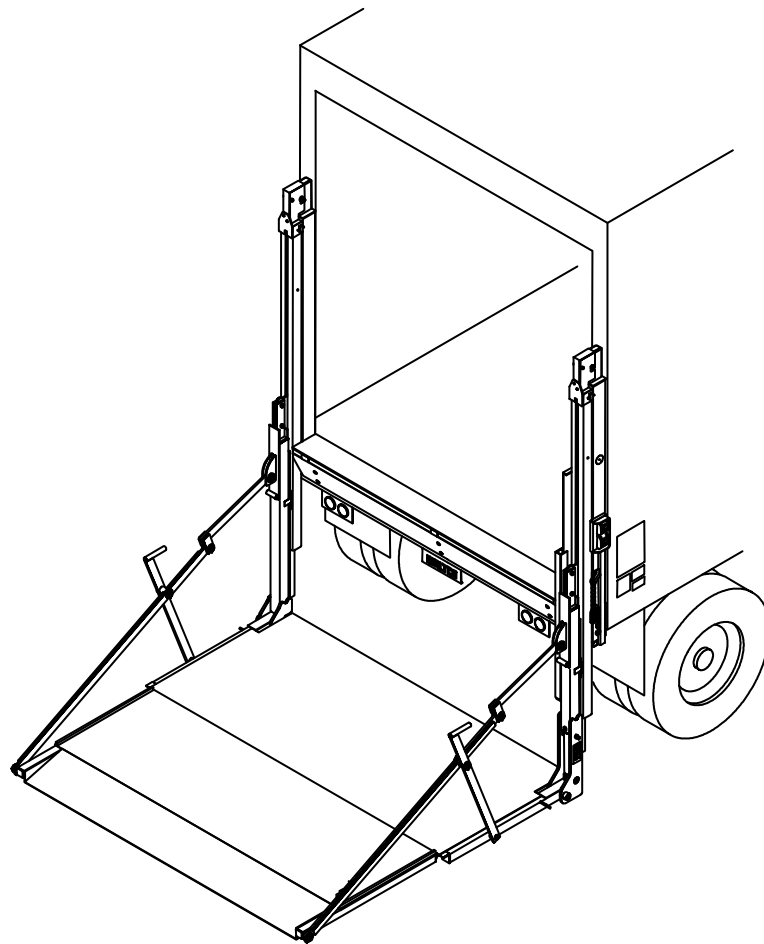

Owner's Manual

RGL and RBGL

2000 lb. - 6000 lb. Capacity Rail Liftgates



GR02479

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Corporate Office United State
285 Northeast Ave.
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P: 330.633.9191
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90 North Queen St.
Etobicoke, ON M8Z 2C5
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Table of Contents



Improper operation and maintenance of this liftgate could result in severe personal injury or death.

Read and understand the contents of this manual and all warning and operation decals before operating and/or performing maintenance on this liftgate.

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INTRODUCTION

If anyone observes improper installation, improper operation, or damage, they should immediately contact a qualified person for assistance and correction. We strongly urge anyone that has any questions or doubts as to the installation, condition, use, operation, maintenance or repair of the liftgate to contact us at Waltco where we have qualified personnel that will be happy to assist you. Telephone numbers and addresses of these locations are listed in the Owner's Manual and Installation Instructions.

INSTALLATION

Waltco liftgates should only be installed by those with sufficient basic skills to understand the installation and operation of the liftgate, along with the equipment on which the liftgate is being installed. Waltco's installation instructions are not intended to give rationale for all the instructions that are given; however, it is the intent of these instructions to give the installer both the operations and what we believe to be the most desirable sequence of implementing these operations. These instructions can in no way expand into an area where they will replace a qualified person, or clear thinking and a basic knowledge that must be possessed by the installer.

It has been our experience that a knowledgeable journeyman following these instructions and observing the operation of the liftgate will have a sufficient comprehension of the liftgate to enable this person to troubleshoot and correct all normal problems that may be encountered.

Failure to follow the installation instructions, adjustments and mounting dimensions may result in improper and unsafe operation of the liftgate. Unauthorized alterations of the liftgate can cause an undesirable and dangerous condition.

OWNER'S MANUAL

The Waltco Owner's Manual is intended to act as a guide for operation and routine maintenance but is no way intended to encourage usage or repair of the liftgate by those who are not qualified to do so.

The contents of the owner's manual include, but are not limited to general operation instructions, routine lubrication, parts lists, and an outline of things that should be checked but may not be obvious to those not technically qualified. This manual assumes the liftgate is properly installed, undamaged and operates correctly. Improper installation, improper operation, or damage should be immediately corrected by a qualified person.

INSPECTION

As part of the regular inspection of a liftgate and after damage or suspicion of an overload, inspect for wear or structural damage and make necessary repairs or replacements. Check all structural components and their attachment to the liftgate for cracked welds, loose fasteners, wear and part deformation. Check cylinder and hose for leaks. Inspections and repairs should be made by a qualified mechanic.

REPLACEMENT PARTS

Use only Waltco original equipment replacement parts. Components of other liftgate manufacturers may outwardly appear to be the same but are not interchangeable with Waltco products. Waltco components are specifically designed for safety requirements, reliability and compatibility with our products. Refer to your Waltco parts manual when ordering parts. NOTE: When ordering, give model and serial number of liftgate.

DECALS

It is important that every vehicle that has a WALTCO Liftgate have legible DECALS clearly posted on the vehicle and an OWNER'S MANUAL in the vehicle at all times as a guide for proper operation and maintenance.

Additional DECALS and OWNER'S MANUALS can be obtained from WALTCO TRUCK EQUIPMENT COMPANY

80101388 Rev 02 EO 6156

Chapter 1 Safety Information

WARNING

Read, understand, and follow all of the warning listed below.

Failure to follow these warning could result in severe personal injury or death.

- Read and understand the Owner's Manual, all decals and warning on liftgate before operating liftgate.
- Do not operate liftgate without a thorough knowledge and understanding of the operation of the liftgate.
- Liftgate hazards can result in crushing or falling.
- This liftgate is designed for loading and unloading of cargo. If personnel are required to ride liftgate, observe and familiarize yourself with the liftgate operation, decals and manuals. Ensure stable footing at all times.
- Do not ride liftgate with unstable loads.
- Wheeled loads must be properly retained from rolling.
- Tall, high center of gravity loads must be retained from falling over.
- Never overload liftgate:
Load platform as close to the vehicle, and towards the middle of the platform as possible. Refer to owner's manual and capacity decal of liftgate for maximum load and load placement.
- Keep hands and feet clear of all potential pinch points.
- Never use liftgate if it makes any unusual noise, has unusual vibration, raises or lowers unevenly, or fails to operate smoothly.
- Never use liftgate if it shows any signs of structural damage such as cracked welds, bent or distorted members.
- Do not attempt any repairs unless you are qualified to do so. Care should be taken when work is performed on a disabled liftgate located near moving traffic. When possible the vehicle should be moved away from traffic areas for repair. Precautionary measures should be taken to ensure personal safety including those recommended in Federal Motor Vehicle Safety Standards 571.125.
- When welding to liftgate, or liftgate components, take all necessary safety precautions, including using respiratory protection and other pertinent personal protective gear when welding harmful materials.
- All protective covers, guards, and safety devices must be in place and access doors closed before operating liftgate.
- Do not allow anyone to stand in, or near area, in which Platform will open and close before opening or closing Platform.
- Do not allow anyone to stand near the Platform where a falling load could land on them.
- Platform is always to be properly stored and secured for transit. See the Owner's Manual for details.
- Take care to retain cargo during transit for liftgate Platforms which function as the tailgate or door of the cargo area. Small objects can fall through the space between the vehicle and the folded Platform.
- A Lock-Out device or Shut-Off Switch should always be used to prevent unauthorized use of liftgate.
- For liftgates with Runners, never use liftgate if Runners do not travel freely and smoothly.
- For liftgates with Roller Lifting Chain, the Chain should be replaced every (5) five years or 15,000 cycles, whichever comes first. Replace only with Waltco approved Roller Chain.
- Never transfer loads which exceed lifting capacity on or over any part of the Platform unless the liftgate is equipped with a special reinforced Platform and Platform Support Bars for use when the Platform is used as loading ramp (dock board). Refer to the "Using Platform as a loading ramp" Chapter in the Operation Instructions of the BZ/RZ series Owner's Manual.
- For liftgates equipped with Trailer Hitches, never exceed the rated capacity of the hitch. Do not exceed the vehicle's weight rating. Refer to the vehicle's Owner's Manual.
- Vehicle must comply with all state and federal standards.
- Follow the "Maintenance Guide" chapter in the Owner's Manual.

Chapter 1 Safety Information

Liftgates with Tilt Function

- Proper use of the Control Switches is of extreme importance.
- Improper use of Tilt Switch could cause load to fall from the Platform or damage the liftgate.
- Platform should be in a generally horizontal position when raising or lowering with a load.
- In any tilt position, the Platform may vary from level while raising or lowering the Platform.

Liftgates equipped with spring operated Cam Closer

- Replace Cam Release Spring every five (5) years or 15,000 cycles, whichever comes first.

RGL-Series Liftgates

- Make certain Platform Brake mechanisms are operating properly.
- The Runners are always to remain powered up against the Upstops Pins when in transit.
- Inspect Cables every three (3) months or 750 cycles, whichever comes first. Cables must be replaced if they show signs of wear, distortion, kinking or if any broken wires are visible
- Replace cables every five (5) years or 10,000 cycles, whichever comes first.



This is the safety alert symbol. This manual uses this symbol to alert you to potential personal injury hazards.

Obey all safety messages that follow this symbol to avoid personal injury or death.

SIGNAL WORDS

WARNING

Indicates a potentially hazardous situation, which if not avoided, could result in death or serious injury.

Black letters on an orange background

CAUTION

Indicates a potentially hazardous situation, which if not avoided, may result in minor or moderate injury. May also be used to alert against unsafe practices.

Black letters on a yellow background.

NOTICE

Indicates a potentially hazardous situation, which if not avoided, may result in property damage.



WALTCO warrants its products free of defects in materials and workmanship.

WALTCO will replace components found defective during the warranty period. Labor will be reimbursed according to our flat rate labor schedule at the prevailing shop rate.

Contact our Sales or Warranty departments for the warranty period of your model or for information regarding our flat rate labor schedule.

WALTCO Warranty Claim Procedure

For consideration, all claims must be received within 30 days of repair and include the following information:

- Liftgate Serial Number
- Description of problem and corrective actions
- Itemization of the labor charge to include the number of hours and labor rate

Replacement warranty parts can be obtained by contacting Waltco's Parts Department. Parts must be returned for inspection when requested.

Exclusions:

Waltco's warranty does not include reimbursement for service calls, vehicle rental, towing, travel time, fabrication of parts available from WALTCO, damage from misuse or abuse, negligence, accidents, alteration, loss of income or overtime expense, oil, or normal wear.

Diagnosis and troubleshooting time are included in the flat rate labor times.

Warranty and technical information is available from WALTCO's toll free customer service lines from 8:00 a.m. to 5:00 p.m. EST.

Waltco Lift Corp

285 Northeast Ave, Box 354, Tallmadge, OH 44278

1-800-211-3074, 330-633-9191

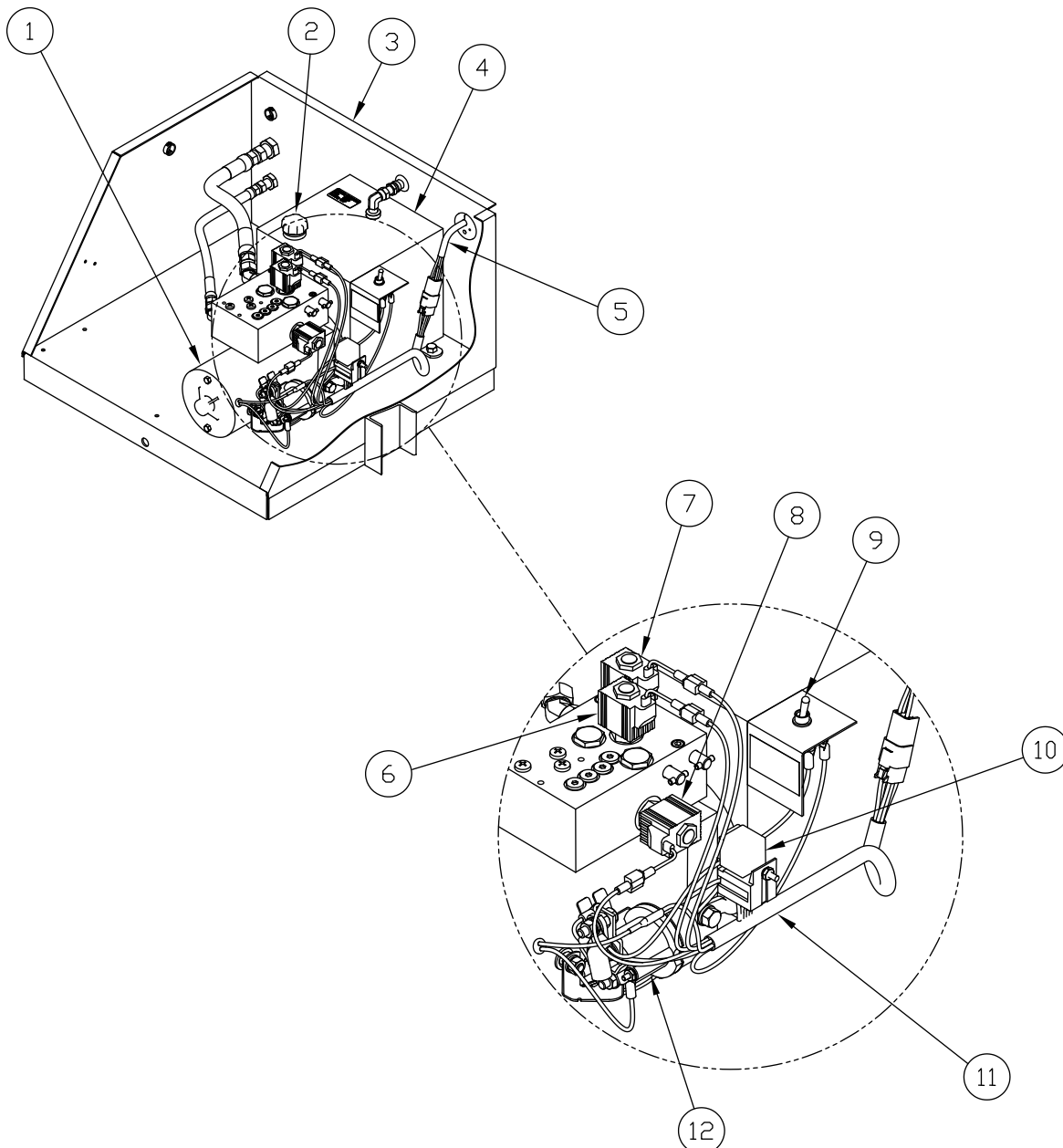
Please visit our websites: <http://www.waltco.com> or <http://www.hiab.com>

We're behind you all the way!

Chapter 2

Liftgate Terminology

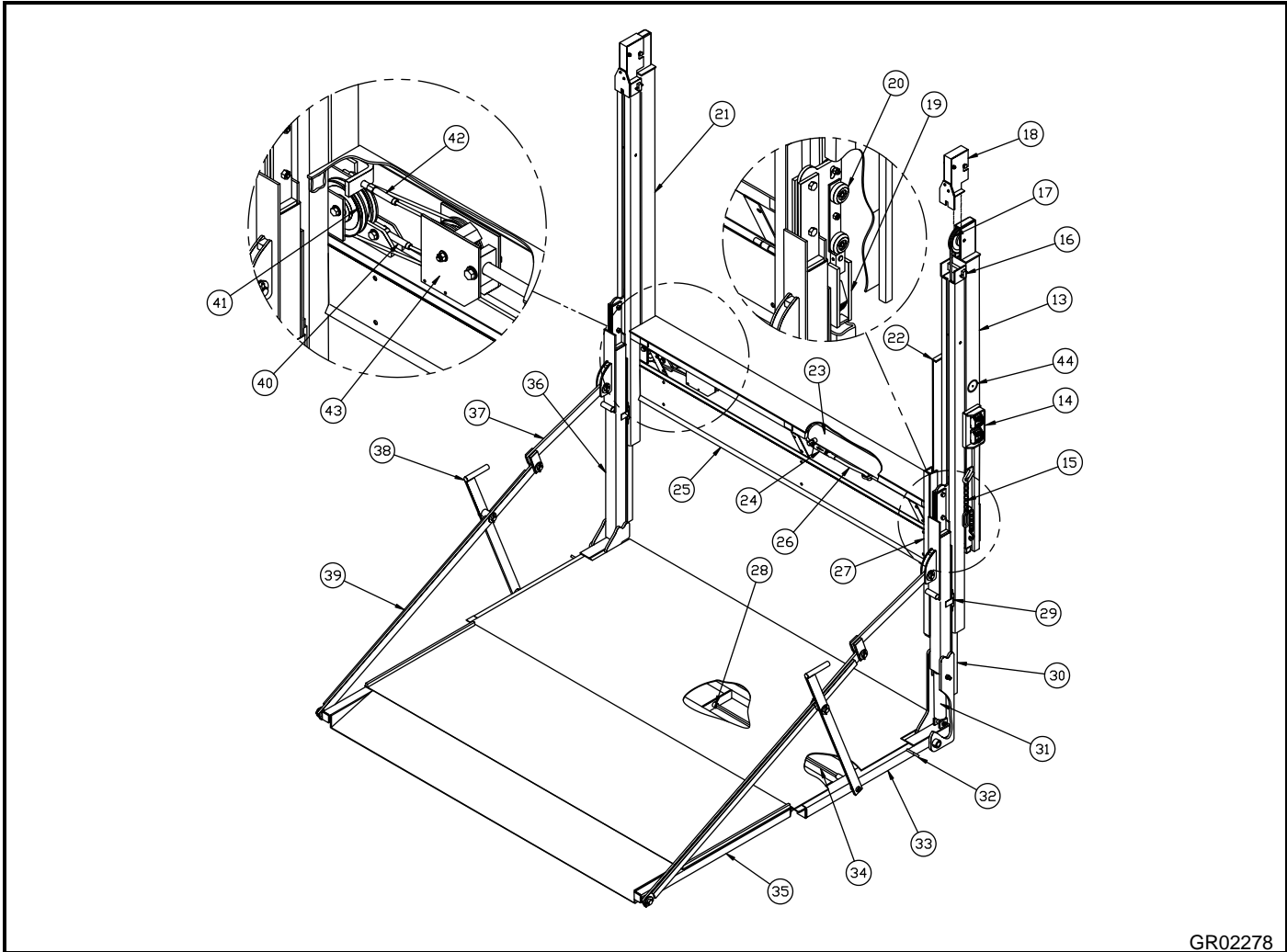
- | | |
|--|--|
| <ol style="list-style-type: none">1. Hydraulic Unit2. Breather3. Hydraulic Enclosure4. Hydraulic Reservoir5. Liftgate Wiring Harness6. Opening Solenoid Valve | <ol style="list-style-type: none">7. Lowering Solenoid Valve8. Raise / Close Solenoid Valve9. Toggle Switch (Dual Pump Only)10. Relay11. Motor Wiring Harness12. Starter Solenoid |
|--|--|



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Chapter 2 Liftgate Terminology

13. Curb Side Rail	30. Curb Side Runner Assembly
14. Control Switches	31. Closure Cylinder
15. Safety Chain Assembly	32. Chain Clip
16. Upstop Pin	33. Deck Assembly
17. Pulley Assembly	34. Torsion Bar
18. Pulley Guard Assembly	35. Deck Extension Assembly
19. Brake Assembly	36. Drivers Side Runner Assembly
20. Upper Roller / Tandem Assembly	37. Upper Link Assembly
21. Drivers Side Rail	38. Connecting Bar Assembly
22. H-Frame Hose Guide	39. Lower Link Assembly
23. Lift Cylinder	40. Curb Side Cable Assembly (Fixed)
24. Flow Control Valve	41. Pulley Assembly
25. Crossbeam Access Cover	42. Drivers Side Cable Assembly (Adjustable)
26. Hydraulic Hose	43. Shoe Assembly
27. Runner Hose Guide	44. Specification Tag
28. Torsion Bar Anchor	
29. Slide Bearing	



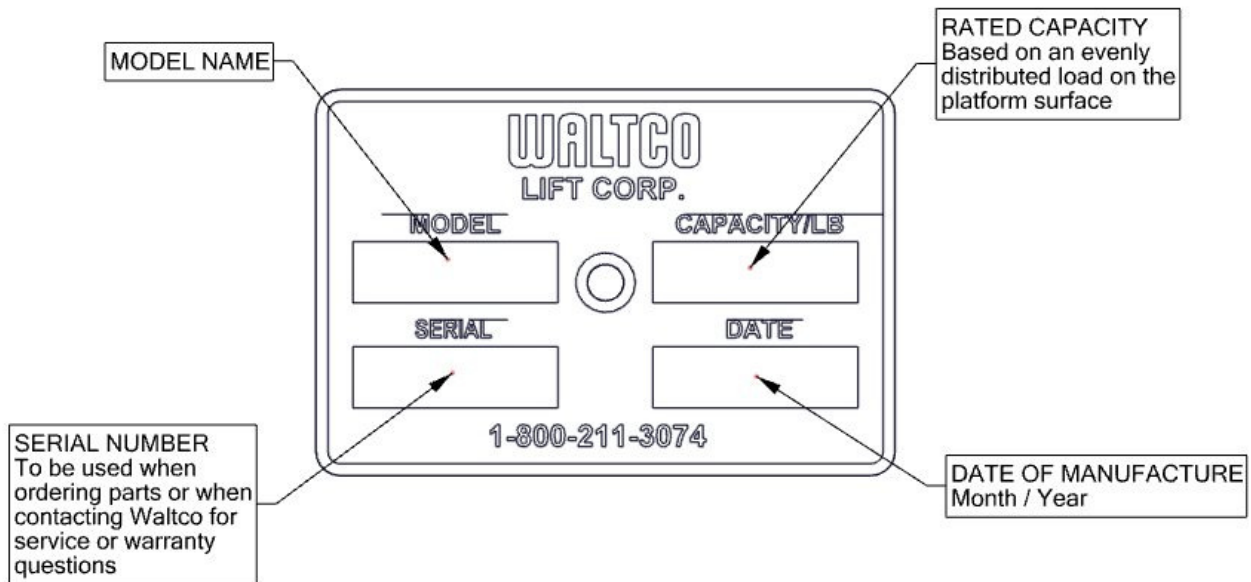
GR02278

Chapter 2

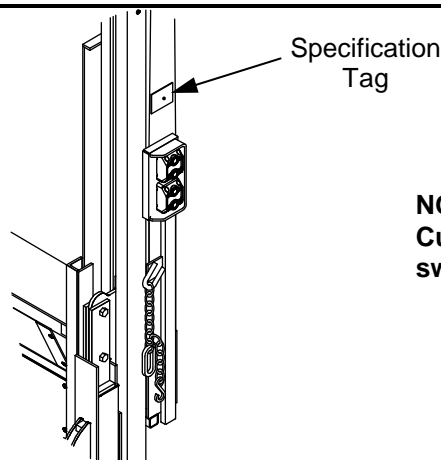
Liftgate Terminology

Explanation of Specification Tag

Model Name	Description	Capacity
RBGL30	Rail Lift, Bottle Gas	3000 lbs.
RBGL40	Rail Lift, Bottle Gas	4000 lbs.
RGL20	Rail Lift (96" WIDE)	2000 lbs.
RGL30	Rail Lift (96" WIDE)	3000 lbs.
RGL40	Rail Lift (96" WIDE)	4000 lbs.
RGL50	Rail Lift (96" WIDE)	5000 lbs.
RGL60	Rail Lift (96" WIDE)	6000 lbs.
RGL20	Rail Lift (102" WIDE)	2000 lbs.
RGL30	Rail Lift (102" WIDE)	3000 lbs.
RGL40	Rail Lift (102" WIDE)	4000 lbs.
RGL50	Rail Lift (102" WIDE)	5000 lbs.
RGL60	Rail Lift (102" WIDE)	6000 lbs.



GR00241




NOTE: Tag located on Curb Side Rail above switches.

GR02279

Chapter 3 Operation Instructions

OPERATION INSTRUCTIONS

 Read and understand these instructions, all warning and operation decals, and this manual before operating this liftgate.

Platform and Runners are always to be powered up against Upstop Pins when in transit.

Both safety chains must be used when liftgate is not in use. A padlock may be used to prevent unauthorized use of liftgate.

Never remove Safety Chains from Platform if chains are in tension. Apply up power and closing power as required to release tension on the chains.

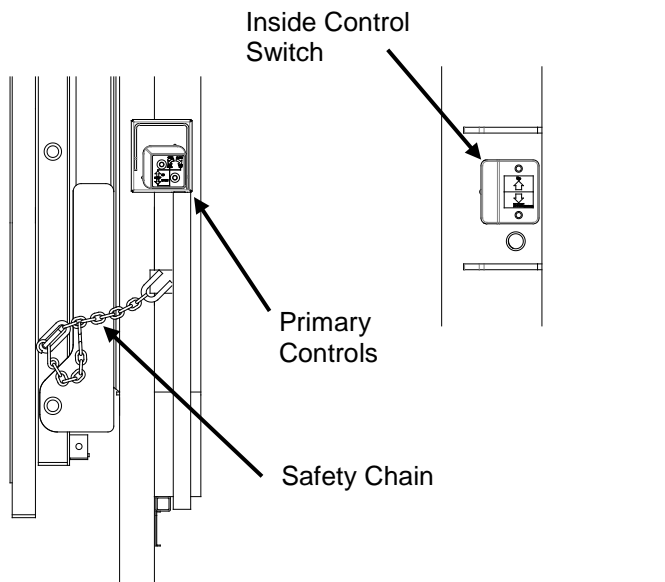
When in transit Platform must be in stored position with Safety Chains hooked securely.

Do not allow anyone to stand in, or near area, in which Platform will open and close before opening or closing Platform.

Do not allow anyone to stand near the Platform where a falling load could land on them.

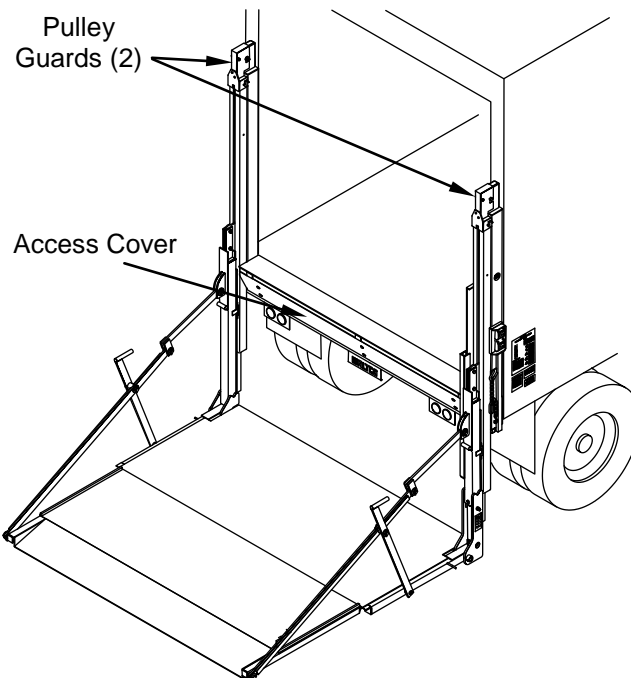
Platform Side Bar Linkage areas must be kept clear for Platform opening and closing.

Certain conditions may cause Platform Brake(s) to engage even if cable has not broken. In this case, raise Platform first then lower Platform.



Make sure all protective covers and guards are properly in place at all times.

 **DO NOT** operate liftgate unless Pulley Guards and Access Cover are installed and secured.



GR02479

Chapter 3 Operation Instructions

LOADING OF PLATFORM

Load and unload from rear of platform and not side of platform. Never remove side linkage to load or unload platform.

Always load as close to center of platform and as close to truck sill as possible.

Never operate lift trucks on or over any part of platform.

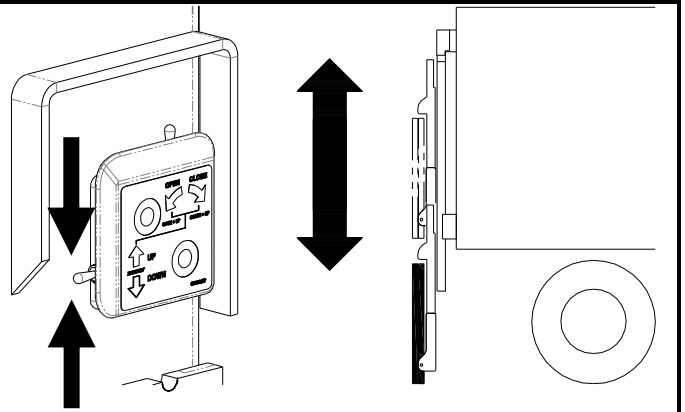
This unit is intended for loading and unloading of cargo only. Do not use for anything but its intended use.

TO RAISE AND LOWER PLATFORM IN DOCK LOADING POSITION

Unhook Safety Chains from Platform

Press DOWN to lower Platform

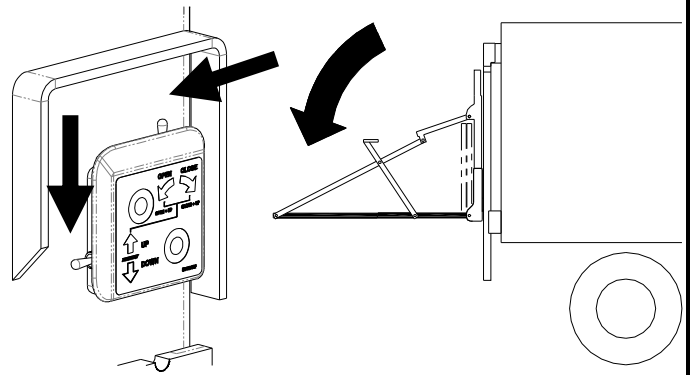
Press UP Switch to raise Platform



TO OPEN PLATFORM TO LOADING POSITION

Unhook Safety Chains from Platform

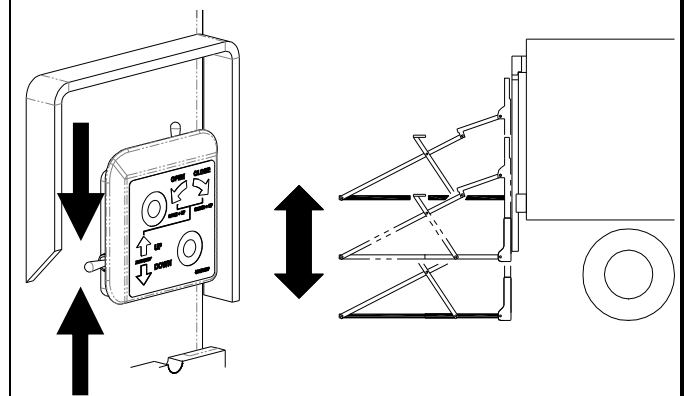
Push the DOWN toggle switch and the OPEN toggle switch simultaneously to power open the platform



TO RAISE/LOWER PLATFORM IN LOADING POSITION

Press UP Switch to raise Platform

Press DOWN Switch to lower Platform



Chapter 3 Operation Instructions

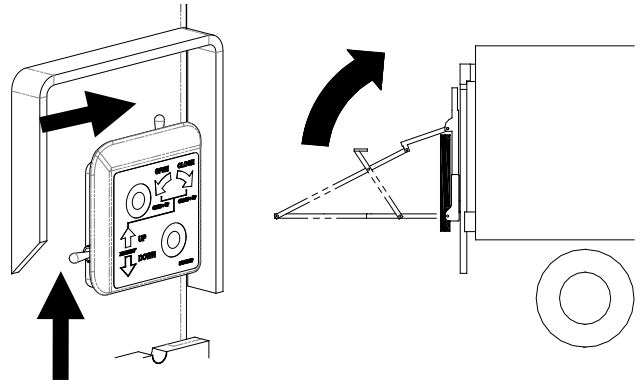
TO CLOSE PLATFORM TO TRANSIT POSITION

Press UP Switch to raise Platform at least 12" from ground

Push the UP toggle switch and the CLOSE toggle switch simultaneously to power close the platform

Press UP Switch to raise folded Platform

Hook both Latch Chains to Platform



PROPER HOOKING OF SAFETY CHAIN

Properly hook latch chain as shown.



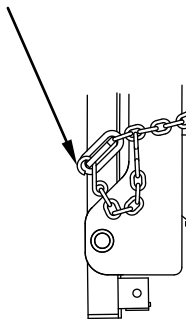
The safety chains provided with your liftgate are an important safety device and should always be in place when liftgate is not in use.



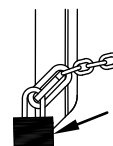
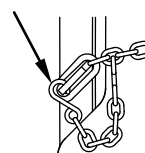
To prevent unauthorized persons from using liftgate, a padlock may be used in place of "S" Hook.

Always use chains on both sides of liftgate when not in use.

Correct hooking of "S" Hook



Incorrect hooking of "S" Hook



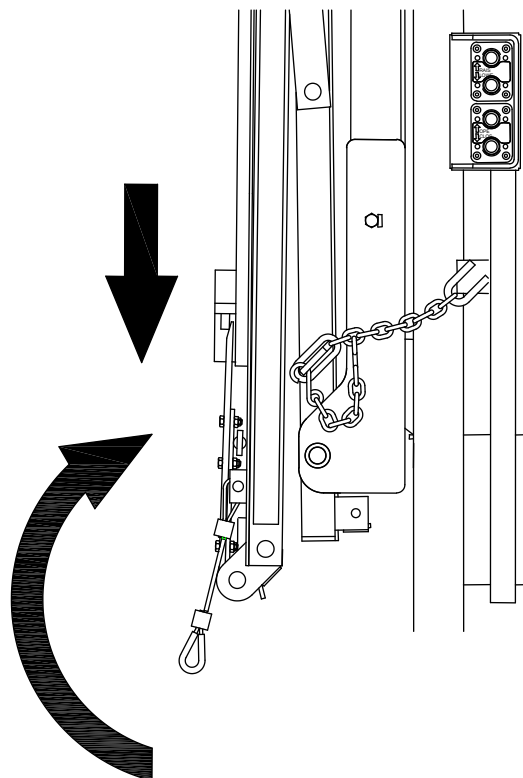
Pad Lock

GR02474

PROPER USE OF FOLDING RAMP

NOTE:

Folding ramps to be folded and latched in place when liftgate is closed in the transit position.

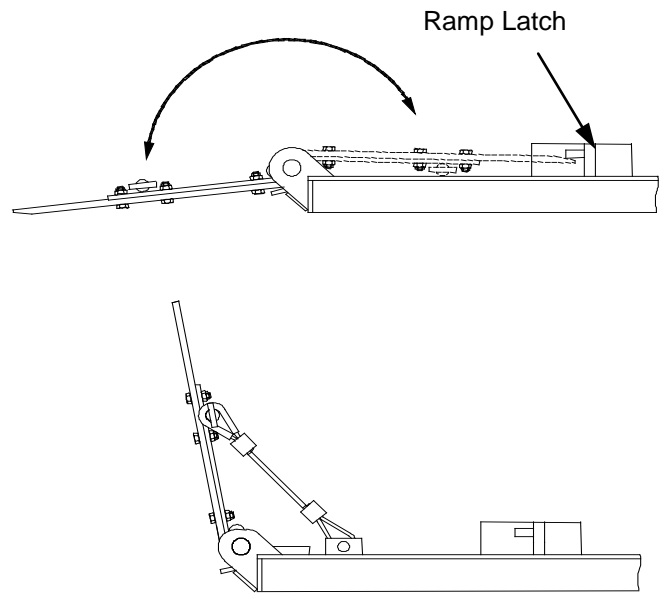


GR02483

Chapter 3 Operation Instructions

FOLDING RAMP OPERATION INSTRUCTIONS

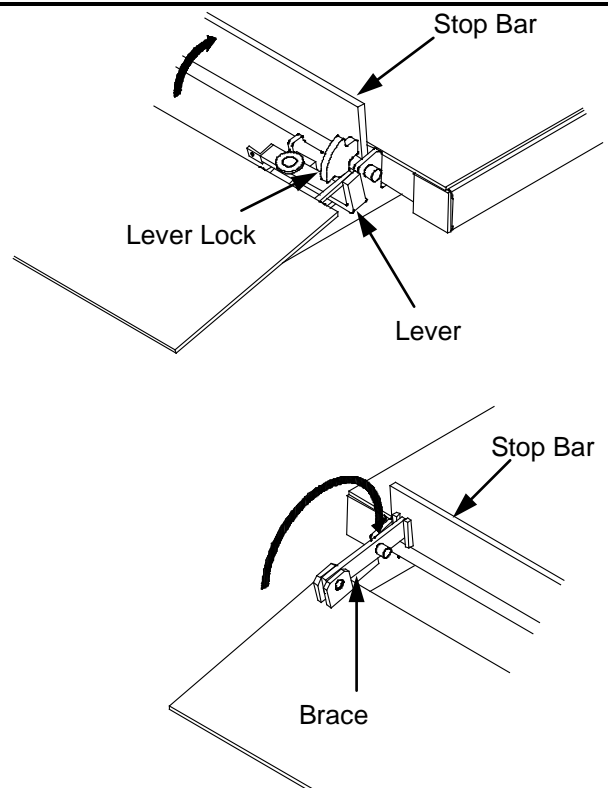
Unlatch ramp and unfold to loading position.
Use cables for retention ramp application.
Assure ramp is latched when in transit position.



GR01553

CART STOP OPERATION INSTRUCTIONS

Push lever away from platform to release stop bar.
Rotate stop bar to lock in vertical position.
Rotate brace to engage stop bar.



GR01552

Chapter 3 Operation Instructions

DUAL PUMP OPERATION INSTRUCTIONS

The purpose of an optional Dual Pump unit is to provide a backup in the event of a malfunction of the Primary Pump or the switches on the column of the liftgate.

The Auxiliary Pump is **NOT INTENDED FOR NORMAL OPERATION** of the liftgate. Liftgate must be repaired as soon as possible after a malfunction of the Primary Pump unit occurs.

The Auxiliary Pump unit is operated with the Hand Held Remote Control located in the Hydraulic Enclosure.

TO OPERATE THE PRIMARY PUMP:

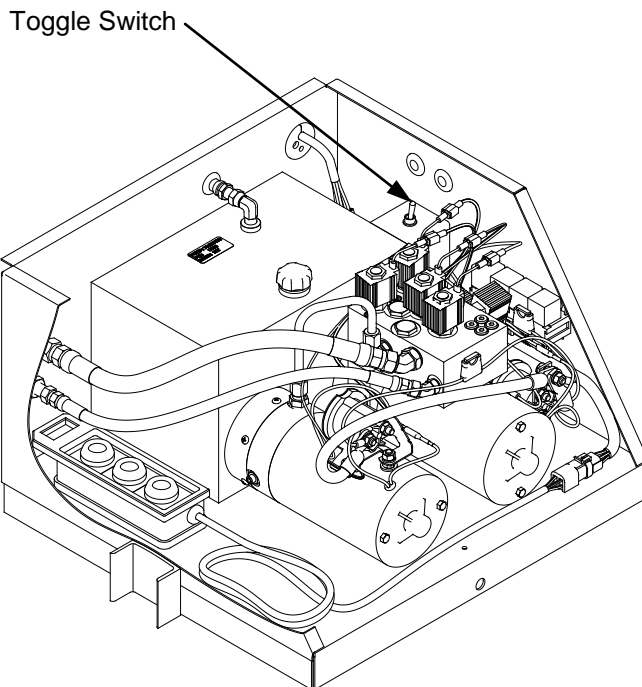
Move toggle switch on the pump to the "Primary Position".

Operate liftgate with controls on columns as usual.

TO OPERATE THE AUXILIARY PUMP:

Move toggle switch on the pump to the "Auxiliary Position".

Operate liftgate with Hand Held Remote Control.

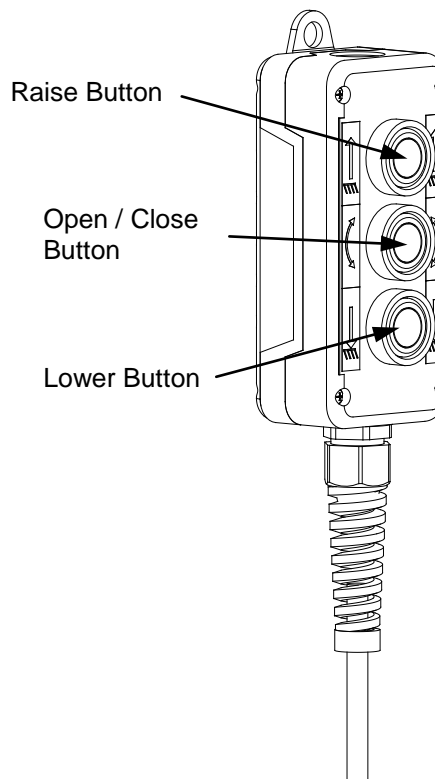


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AUXILIARY HAND HELD REMOTE CONTROL:

Auxiliary Pump Hand held remote operates in the same manner as the outside Main Control Switches.

Use the center switch in conjunction with the Raise or Lower switches to close or open platform.



GR02043

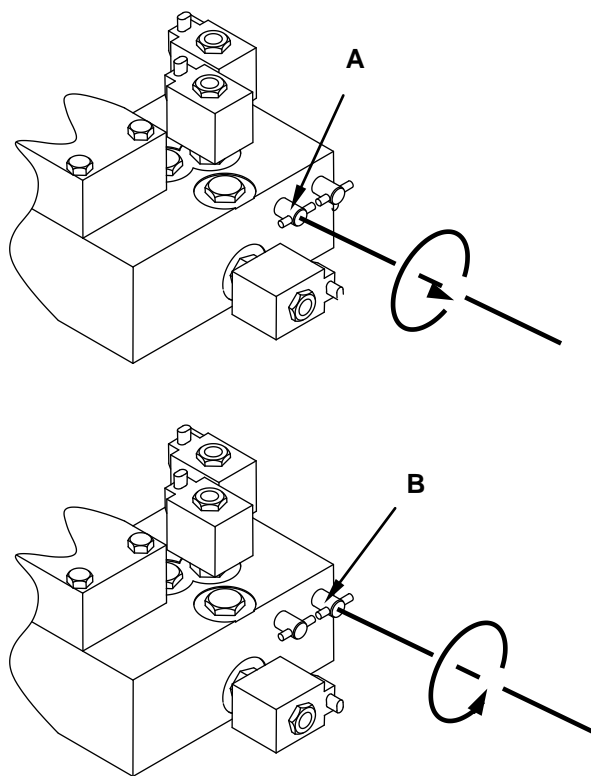
Chapter 3 Operation Instructions

OPERATION OF MANUAL OVERRIDE VALVES TO LOWER AND UNFOLD PLATFORM IN EVENT PUMP ISN'T FUNCTIONING:



Do not allow anyone to stand in, or near area, in which Platform will open and/or lower.

Use valve (A) to open platform. Then valve (B) to lower platform to ground.



GR01987

HAND PUMP OPERATION INSTRUCTIONS:

Hand Pump option is to provide a backup in the event of a malfunction of the batteries, pump unit or controls.

The Hand Pump is **NOT INTENDED FOR NORMAL OPERATION** of the liftgate. Liftgate must be repaired as soon as possible after a malfunction occurs.

Make certain Manual Override Valves (A & B) are closed.

Raise platform to bed level with Hand Pump.

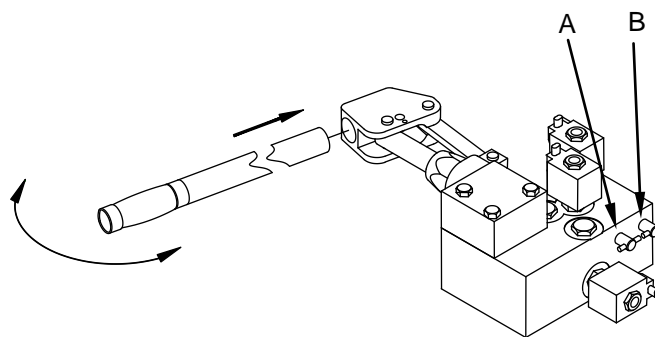
Make certain platform surface is clear of all objects.

Continue to pump until platform is closed.



Do not over pressurize hydraulic system. Once platform is closed, stop pumping.

Install Safety Chains.



GR02484

Chapter 4 RBGL Operation Instructions

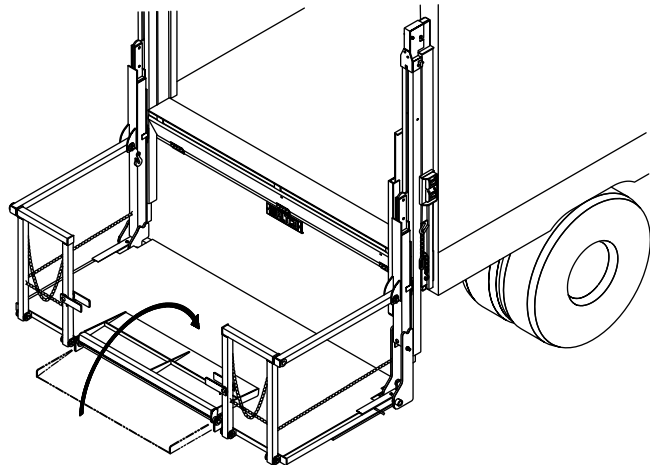
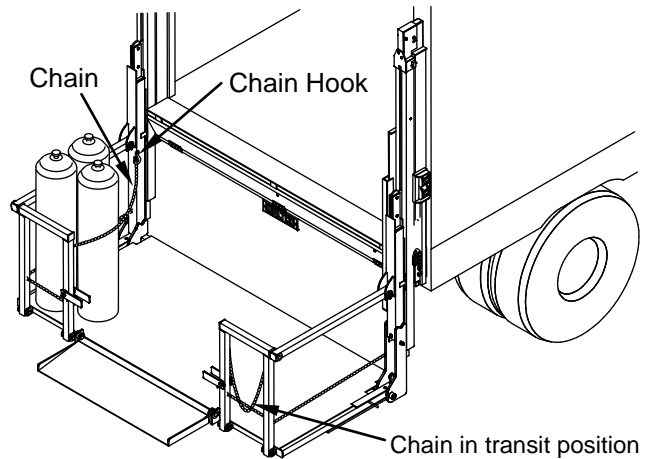
RBGL SERIES OPERATION INSTRUCTIONS

The RBGL is specifically designed for handling tall loads such as cylinder gas bottles.

Securing loads can be accomplished by using the chains.

After placing a load in position, fasten chain snugly around load to Chain Hook on Runner.

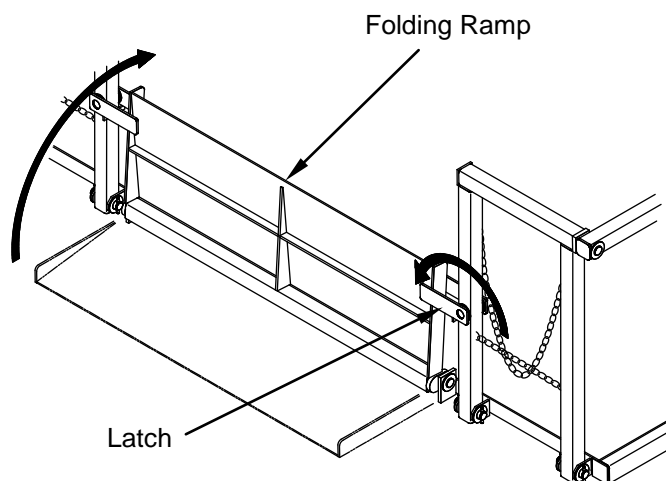
After use, chains are hooked to Guard Rail and ramp is folded onto the platform skin for transit.



GR02485 - 86

FOLDING RAMP USED AS CART STOP

Folding Ramp may be used as a retaining device to prevent carts and similar devices from rolling off platform.

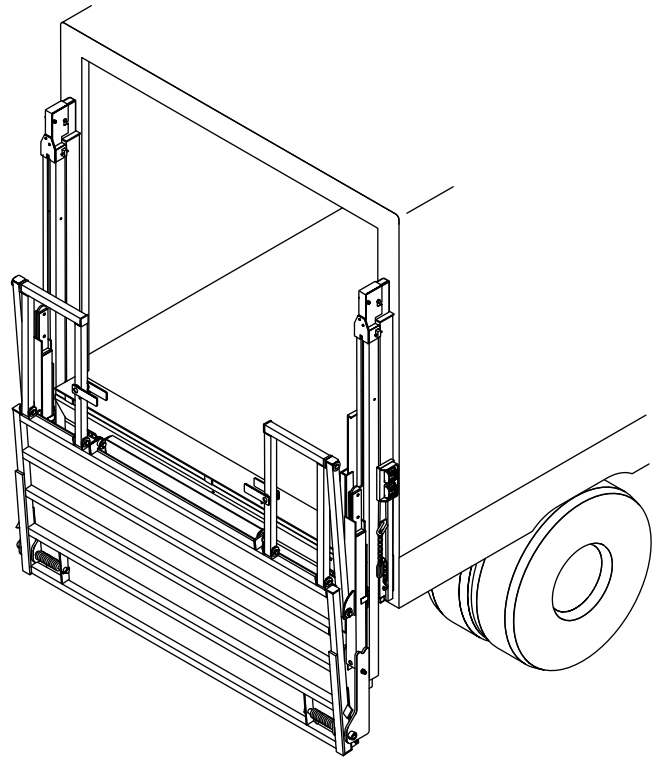


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Chapter 4 RBGL Operation Instructions

RBGL WITH FIXED RAILS IN DOCK LOADING POSITION.

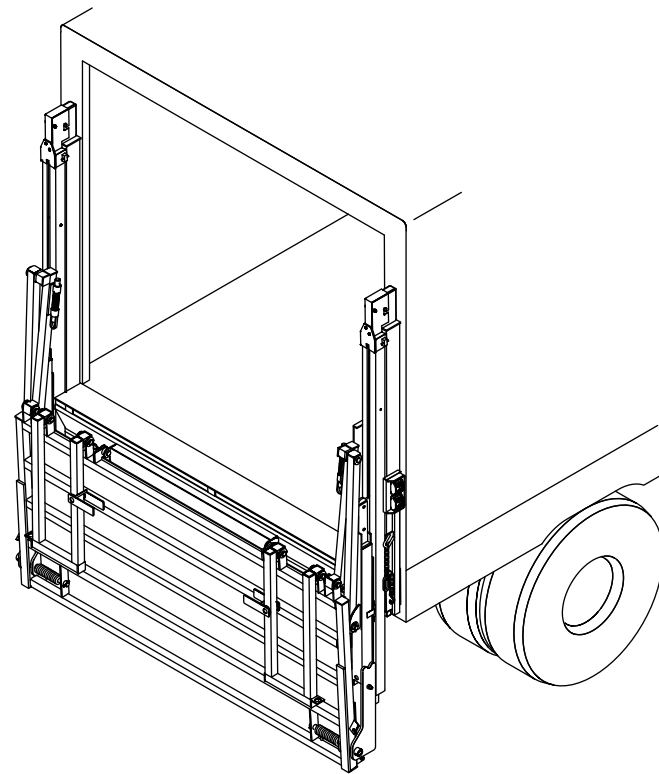
When dock loading, ramp is to be folded down onto platform skin before raising platform to closed position.



GR02488

RBGL WITH FOLD DOWN RAILS (optional)

Fold Down Rails can be folded down out of the way to increase available opening width when dock loading.



GR02489

Chapter 5

Preventive Maintenance

Waltco recommends that the RGL-Series liftgate be inspected at recommended intervals listed below to help assure proper function and operation of the liftgate.

Note: Photocopy the following PM Checklist to help keep track of periodic maintenance on the liftgate. Keep completed form with maintenance records.

For more detailed instructions on the following checklist items, refer to the appropriate sections in this Owner's Manual.



DO NOT CONTINUE TO USE LIFTGATE IF ANY POINTS OF INSPECTION LISTED BELOW, MAY CAUSE YOU TO THINK THE LIFTGATE IS UNSAFE. REPAIR IMMEDIATELY.

If liftgate is found to be in need of repair or adjustment not covered in this manual, contact your nearest Waltco Distributor.

WALTCO RGL/RBGL-SERIES LIFTGATE PREVENTIVE MAINTENANCE CHECKLIST

PM Interval: As listed below

Date: _____

Vehicle No. _____

Mechanic: _____

Liftgate S/N: _____

Model: _____

Check appropriate box below for each step:

Weekly PM Procedures

1	OK	Repair Required	Corrected	Check platform brake (weekly procedures).
---	----	-----------------	-----------	---

Monthly PM Procedures

2	OK	Repair Required	Corrected	Check liftgate operates freely and smoothly throughout entire operation.
3	OK	Repair Required	Corrected	Check platform brake (monthly procedures).
4	OK	Repair Required	Corrected	Check for apparent damage to the lifting structure, such as bent or distorted members or cracked welds.
5	OK	Repair Required	Corrected	Check that all pins, bolts and fasteners are tight and secure.
6	OK	Repair Required	Corrected	Check for worn or damaged bearings, pulleys, rollers, all pivot points.
7	OK	Repair Required	Corrected	Check safety chains and hooks.
8	OK	Repair Required	Corrected	Check that controls operate properly.
9	OK	Repair Required	Corrected	Check operating speeds.
10	OK	Repair Required	Corrected	Check for hydraulic leaks in hydraulic cylinder(s), hoses, fittings, and valves.
11	OK	Repair Required	Corrected	Check all battery cables and connections (both positive and ground cables) to be sure they are tight and free of corrosion.
12	OK	Repair Required	Corrected	Check oil level in reservoir.
13	OK	Repair Required	Corrected	Check that all decals are in place and legible.
14	OK	Repair Required	Corrected	Lubricate the liftgate per the "Lubrication Instructions".

3 Month PM Procedures (Includes steps 2-14 above)

15	OK	Repair Required	Corrected	Check entire length of both lifting cables. Replace cables every 5 years or 10,000 cycles whichever comes first.
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Semi Annual PM Procedures (Includes steps 2-15 above)

16	OK	Repair Required	Corrected	Check motor brushes, clean motor housing and change oil.
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WEEKLY INSPECTION

Platform Brake

Lower opened platform to within a few inches of the ground. Place a 4 X 4 or similar block under the Platform Side Tube at main Platform Pivot.

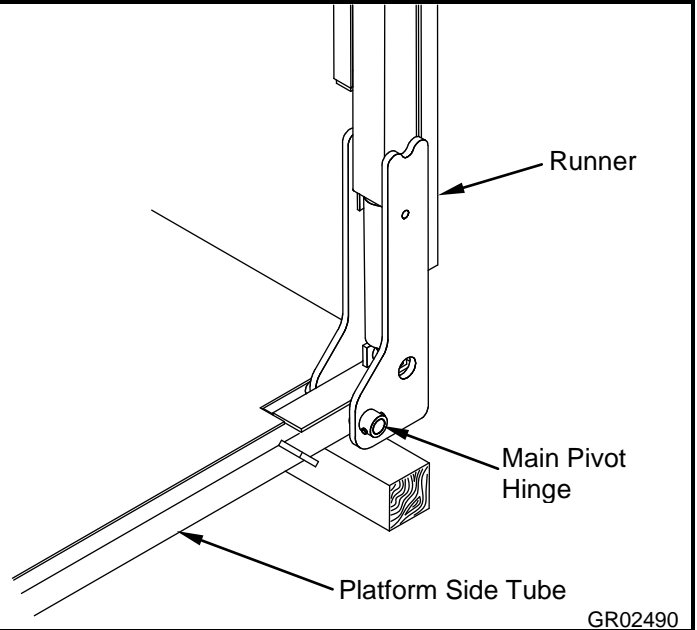
Lower opposite side of platform to the ground so that platform is resting at an angle.

While raising platform with raise switch, listen for a "click" near top of Runner. If no "click" is heard, try again. If still no "click", the "Monthly Inspection" must be conducted.

Repeat above test for opposite Runner.



Do not use liftgate if Platform Brake is not functioning properly. Have liftgate serviced immediately.



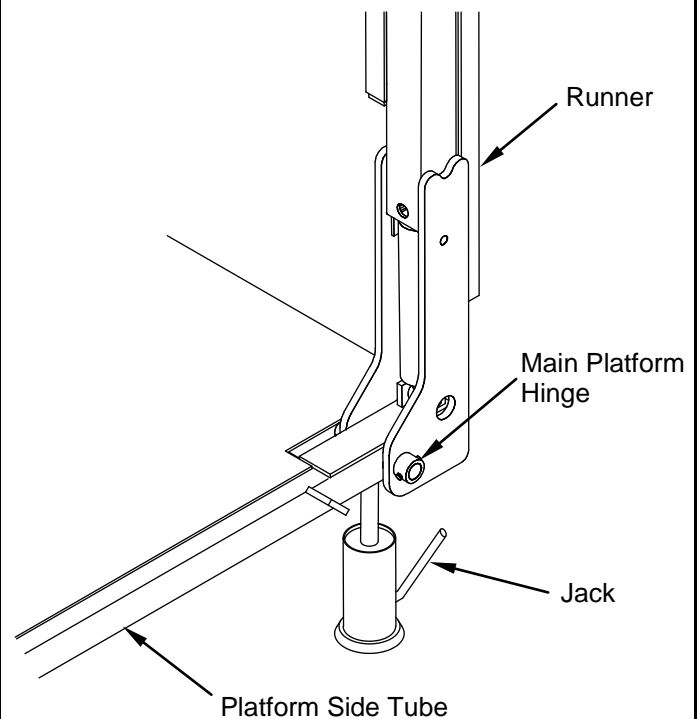
GR02490

MONTHLY INSPECTION

1. Check that liftgate operates freely and smoothly throughout its entire operating cycle and there are no unusual noises.
2. Check that platform is level when raised to bed height.
3. Perform the following steps to test Platform Brake mechanism:
 - Lower open platform to within a few inches of ground. Place a suitable hydraulic or scissor type jack under Platform Side Tube at main Platform Hinge.
 - Jack Platform and Runner up approximately 3" relative to Rail.
 - Lower jack. If Platform and Runner remain in the raised position then Platform Brake is operational.
 - Push Raise Switch to raise entire platform several inches above test position and Platform Brake should disengage.
 - Lower platform and repeat for the opposite side Platform Brake.



Do not use liftgate if Platform Brake is not functioning properly. Have liftgate serviced immediately.



GR02491

Chapter 5

Preventive Maintenance

4. Inspect entire length of both Cables. Replace if necessary.



Entire length of both Cables must be inspected a minimum of every three (3) months or 750 cycles, whichever comes first.

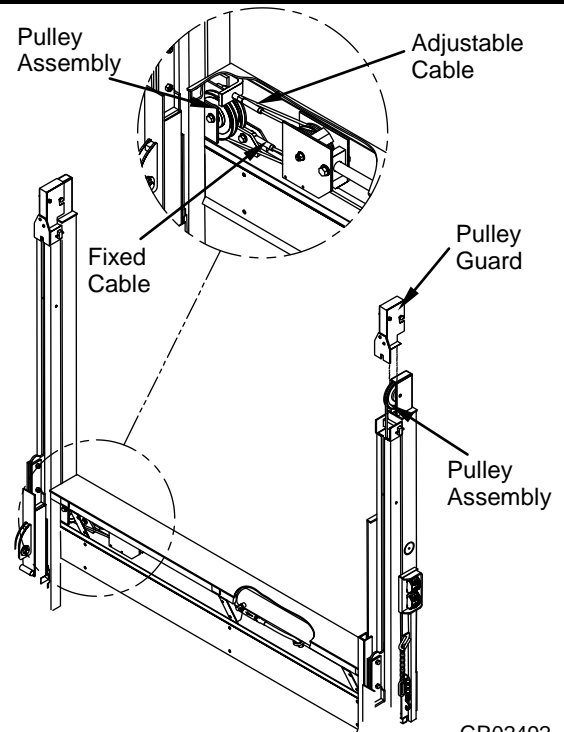
Cables must be replaced if they show any signs of wear, kinking, corrosion, distortion, or if any broken cable wires are visible.



Cables must be replaced every five (5) years or 10,000 cycles, whichever comes first.

Any time Cables are replaced, all Pulley Bolts and lock washers must also be replaced. Waltco provides kits for Cable/Pulley Bolt replacement.

During Cable and Pulley Bolt replacement, also inspect the Pulleys and Pulley Bearings. If any components are worn or otherwise deteriorated they must be replaced. If bearings do not rotate freely, they are to be replaced.



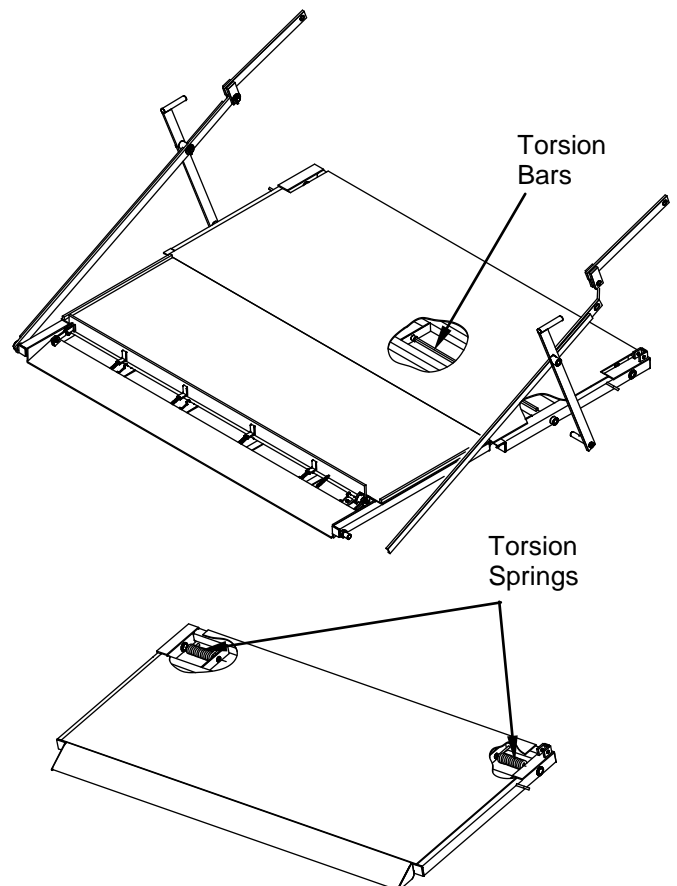
GR02492

5. Check for apparent damage to liftgate, such as bent or distorted members and/or any cracked welds, which may have resulted from overloading or abuse.
6. Check for any excessive wear in the Cable Pulleys, Bearings and Rollers, Platform Linkage and Pins,
7. Closer Mechanism, Pulley Bolts, and all pivot points.
8. Check that all nuts and bolts are in place and properly tightened.
9. Check that all Pivot and Stop Pins are in place and retained by their proper fasteners.
10. Check that all control switches operate properly.
11. Check the Platform opening and closing speed. The Platform must open and close smoothly and at a safe and reasonable rate of speed subject to the environment in which it will be operated.
12. On platforms with Side Linkage, inspect the Torsion Bars with the platform in loading position at bed level. If any Torsion Bars are broken they must be replaced.



DO NOT get under Platform to inspect Torsion Bars.

13. On platforms without side linkage, inspect Torsion Springs visually with Platform in stored position. If any Torsion Springs are broken they must be replaced.



GR02492

Chapter 5

Preventive Maintenance

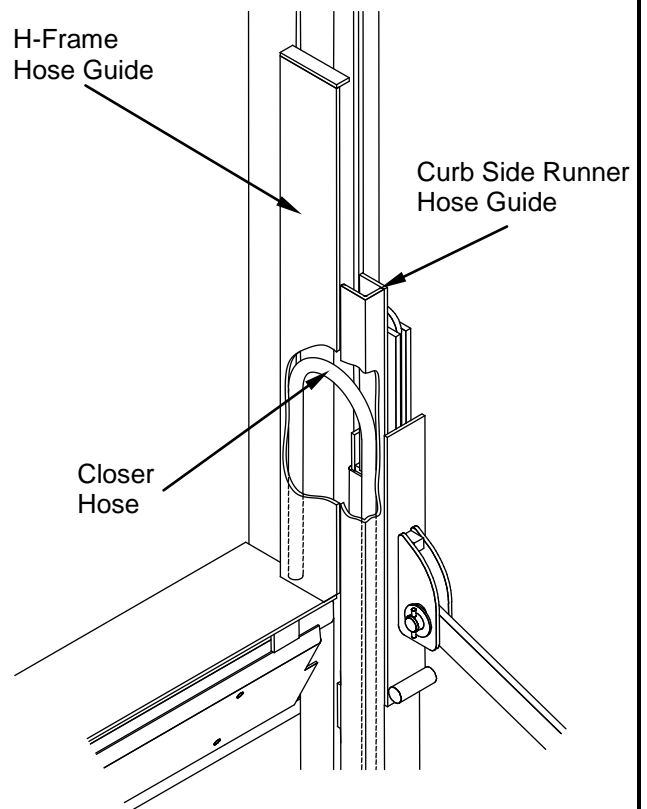
14. Inspect entire length of Closer Cylinder Hose for signs
15. of wear, abrasion, or leakage. Hose should flex easily throughout operating cycle with no binding.
16. Check Hose Guides for bends or damage.
17. Check for oil leaks in hydraulic Lift Cylinder, hydraulic Closer Cylinder, and all hydraulic hoses and fittings. Replace any hose that show any sign of excessive abrasion of the covering. Tighten or replace any hydraulic component as required to stop oil leakage.
18. Check level of oil in liftgate hydraulic Reservoir with the Platform at ground level. The oil should be within 1/2" of top of Reservoir.
19. Lubricate the liftgate by following the "Lubrication Instructions" chapter in this manual.
20. Check the electrolyte level of vehicle battery. Fill as required per manufacturer recommendation.
21. Examine all Warning, Capacity, and Operation decals.



If any decals are illegible and need to be replaced, decals can be obtained free of charge from Waltco.



If liftgate is found to be in need of repair or adjustment not covered in this manual, contact your nearest Waltco distributor.



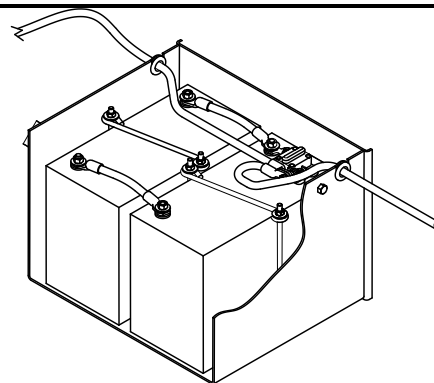
GR02493

CHECK BATTERIES

Check electrolyte level of batteries.

Check that all wiring and battery cable connections are tight and free of corrosion.

All electrical connections are to be coated with dielectric grease.

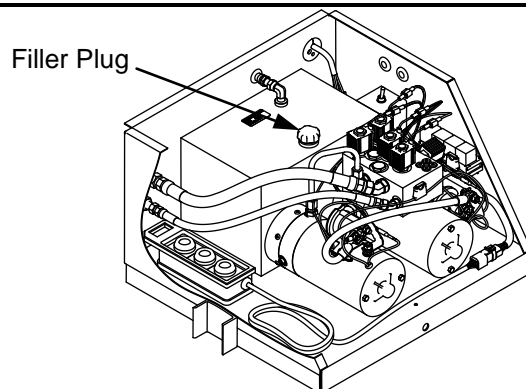


GR01471B

CHECK OIL LEVEL

Lower platform to ground in open position.

Fill hydraulic reservoir to within 1/2" of top of reservoir.



GR02135

Recommended Fluids	
Temperature Range	Acceptable Fluids
0° to 120° F	Waltco Biodegradable Liftlube™ part #85803860
	Shell Tellus S2 V 32
	Chevron Rando HDZ 32
-20° to 90° F	Waltco Biodegradable LiftLube Arctic part #85803866
	Waltco All Season Hyd Oil Part 85803867
	Shell Tellus S2 V 15
	Mobil DTE 10 Excell 15

A good quality SAE 10W motor oil may also be used in temperatures above 32° F.

Fill reservoir

- Fill with recommended fluid or equivalent.
- Fill the reservoir to within 1/2" from the top.
- Fluids are available from the Waltco parts Dept. 1-800-411-5685 www.waltco.com

NOTE:

Do not use the following fluids:

Brake Fluid

Power steering fluid

Automatic Transmission Fluid (ATF)

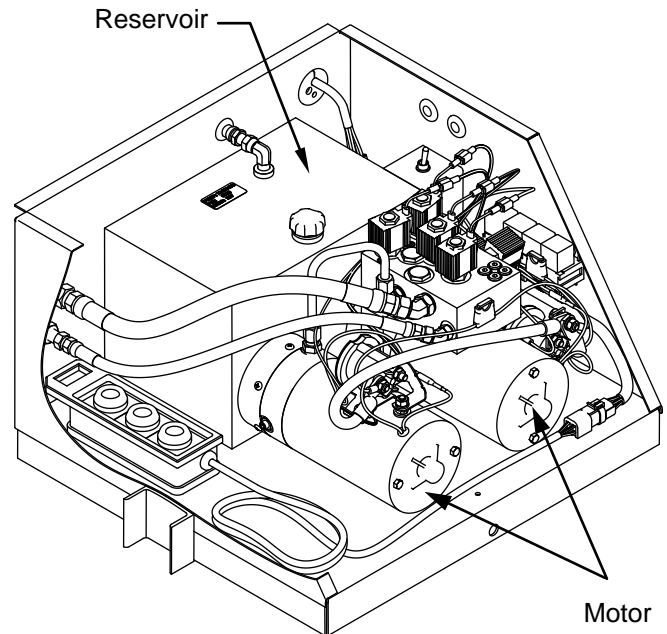
Rev 06

SEMI ANNUAL INSPECTION

1. Perform procedures outlined in "Monthly Inspection"
2. Inspect pump unit motor:
 - Disconnect battery cables.
 - Remove motor end cover.
 - Examine armature brushes for wear. Motor should be replaced if brushes are less than 1/8" long.
 - Clean out all residue from inside motor housing
 - Apply several drops of light weight machine oil to armature shaft bearing in motor end cover and reassemble motor end cover.

If oil is dirty, drain oil from hydraulic system and flush entire system. To replace Hydraulic Fluid:

 - Open platform and lower to ground.
 - Drain oil from hydraulic system using drain port located on bottom of reservoir and flush entire system.
 - Fill reservoir to within 1/2" of top of reservoir



GR02135

Chapter 5

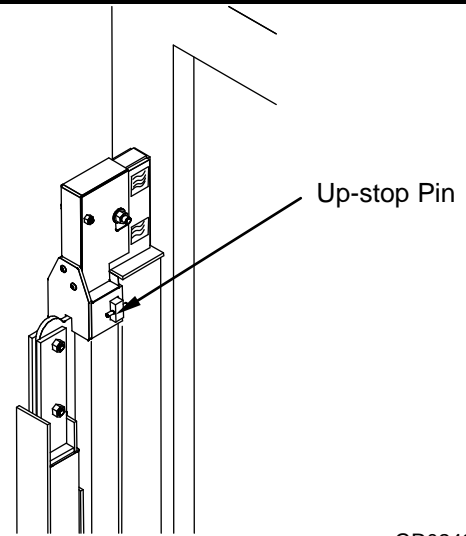
Preventive Maintenance

PLATFORM ADJUSTMENT

If platform is not level with floor of vehicle check that both up-stop pins are properly secured in place.

If not, up-stop pins must be re-installed properly.

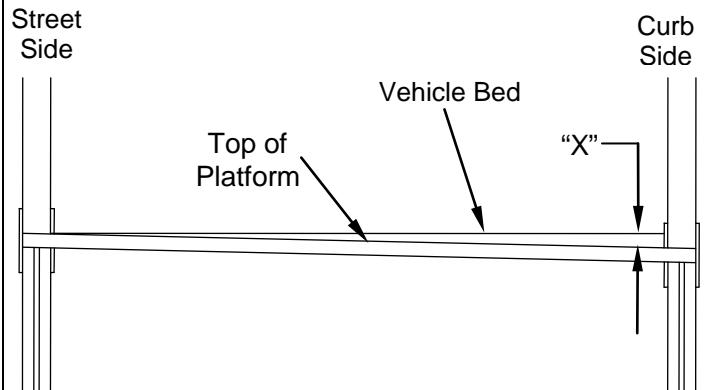
If platform is still not level proceed to next step.



GR02494

Unfold and raise platform to bed level and measure how uneven platform is in relationship to vehicle floor. This will be your "X" dimension.

Lower platform to ground. Remove access cover from crossbeam box.



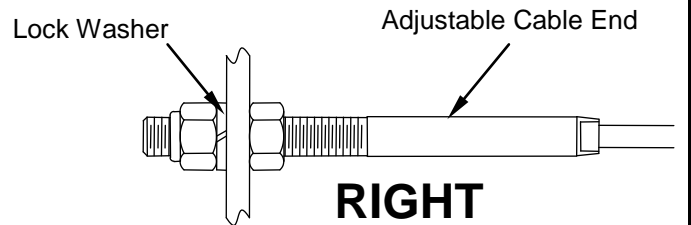
GR02495

Loosen locknut. If curb side of platform is lower than street side, adjust cable to the right by turning the adjusting nut counterclockwise from cable end. If street side of platform is lower than curb side, adjust cable to the left by tuning the adjusting nut clockwise from cable end. Adjust cable the same distance as "X" as measured above. Tighten locknut.

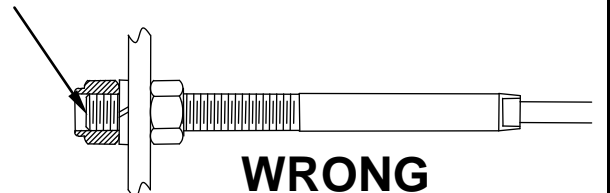


Make certain adjusting nut is fully threaded on cable end and tightened.

Reinstall access cover.



Cable End not to be below surface of nut



GR02496

Chapter 6

Placement of Decals



All decals must be in place and legible or all warranties are void.

All decals must be in place and legible or all warranties are void.

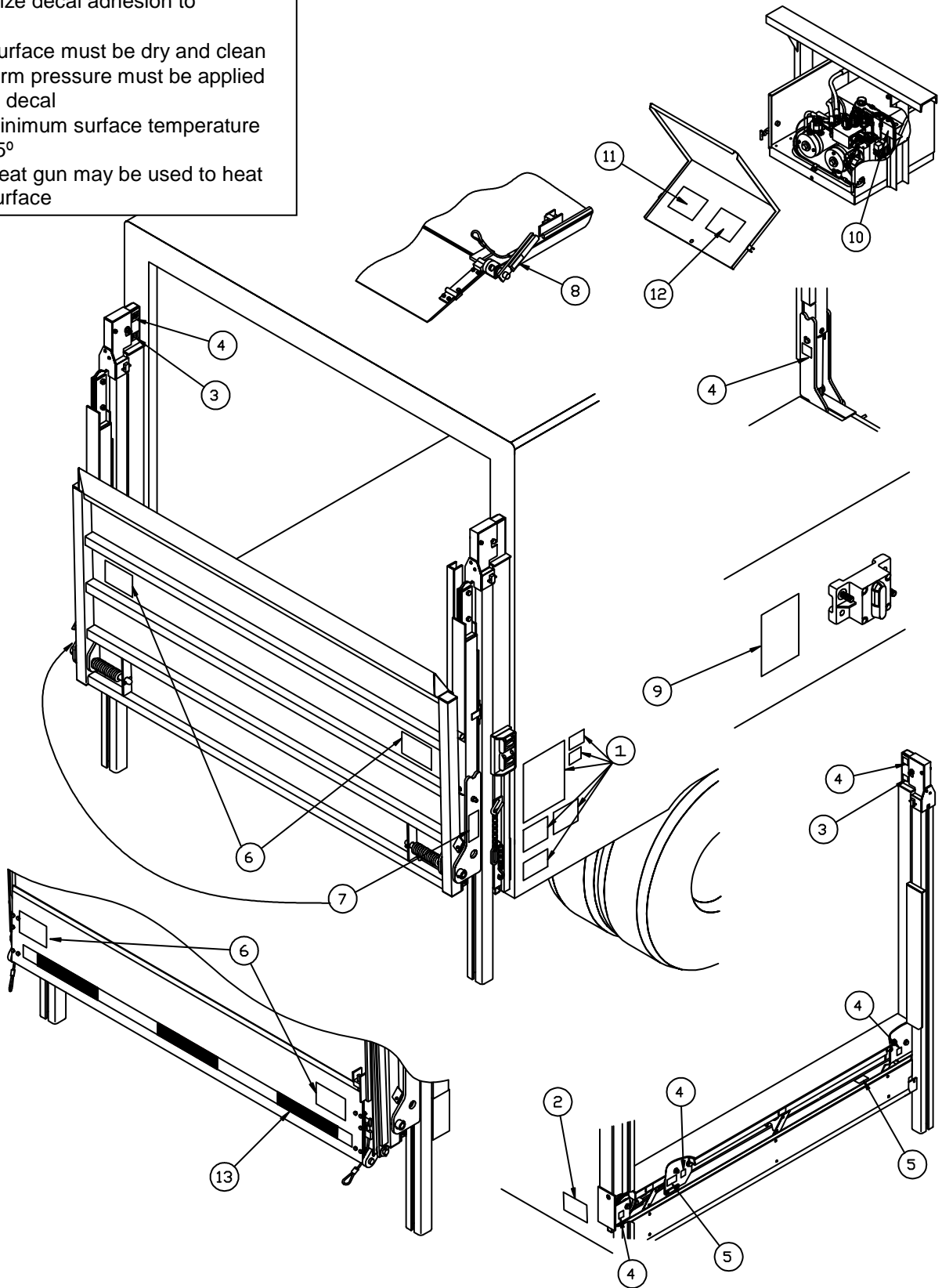
ITEM	DECAL	QTY	PART NO.	LOCATION
1	Safety Instructions	1	80100850	<p>Locate in a conspicuous place near controls.</p> <p> If your liftgate is equipped with dual controls, an additional Safety Instruction decal (80100850) is to be placed in a conspicuous place near the second set of the controls.</p>
	Operation	1	80101669	
	2000 lb Capacity Decal	1	80100253	
	3000 lb Capacity Decal		80100257	
	4000 lb Capacity Decal		80100260	
	5000 lb Capacity Decal		80100263	
	6000 lb Capacity Decal		80100265	
	Circuit Breaker Decal	1	80100828	
	Hazard Decal	1	80101370	
	Caution Stand Clear	1	75089296	
2	Caution Stand Clear	1	75089296	Locate near liftgate on street side of vehicle.
3	Caution Decal	2	75089282	Locate near top of each rail, not on pulley covers themselves, so can be read when removing pulley covers.
4	Important Decal	6	75089280	Locate one each in a conspicuous place near upper and lower pulley bolts, main cylinder bolts, shoe assembly bolts, and upper and lower cylinder bolts.
5	Caution Decal	2	75089282	Locate one on shoe assembly and one on bottom of crossbeam box, under cylinder.
6	Caution Stand Clear	2	75089296	Locate on back (bottom) side of platform or ramp so as to be visible when liftgate is in stored position. Used on liftgates equipped with single section platform or with folding ramp.
7	Safety Chain Decal	2	80100527	Locate at base of both runners.
8	Important Decal	1	80100482	Locate on lower curb side linkage. Used on liftgates equipped with a folding ramp.
9	Warning Decal	1	80100829	Locate next to circuit breaker. If more than one circuit breaker is used; decal must be in both locations.
10	Selector Switch Decal, Single Pump Only	1	80101371	Locate appropriate decal on pump unit selector switch bracket.
	Selector Switch Decal, Dual Pump Only		80101380	
11	Dual Pump Decal	1	80101021	Locate decal inside hydraulic enclosure cover for all dual pumps.
	Hand Pump Decal		80101199	Locate decal inside hydraulic enclosure cover for liftgates with Auxiliary Hand Pump Option.
12	Single Pump Decal	1	80101372	Locate decal inside hydraulic enclosure cover for all single pumps.
	Dual Pump Decal		80101373	Locate decal inside hydraulic enclosure cover for all dual pumps.
13	Conspicuity Tape	1	82021067	Locate on back (bottom) side of platform or ramp so as to be visible when liftgate is in stored position.

Chapter 6

Placement of Decals

To maximize decal adhesion to surfaces:

- Surface must be dry and clean
- Firm pressure must be applied to decal
- Minimum surface temperature 65°
Heat gun may be used to heat surface



GR02475

Chapter 7 Lubrication Instructions

The liftgate should be lubricated every 120 days.

#1 – Grease with automotive type chassis grease with platform resting on ground.

#2 and #3– Oil with WD-40 or equivalent.

#1 Lubricate with chassis grease:

- Under shoe assembly
- Using a rag, lightly lubricate outside faces of rails with light chassis grease if required for smooth operation. Lubricate only areas where bearings slide on rails.



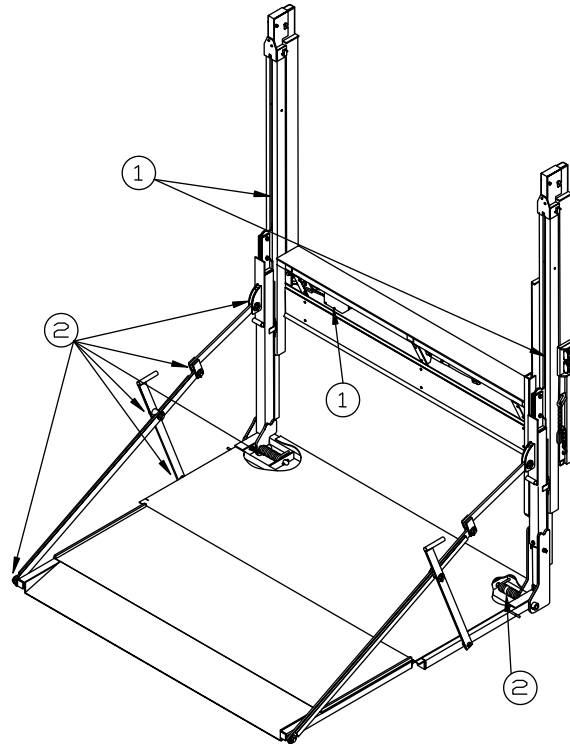
Do not operate liftgate if any guards or access covers are not in place and properly secured.

#2 Lubricate with WD-40 or equivalent:

- Platform Linkage which includes Torsion Bar Anchors, and Springs on one-piece platforms.

NOTE:

Take care not to nick or scratch exposed cylinder shaft as this could cause cylinder leakage.



GR02476

#3 With Platform at bed level, use WD-40 or equivalent to lubricate two areas of both Platform Brake Mechanisms.

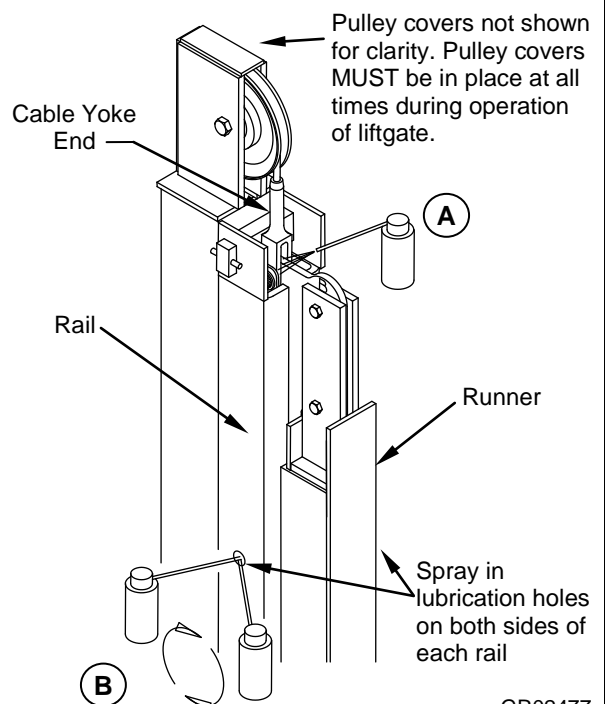
- A. Spray inside Lifting Cable Yoke end where it attaches to Runner Assembly.
- B. Spray generously with a circular motion inside lubrication holes on both sides of each rail.



Use only WD-40 or equivalent light spray lubricant to lubricate Platform Brakes. DO NOT use grease or heavy oil that may tend to build up and become gummy.

NOTE:

Cables, Roller Bearings, and Pulley Bearings do not require lubrication. While cables do not require lubrication, if cables have ever been lubricated it is recommend they continue to be lubricated.



GR02477

Chapter 8

Platform Brake

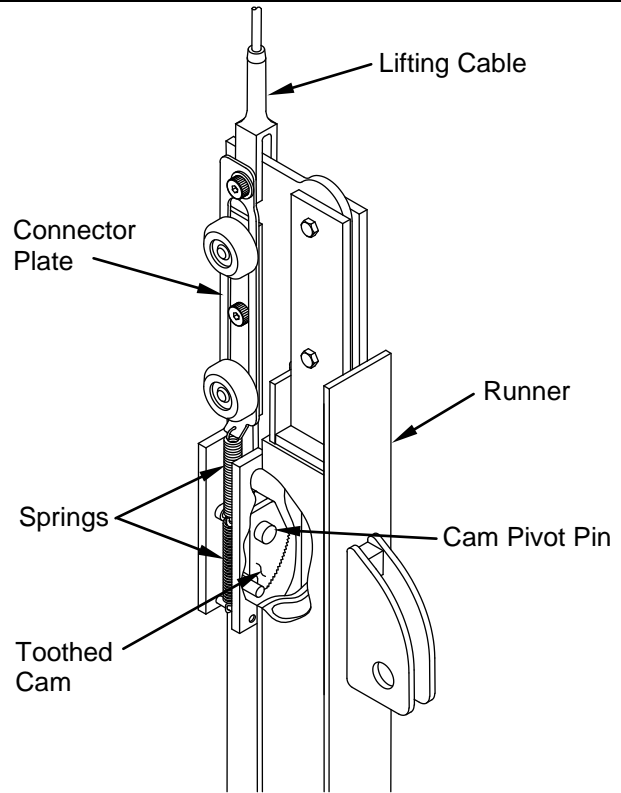
PLATFORM BRAKE

This liftgate is equipped with a platform brake system, designed to prevent the platform from falling in the event a lifting cable breaks. These platform brakes must never be used as a substitute for timely inspection and replacement of cables.



Certain conditions and/or circumstances may prevent platform brakes from functioning consistently. These platform brakes are not intended to and must not take the place of proper cable maintenance. Lifting cables must always be inspected and replaced as described in this owner's manual.

In the event a cable does break, do not move vehicle with a load on platform. Platform must be unloaded and secured for transit before vehicle is moved.



GR02498

DESCRIPTION AND FUNCTION OF PLATFORM BRAKE

The platform brake system consists of two independent brake mechanisms located at the upper portion of the runner assemblies (inside the rails).

Each platform brake assembly has a toothed cam. This cam is joined by a spring and connector plate to lifting cable. If cable is pulled taut, the cam pivots away from the rail and runner is free to travel up and down the rail.

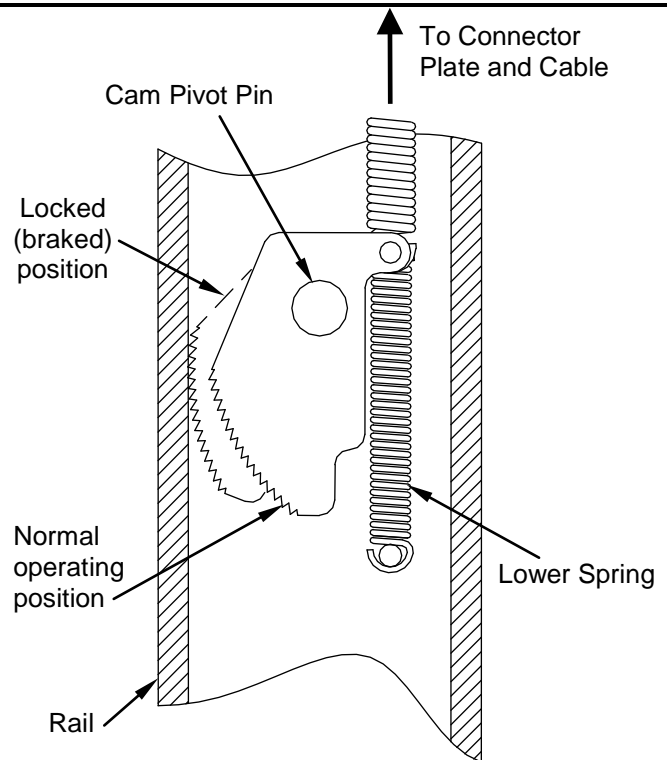
Should a cable break, spring tension (lower spring) pivots the cam so teeth contact the inside of rail, causing runner to lock at that position.

Under certain conditions, one or both platform brakes may engage (even if a cable has not broken), thus not allowing platform to lower or allowing only one side to lower.

If this happens and a cable has not broken, platform brake(s) can be disengaged by raising platform to bed level and slightly powering up against upstop pins.

NOTE:

Never allow platform to lower unevenly.



GR02499

Chapter 9 Cable Replacement

CABLE REPLACEMENT



Do not move vehicle with a load on platform.

Platform must be unloaded and secured for transit before vehicle is moved.

It is very important that both cables be replaced at the same time.

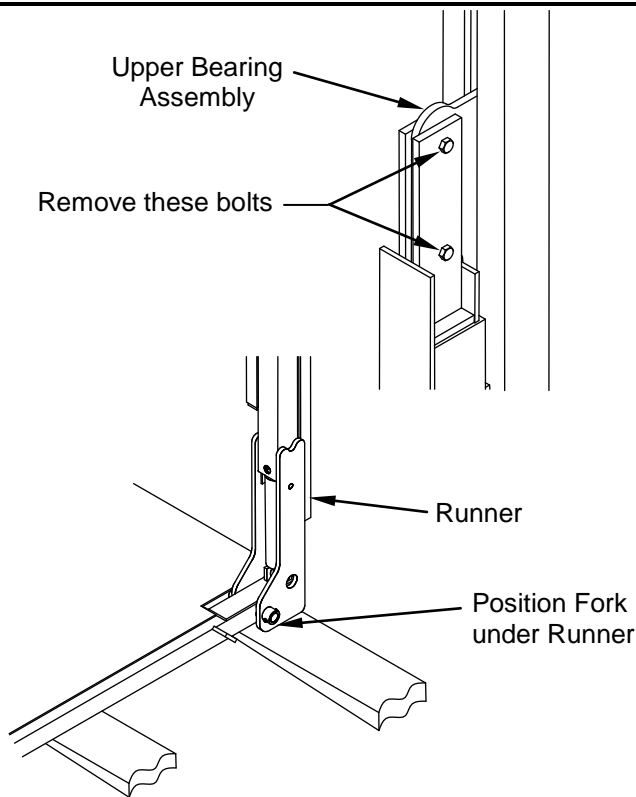
Any time cables are replaced, remove platform brake assembly for thorough cleaning and inspection. In addition, all pulley bolts and lock washers must also be replaced.

Follow these procedures for replacing cables; if you are performing a periodic replacement of cables then skip to step 3.

1. If a cable is broken, carefully unload platform. Use a forklift to support runner (side with broken cable). Only then remove upper bearing assembly mount bolts from runner (with broken cable).



Be sure to use safety precautions to avoid injuries.



GR02243

2. Lower platform slowly to ground by using one person to push Lower Switch and another to lower side of platform with forklift.

NOTE:

Be careful during this operation to prevent any damage to liftgate.

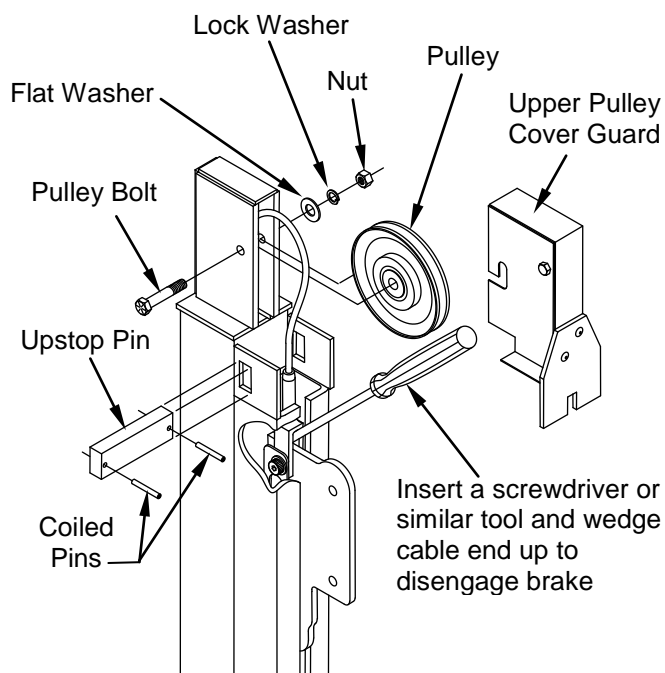
3. Make certain platform is on ground. If bolts have not been removed from upper bearing assembly do so at this time.
4. Remove pulley cover guards, upstop pins and upper pulleys from top of both rails.
5. Lift upper bearing/brake assemblies out of rails by the cable.



Cable may have broken wires sticking out – using leather gloves is recommended.

NOTE:

Bearing/Brake assembly should be pulled out by the Cable. If unable to do so, insert a screwdriver between Cable Anchor and Upper Bearing/Brake Mount Plate. This will release Brake so Bearing Assembly can be pulled out of Rail.



GR02244

Chapter 9 Cable Replacement

- Remove old cables from liftgate, making note of how cables are routed. Install new cables.

NOTE:

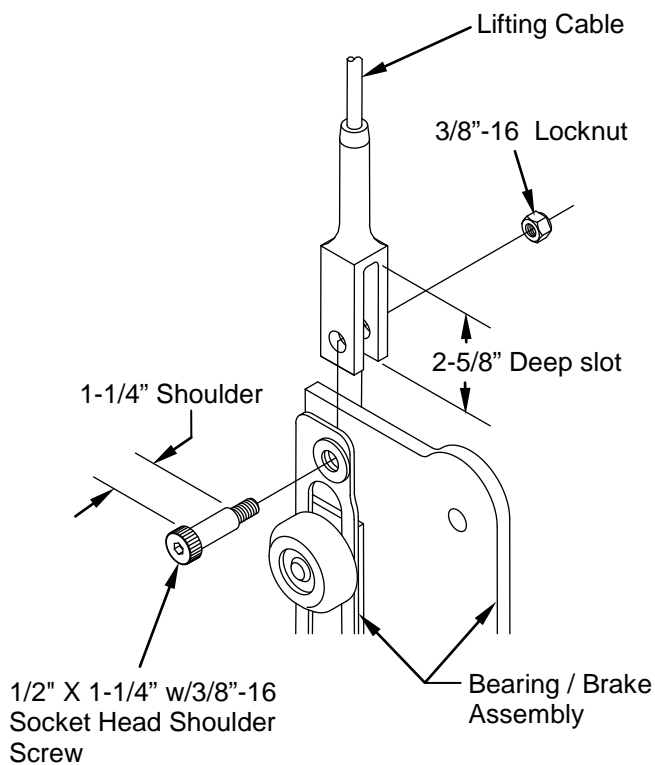
Use proper cables. Cables used on liftgates with Brakes must have 2-5/8" deep end slots as shown.

- Platform brakes should be inspected cleaned and lubricated at this time (see below).
- Attach yoke end of new cable to brake assemblies.
- Use a screwdriver, if required, to lower bearing/brake assembly down into rail (see previous page).

NOTE:

Special care must be observed when attaching Cable End to platform Brake Mechanism so use proper parts as shown.

- Reinstall upper pulleys, upstop pins and pulley cover guards (ref previous page).
- Line up holes in bearing/brake assembly with mount holes in top of runner and install bolts, nuts and lock washers.
- Double check that all nuts, bolts, washers, and coiled pins are in place and properly secured.
- Adjust cables to level out platform per instructions in this manual.
- Test operation of each platform brake assembly as outlined in the "Maintenance Guide" in this manual.



GR02245

INSPECTION OF PLATFORM BRAKES

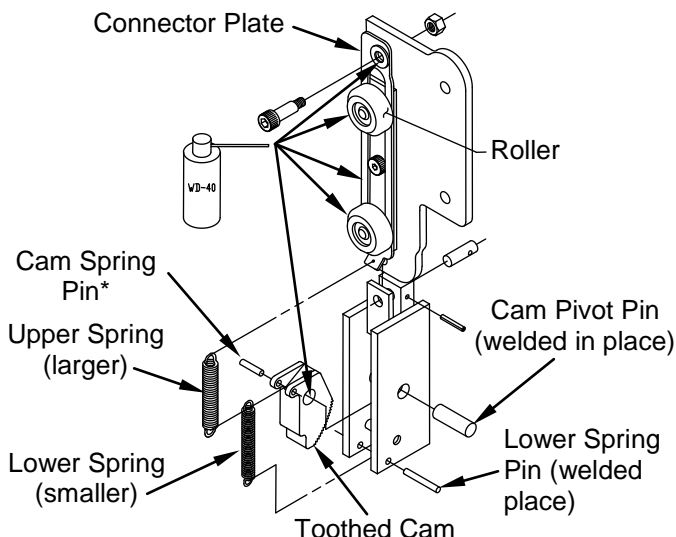
Examine platform brake assembly for loose pins, bent or damaged parts, etc. Replace any damaged components.

Make certain all parts including cam moves freely without binding which may be caused by corrosion, bent pins, etc.

Be certain springs are not corroded, bent or broken. Replace if necessary.

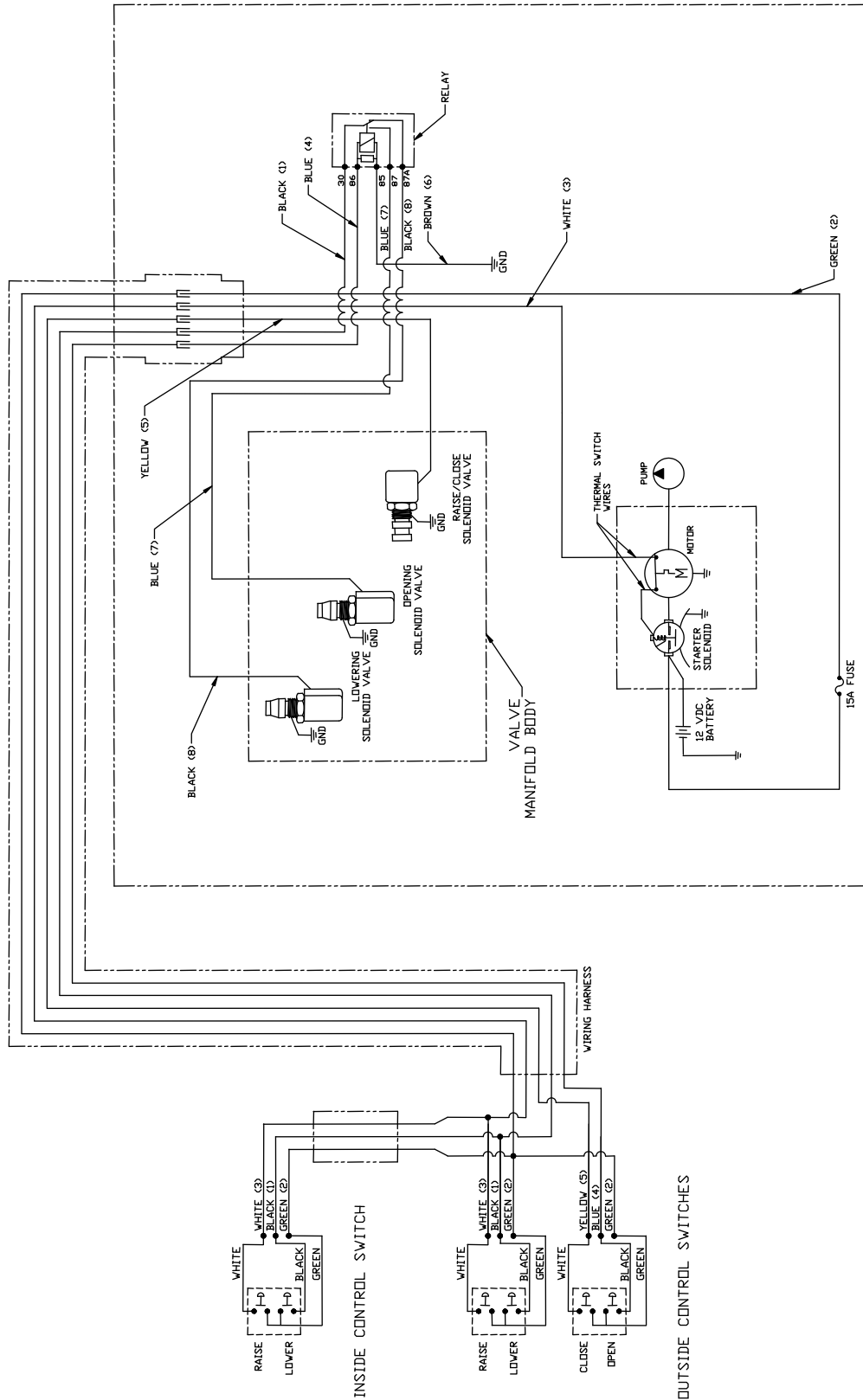
Examine toothed cam for chipped, broken or dulled teeth. Replace if signs of damage. Clean any grease, dirt, etc. from teeth of cam.

Lubricate areas shown with "WD-40" or similar light spray lubricant.



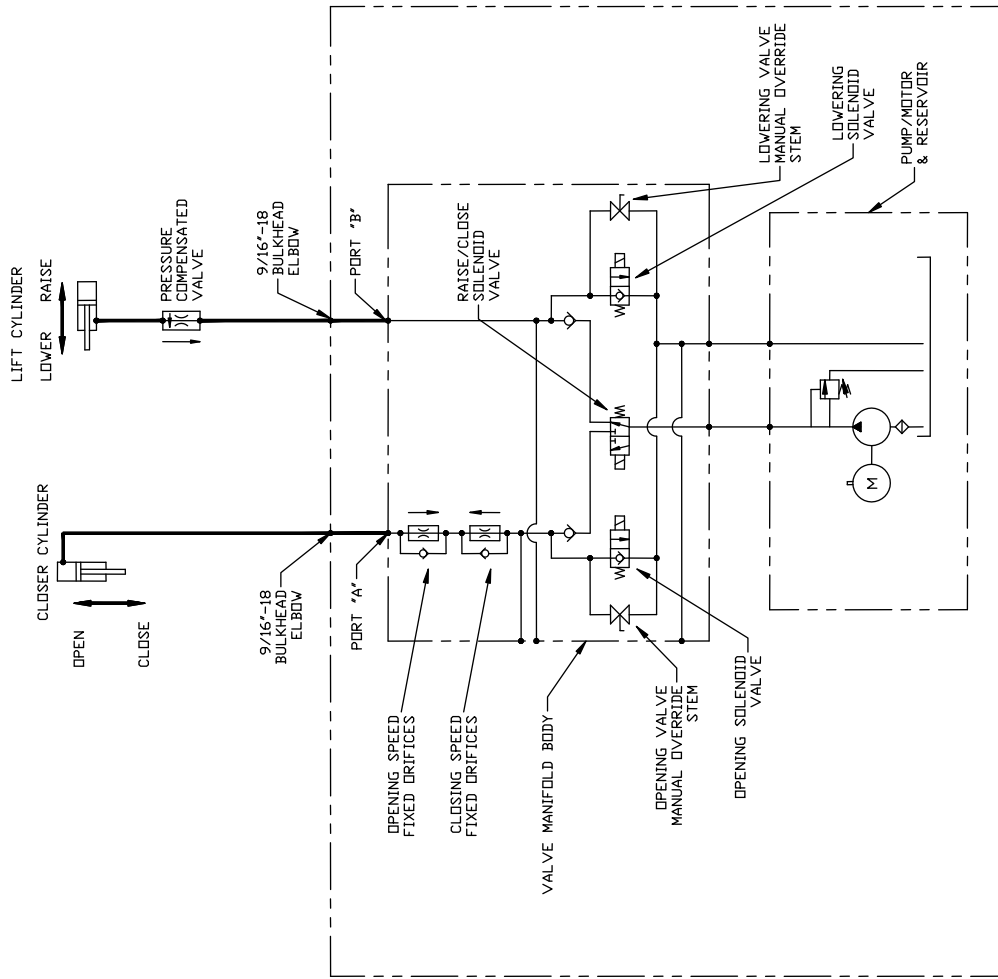
GR02500

SINGLE PUMP ELECTRICAL SCHEMATIC

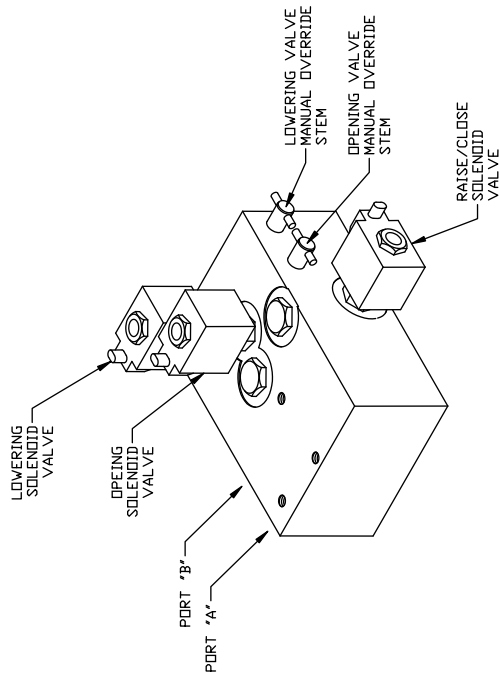


GR02304

SINGLE PUMP HYDRAULIC SCHEMATIC



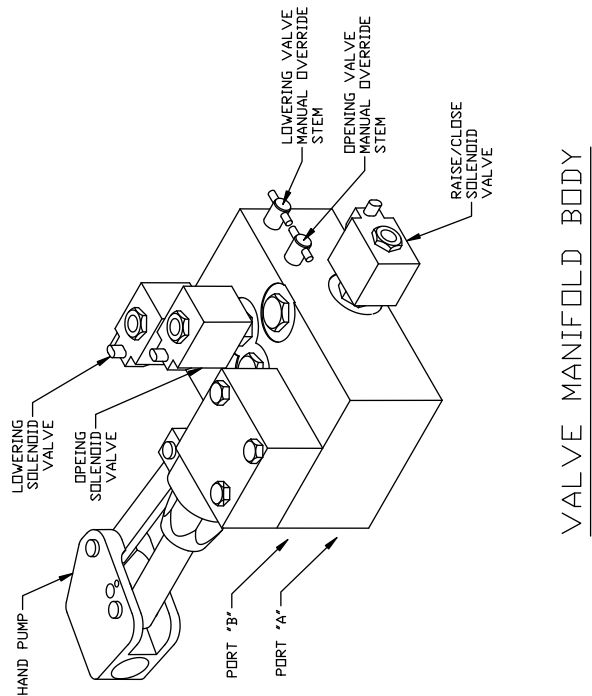
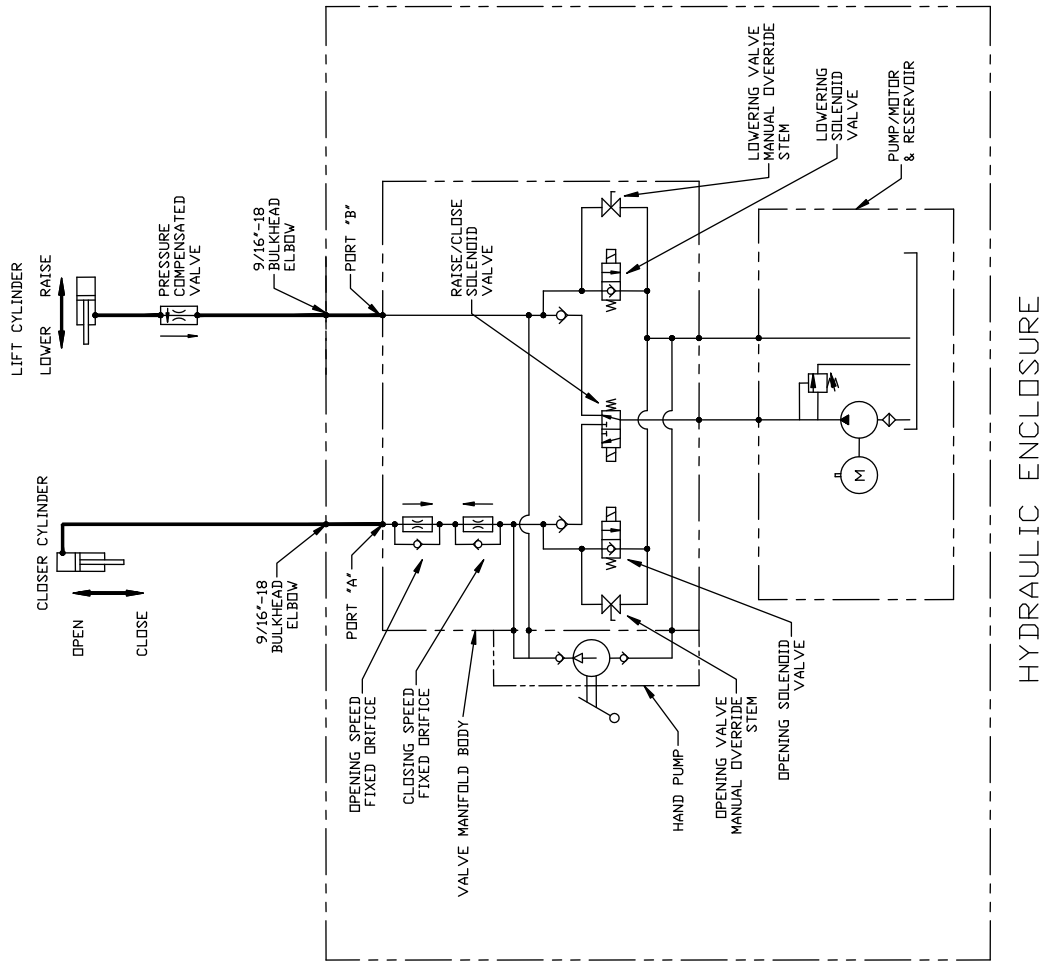
HYDRAULIC ENCLOSURE



VALVE MANIFOLD BODY

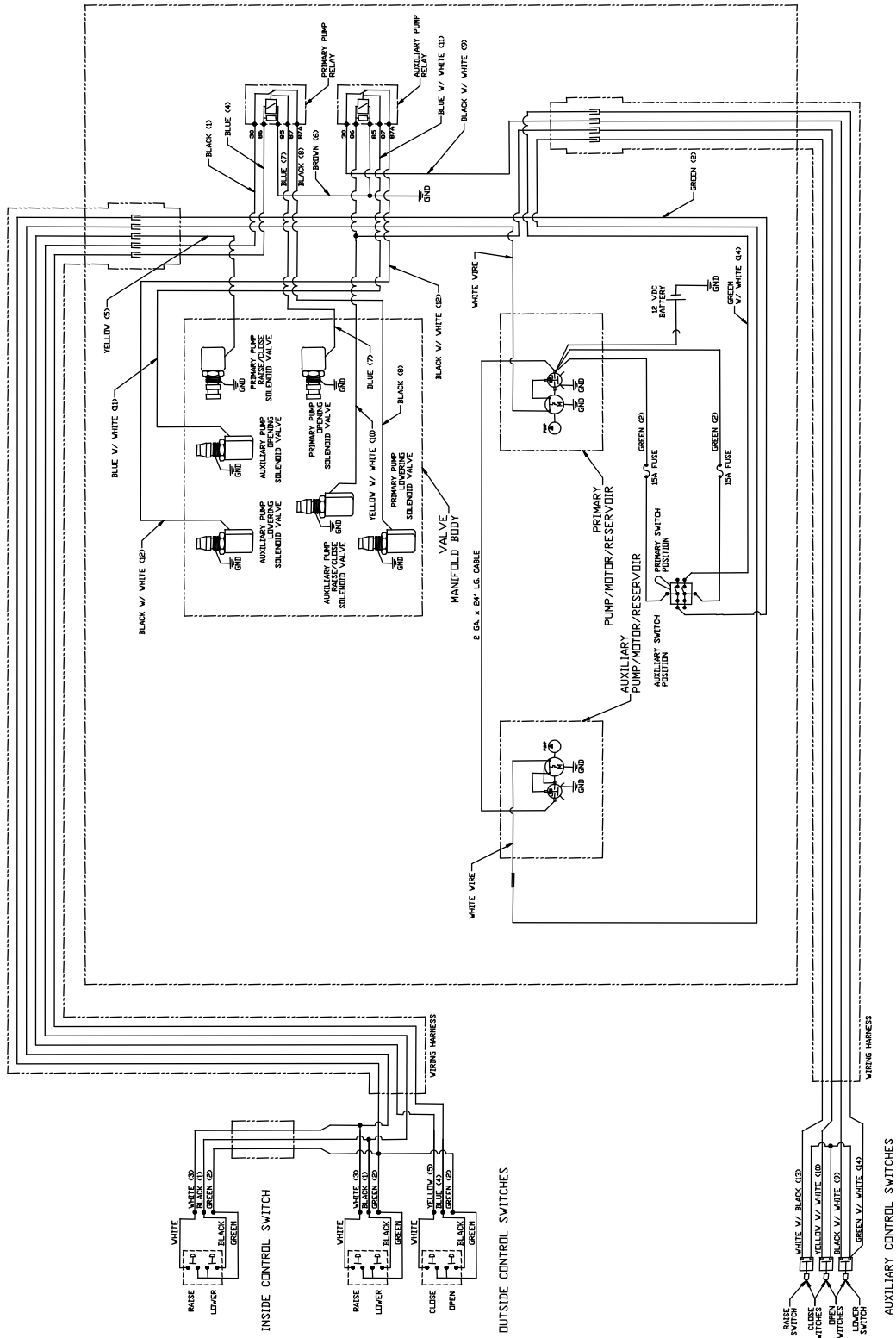
GR02305

SINGLE PUMP WITH HAND PUMP HYDRAULIC SCHEMATIC



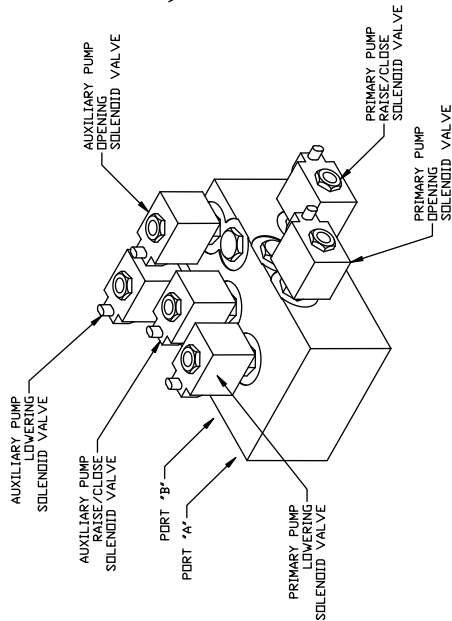
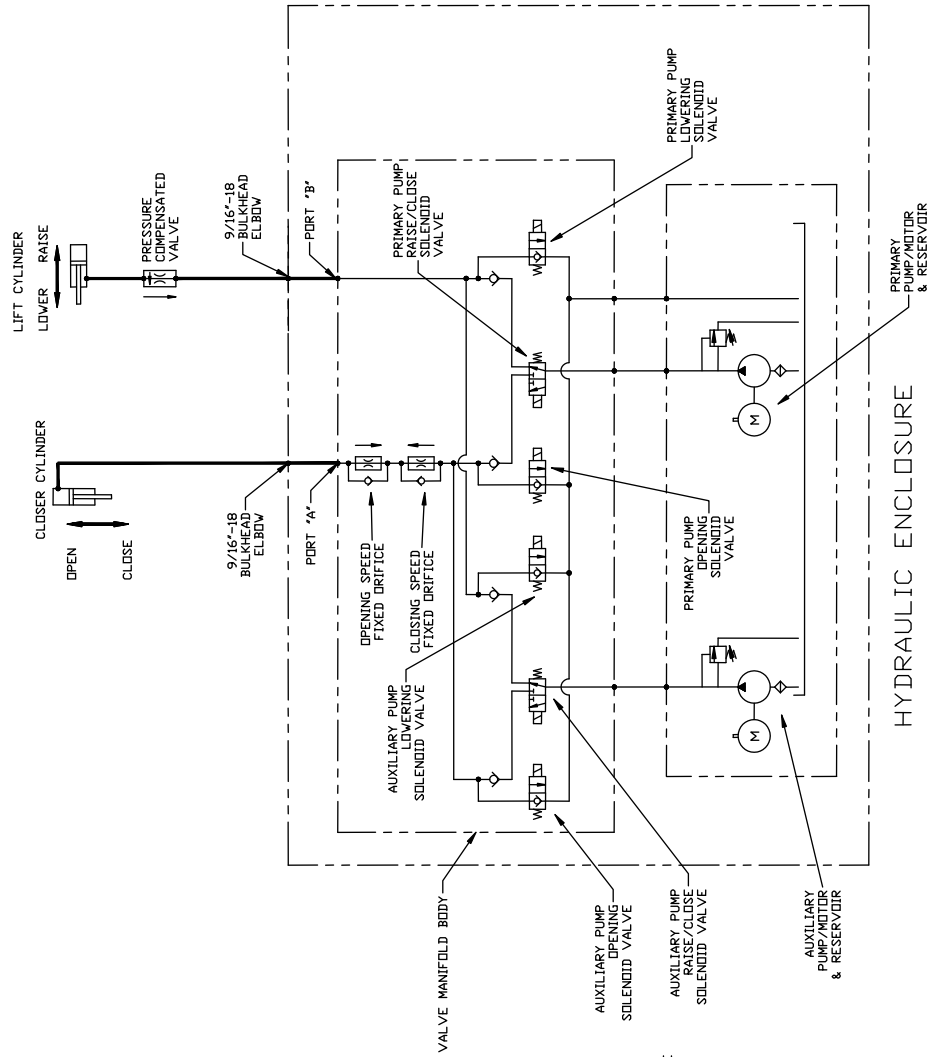
GR02307

DUAL PUMP ELECTRICAL SCHEMATIC



GR02308

DUAL PUMP HYDRAULIC SCHEMATIC



VALVE MANIFOLD BODY

GR02309

How To Order Parts

Repairs should be made only by authorized mechanics using WALTCO Replacement parts.

When ordering repair or replacement parts, please include all the information asked for below. If this information is not available, a complete written description or sketch of the required part will help WALTCO identify and deliver the needed part to you.

THE FOLLOWING INFORMATION MUST BE INCLUDED:

1. SERIAL NUMBER - [WALTCO liftgate serial numbers can be found on the Specification Tag attached to the mount frame. (On older units the Specification Tag is located on the side or bottom of the platform.)]
2. MODEL NUMBER - [Or capacity]
3. PLATFORM SIZE

THEN INCLUDE THE FOLLOWING INFORMATION:

4. PART NUMBERS
5. DESCRIPTION
6. QUANTITY REQUIRED

MAIL, E-MAIL OR PHONE YOUR REQUEST TO:

Waltco Truck Equipment Co.
285 Northeast Avenue
Tallmadge, OH 44278
1-800-411-5685
FAX: 1-800-411-5684
E-MAIL: parts@waltco.com

ALL PARTS ARE F.O.B. FROM THE SHIPPING FACTORY

PLEASE NOTE:

To assure you of continuing and effective quality control, our warranty policy permits replacement of hydraulic cylinders, valves and motor pump units when their factory seals are intact. Parts under warranty will be exchanged promptly after careful inspection of the returned assemblies.

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Every vehicle that has a WALTCO Liftgate must have legible **WARNING AND OPERATION DECALS** clearly posted on the vehicle and an **OWNER'S MANUAL** in the vehicle at all times as a guide for proper operation and maintenance.

Additional **WARNING DECALS**, **OPERATION DECALS** and **OWNER'S MANUALS** can be obtained from **WALTCO TRUCK EQUIPMENT COMPANY**.

NOTE:

**When ordering, give model
and serial number of the liftgate.**

IMPORTANT

KEEP THIS OWNER'S MANUAL IN THE VEHICLE

WARNING

Improper operation and maintenance of this liftgate could result in severe personal injury or death.

Read and understand the contents of this manual and all warning and operation decals before operating and/or performing maintenance on this liftgate.

**For SAFETY information on this liftgate see
Chapter 1 of this manual**