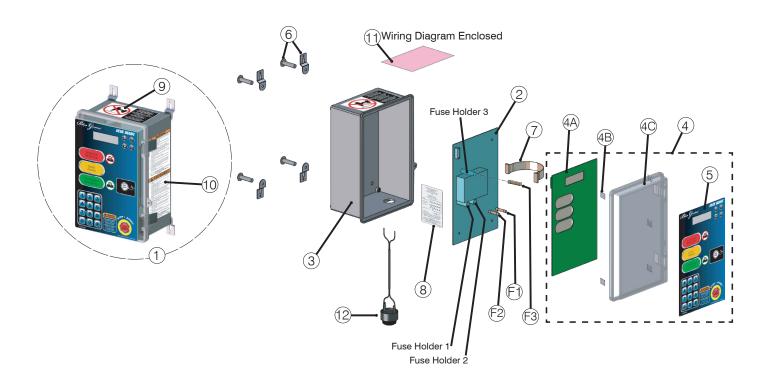
Blue Genius™ Gold Series I

#### 16.1 SP2 CONTROLS



	ITEM OTY DARK NO DESCRIPTION					
ITEM	QTY.	PART NO.		DESCRIPTION		
	1	SP2S1115	F	SP2 Control Assembly 115V Single Phase		
			s			
1		SP2S1230	F	SP2 Control Assembly 230V Single Phase		
			S			
2	1	025-G023-4M		Control Box Enclosure		
3	1	026-G054-M		Power Circuit Board - SP2, 1PH STD		
4	4	025-G010-1		Mounting Tabs w/Screws		
5	1	026-G121		Fuse F.A. 100mA, 250V 5 x 20mm		
6	1	026-G202		Button Contact Block N/O		
7	1	028-573		Green Push Button w/Mounting Collar		
8	1	038-266EF		Decal, English / French		
0		038-266ES		Decal, English / Spanish		
	1	038-284EF		Decal, Serial Plate / French		
9		038-284ES		Decal, Serial Plate / Spanish		
10	1	026-G035		3 Wire Cable		
11	4	010-216		Screw, M4 x 8 Pan Phil		
12	2	025-062		Cable Tie Mount		
13	2	522-008		Ties, Wire YS-98C		

# **16.2 BLUE GENIUS™ CONTROLS**



СОМ	COMPLETE CONTROL STATION ASSEMBLY - ITEM 1 (Example BGGE01115F)								
ITEM	SINGLE PHASE								
	<b>\Q</b>	FUSE	QTY	PART NO.	DESCRIPTION	ASSY PART #	*		
	F1	В	1		Power Board	DOOF SALATE	F		
2	F2	А	1	026-PB1115	Sub-Assembly † (1PH 115V 50-60HZ)	BGGE01115	S		
	F1		1	000 BB4000	Power Board	50050000	F		
	F2		C 026-PB1230 Sub-Assembly † (1PH 230V 50-60	(1PH 230V 50-60HZ)	BGGE01230 Z)	S			
3			1	025-G010-M	Control Box Enclosure (Includes 4C)				
4			1	025-G014-V3-M	Transparent Cover Door (4C) and Touch Control Board (4A) (Serial # Required)				
4A			1	026-G021-M	Touch Control Board (Serial # Required)				
4B			5	025-062	Cable Tie Mount				
4C			1	025-G014	Transparent Cover Door				
5			1	038-259E F	Button Decal				
6			1	025-G010-1	Mounting Tabs with Hardware (1 pkg of 4)				

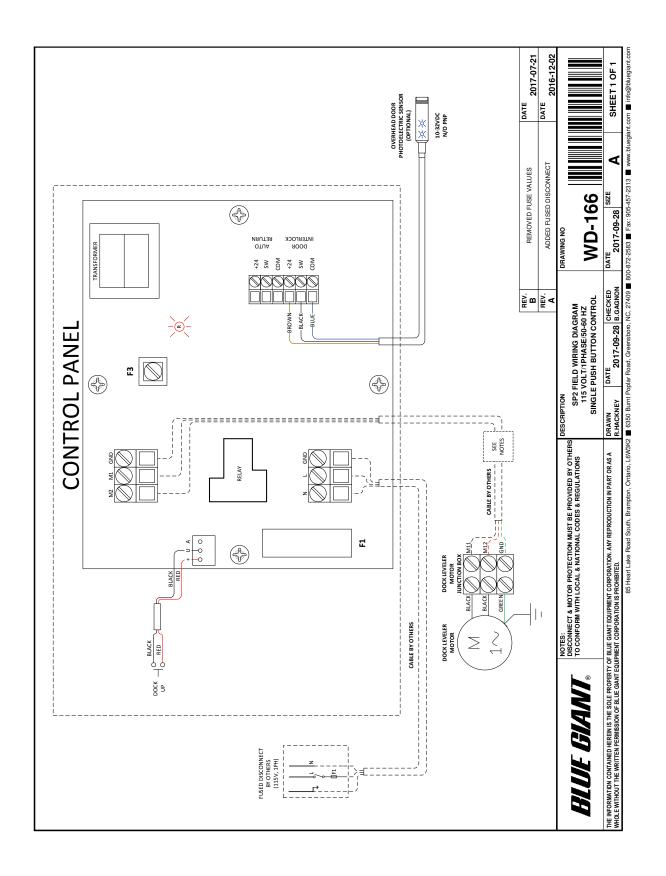
<sup>\*</sup> Language on decal: F = English / French S = English / Spanish

 $<sup>\</sup>Diamond$  Location on Power Board  $\,$  † Includes Fuses  $\,$  ‡ 115 Volt Control Box Shown

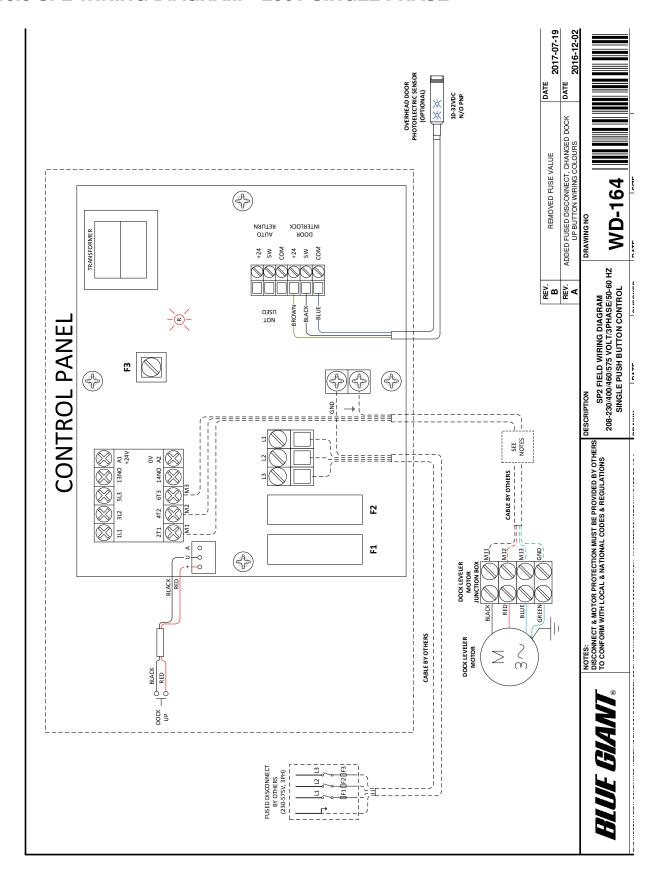
QTY	PART NO.		DESCRIPTION
1	026-G030		Ribbon Cable
1	038-284E	F	Decal, Serial Plate
		S	
1	038-283EFS		Decal, Do Not Drill
1	038-853E	F	- Warning Decal
		S	
11 1 026-615-1		1	Anti-Static Poly Bag (Wiring Diagram Enclosed)
'	020-015-1		(Serial # required for diagram)
1	026-G402-B		Audible Speaker
1	026-037-1		Fuse, 2.5A, 700V, Fast-Blow 1/4" Glass
	1 1	1 026-G03 1 038-284E 1 038-283E 1 038-853E 1 026-615 1 026-G402	1 026-G030  1 038-284E F S 1 038-283EFS 1 038-853E F S 1 026-615-1 1 026-G402-B

AS PER VOLTAGE - SEE ITEM 1				
ITEM	QTY	PART NO.	DESCRIPTION	
В	1	026-G101	Fuse, 8A, 250V, Time Delay for 1PH, 208-240V	
С	1	026-G102	Fuse, 0.5A, 250V, Time Delay for 1 and 3PH, 208-240V	
Е	1	026-G104	Fuse, 0.75A, 250V, Time Delay for 1PH, 110-130V	

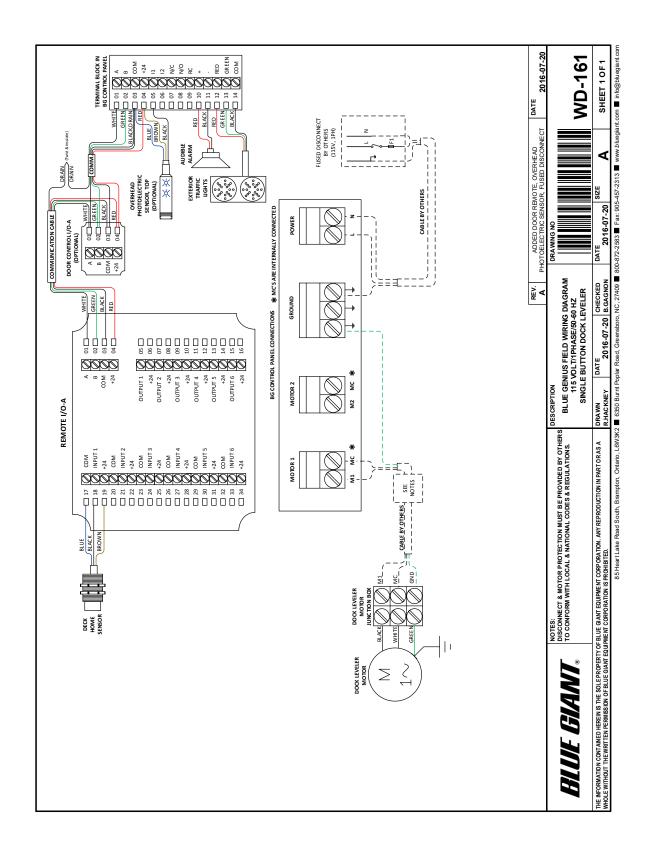
# SP2 WIRING DIAGRAM—115V SINGLE PHASE



# 16.3 SP2 WIRING DIAGRAM—230V SINGLE PHASE



# 16.4 BLUE GENIUS™ GOLD WIRING DIAGRAM—115V SINGLE PHASE



# 16.5 BLUE GENIUS™ GOLD WIRING DIAGRAM—230V SINGLE PHASE

