



# WALTCO

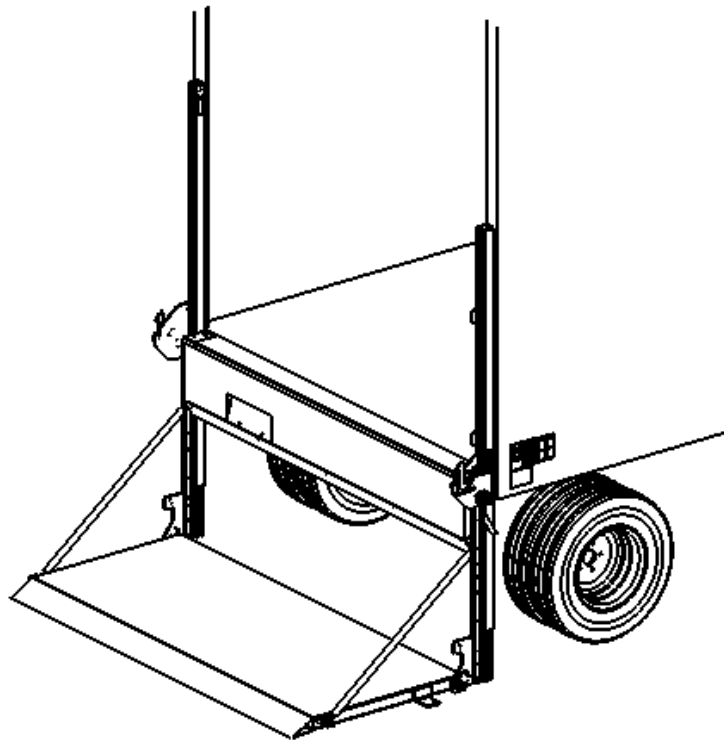
[www.waltco.com](http://www.waltco.com)  
parts@waltco.com

Phone: 800.411.5685  
Fax: 800.411.5684

## Owner's Manual

### MDL, MDLBG

1250 lb. - 2000 lb. Capacity Rail Liftgates



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# Table of Contents



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

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

Introduction.....	3
Safety Information.....	4
Warranty.....	6
Liftgate Terminology.....	7
Basic Mounting Requirements.....	8
Operation Instructions.....	9
Preventative Maintenance.....	16
Placement of Decals.....	21
Lubrication Instructions.....	22
Schematics.....	23
How to Order parts.....	24

# 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 list, and an outline of things that should be checked but may not be obvious to those not technically qualified. The 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 for 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 LIFT CORP.

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# Chapter 1 Safety Information



**Read, understand, and follow all of the warnings listed below.**

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

- \* Read and understand the Owner's Manual, all decals and warnings 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 failing.
- \* This liftgate is designed for loading and unloading cargo. If personnel are required to ride the 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 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 and 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 up or down 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 or Bed Extension unless the liftgate is equipped with a special reinforced Platform and Platform Support Bars for use when the Platform is used as a 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 (5) five 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 Upstop Pins when in transit.
- \* Inspect cables every (3) three 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 (5) five years or 10,000 cycles, whichever comes first.

## MDL Series Liftgates

- \* Make certain Platform Brake mechanisms are operating properly.
- \* The Platform Retaining Bar should be lowered into H-Frame Storage Plate when in transit.
- \* Inspect Roller Chains every (3) three months or 750 cycles, whichever comes first. Roller Chains must be measured and checked for signs of stretching. If the chain is stretched by more than 3% they should be replaced.
- \* Replace Roller Chains every (5) five years or 15,000 cycles whichever comes first. Replace only with WALTCO APPROVED Roller Chain.
- \* Check that all connecting links at each end of Roller Chain are properly secured with proper cotter pins monthly.



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 an yellow background.



### NOTICE

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



# WALTCO Warranty Policy

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***

1777 Miller Parkway

Streetsboro OH, 44241

Sales Direct Line: 1-800-211-3074

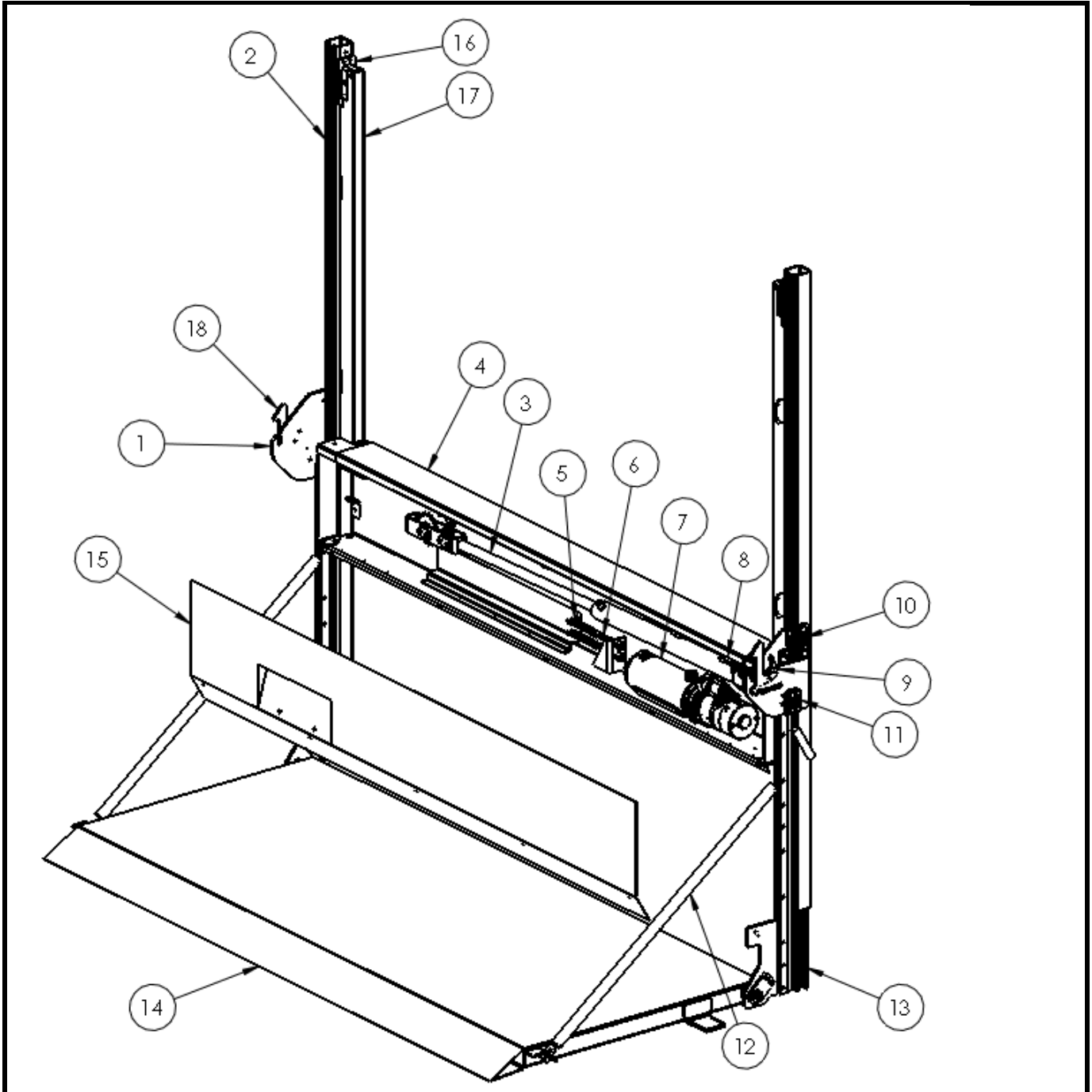
Parts Direct Line: 1-800-411-5685

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

***We're behind you all the way!***

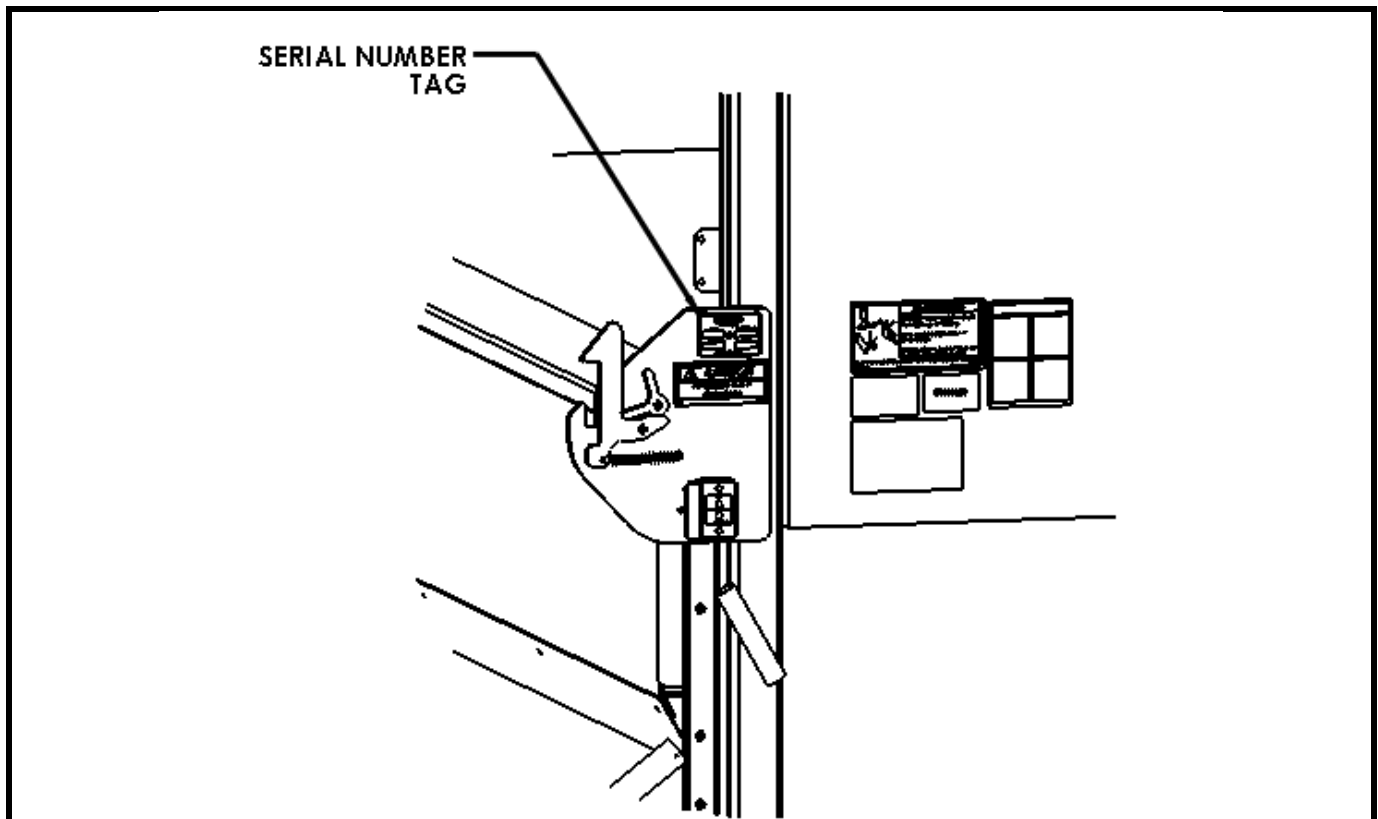
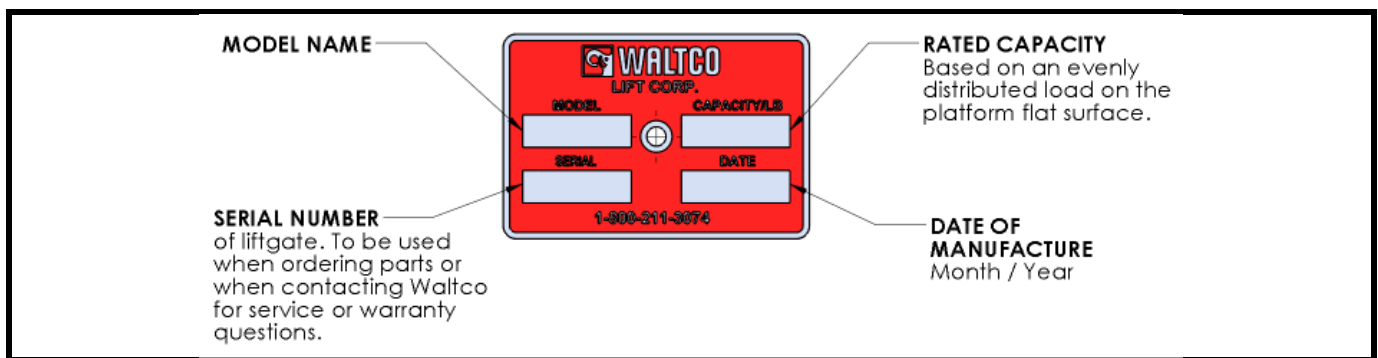
## Chapter 2 Liftgate Terminology

- |                            |                       |                                  |
|----------------------------|-----------------------|----------------------------------|
| 1. Storage plate           | 7. Pump Unit          | 13. Runner (Slider)              |
| 2. Rail (Track)            | 8. Flow Control Valve | 14. Platform                     |
| 3. Lift Cylinder           | 9. Latch Lock         | 15. Access Door                  |
| 4. Crossbeam Box (Housing) | 10. Serial Number Tag | 16. Above Floor Sprocket Bracket |
| 5. Lifting Chain           | 11. Switch Assembly   | 17. Above Floor Chain Guard      |
| 6. Chain Anchor Bolt       | 12. Support Chain     | 18. Transit Latch                |



## Chapter 2 Liftgate Terminology

EXPLANATION OF SERIAL NUMBER TAG		
MODEL NAME	DESCRIPTION	CAPACITY
MDL-12	Medium Duty Lift	1250 lbs.
MDL-16	Medium Duty Lift	1600 lbs.
MDL-20	Medium Duty Lift	2000 lbs.
MDL-30	Medium Duty Lift	3000 lbs.
SB-12	Service Body	1200 lbs.
SB-16	Service Body	1600 lbs.



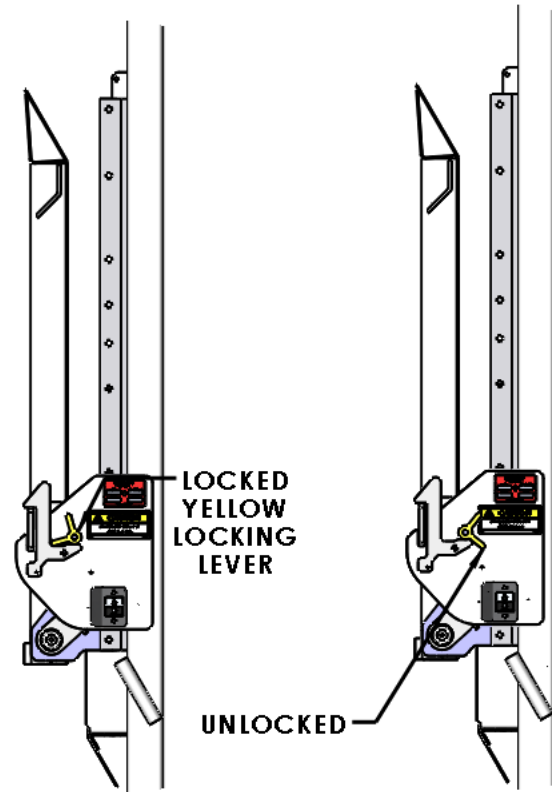


## Chapter 3 Operation Instructions

### TO OPEN PLATORM

#### Manual Close

Rotate yellow locking levers on each side to "UNLOCKED" position as shown.

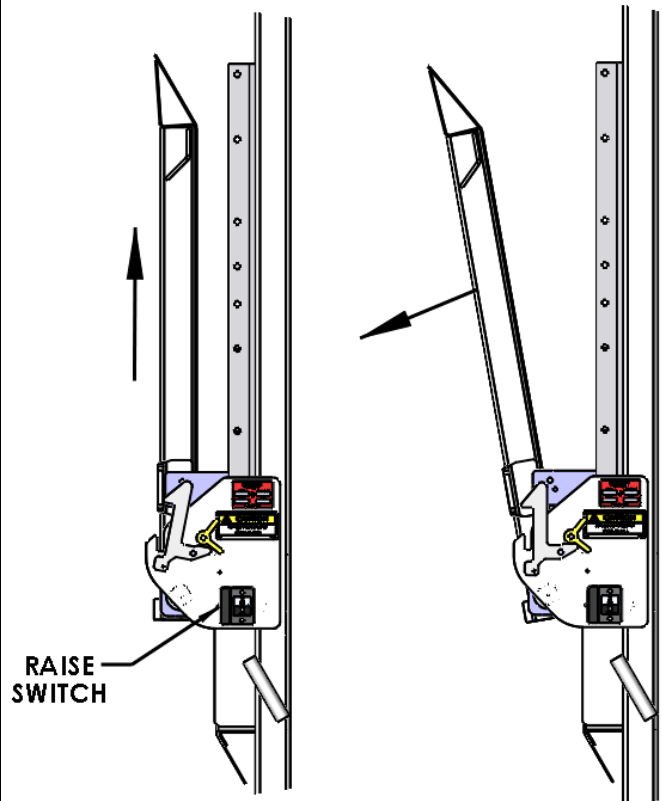


Use switch to raise platform up out of storage plates.

Follow switch instructions to open platform to horizontal position.



**Never force platform open.  
Keep hands away from pinch points.**

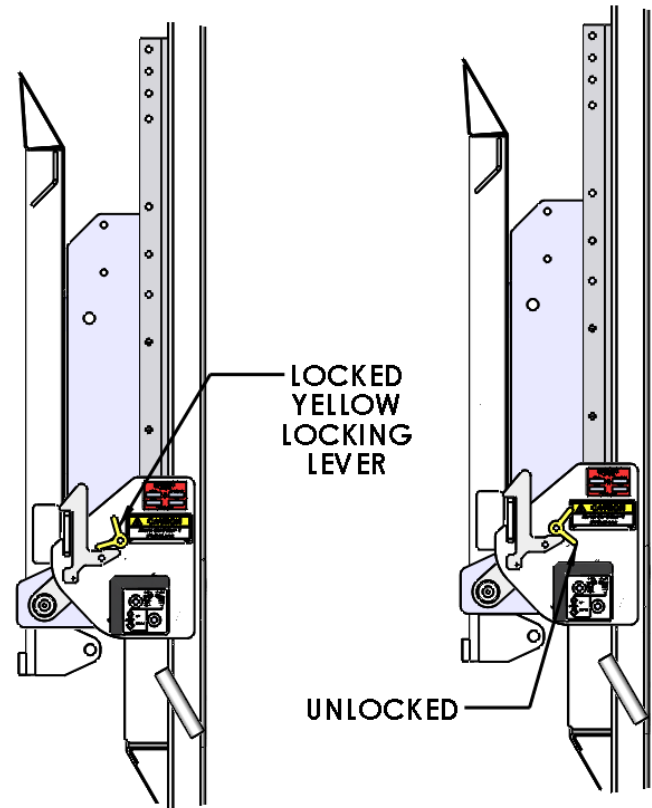


## Chapter 3 Operation Instructions

### TO OPEN PLATORM

#### Power Close

Rotate yellow locking levers on each side to "UNLOCKED" position as shown.

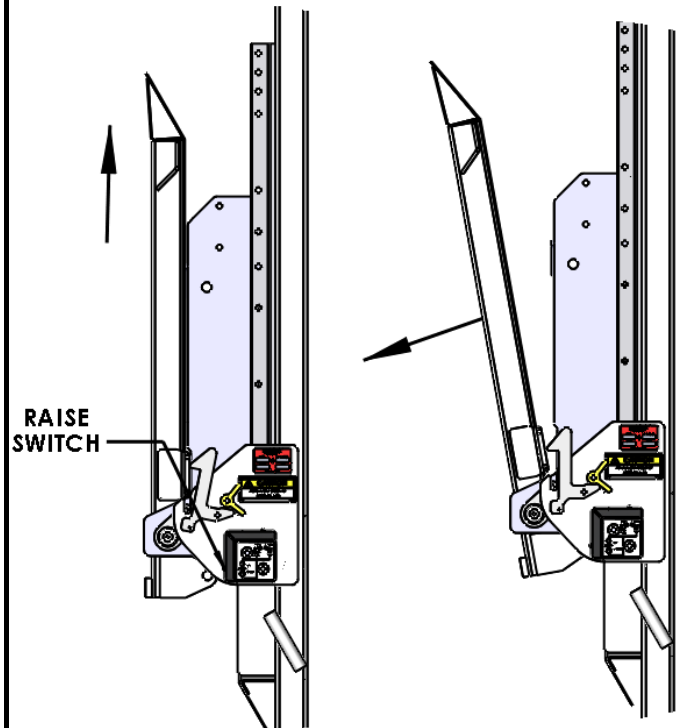


Use switch to raise platform up out of storage plates.

Follow switch instructions to open platform to horizontal position.



**Never force platform open.  
Keep hands away from pinch points.**



## Chapter 3 Operation Instructions

### TO STORE PLATORM

#### Manual Close

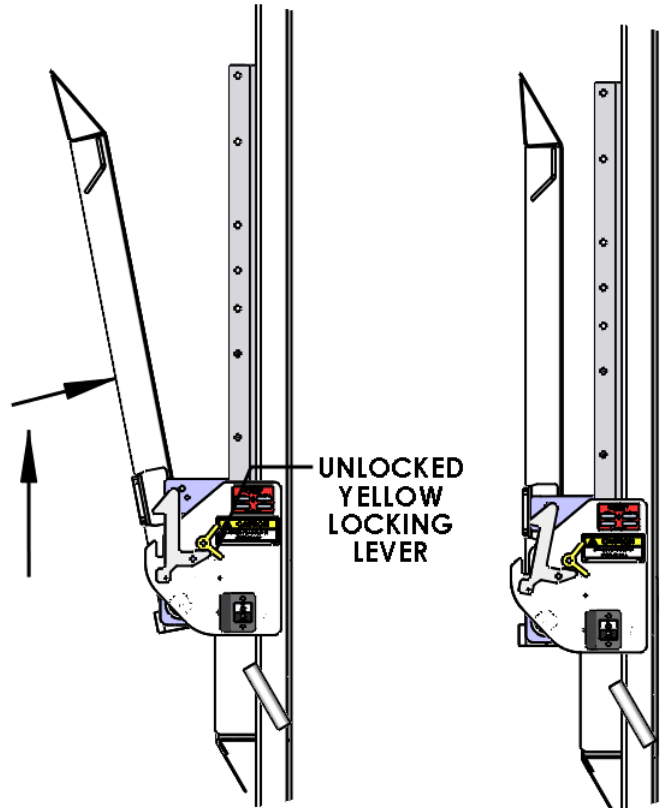
Make sure both yellow locking levers are in the "UNLOCKED" position.

Raise platform to bed level.

Follow switch instructions to close platform.

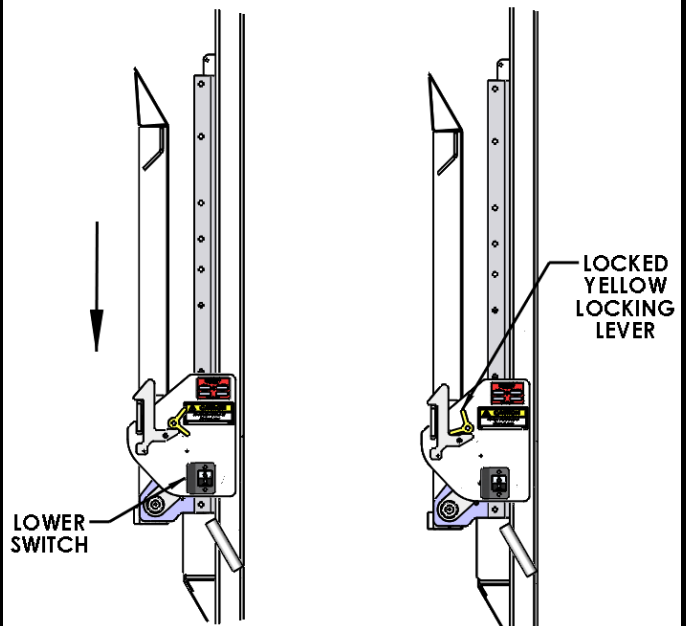


Keep hands away from pinch points.



Use switch to lower platform into storage plates.

Rotate both yellow locking levers into "LOCKED" position



## Chapter 3 Operation Instructions

### TO STORE PLATORM

#### Power Close

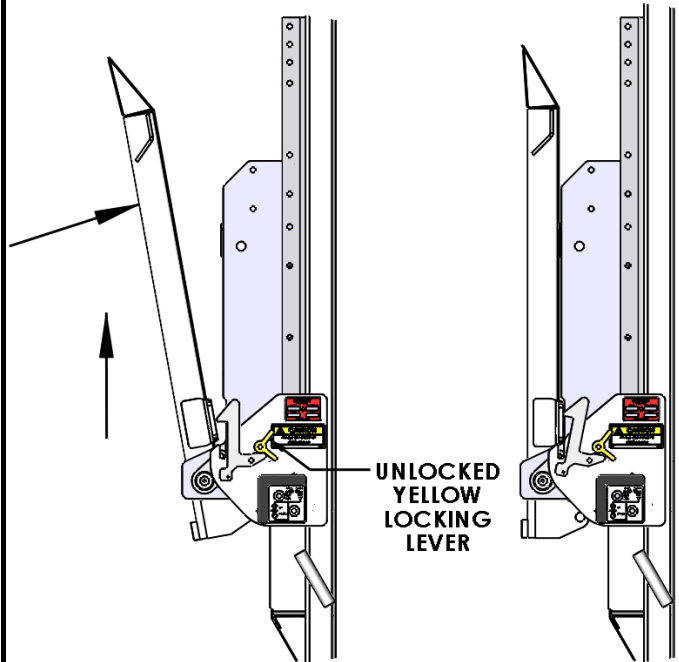
Make sure both yellow locking levers are in the "UNLOCKED" position.

Raise platform to bed level.

Follow switch instructions to close platform.

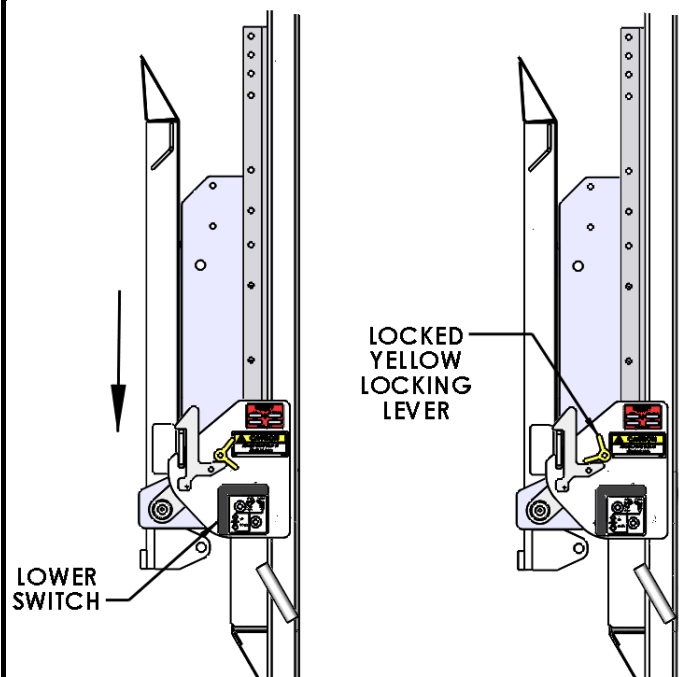


**Keep hands away from pinch points.**



Use switch to lower platform into storage plates.

Rotate both yellow locking levers into "LOCKED" position



## Chapter 3 Operation Instructions

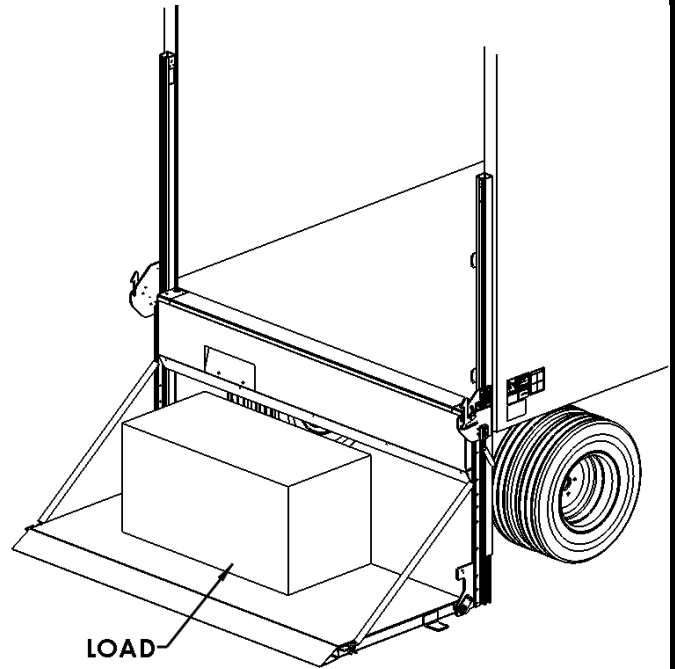
### LOADING OF PLATFORM

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

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

Never operate fork lift trucks on or over any part of liftgate.

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

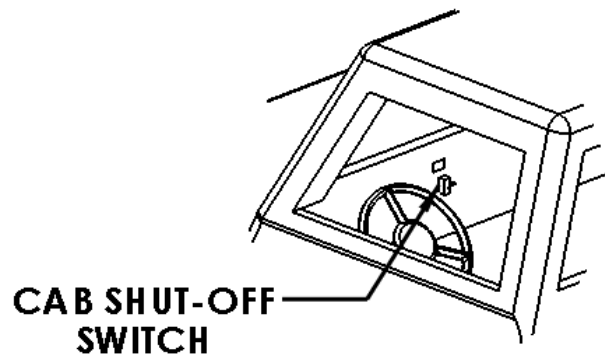


### POWER OFF TO LIFTGATE (OPTIONAL SWITCH)

Turn power off to liftgate by turning off the Cab Shut-Off switch inside cab of vehicle. This may be a toggle or rotary type switch.



**Turn power off to liftgate to prevent unauthorized use of liftgate.**



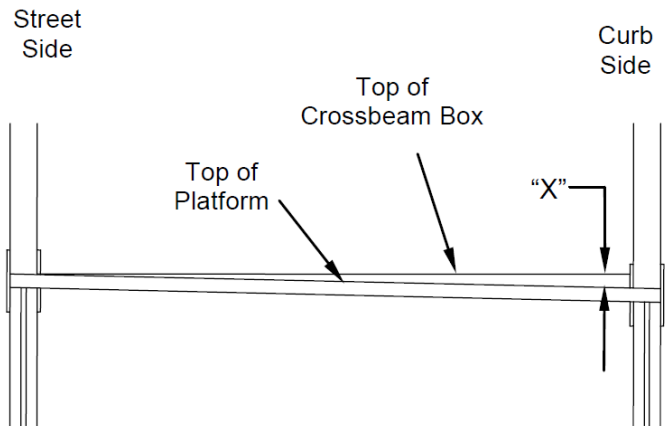
# Chapter 4 Preventive Maintenance

## PLATFORM ADJUSTMENT

Unfold and raise platform to bed level and check for:

- 1 If platform travels more than 1/4" above the top of the crossbeam box, and liftgate is **not an Above Floor** model liftgate, see below for adjustment.
- 2 If platform is uneven see below for adjustment.

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



If liftgate is Above Floor model:

- \* Adjust as required to level platform.

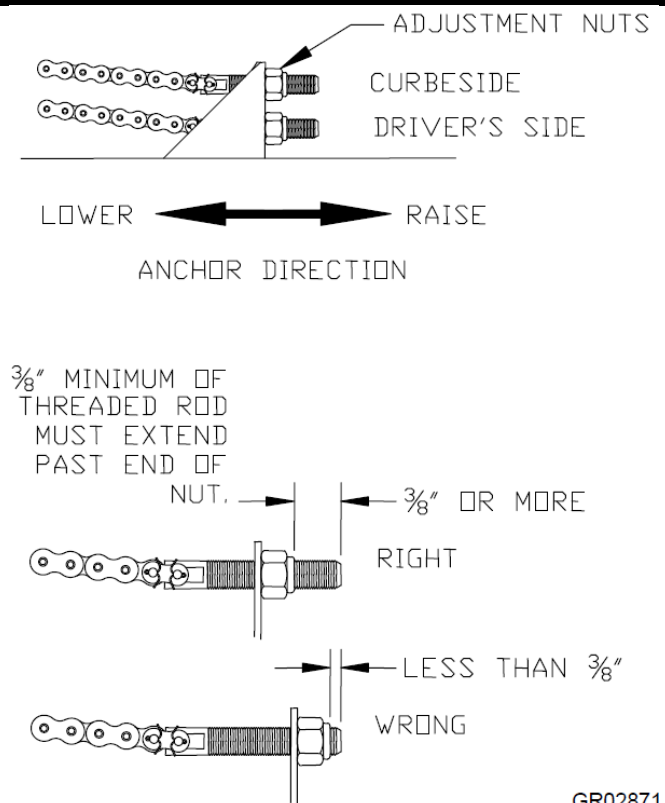
If liftgate is not an Above Floor model:

- \* Adjust platform so it is level with top of crossbeam box.

**⚠ For non-Above Floor liftgates, never adjust platform to travel more than 1/4" above the crossbeam box.**

**⚠ Never adjust nut out less than 3/8" from end of anchor bolt.**

**⚠ Never have any part of your body underneath the platform while making adjustments.**



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## ABOVE FLOOR TRAVEL

If above floor travel is to be reduced, additional chain links will need to be added to lifting chains.

If additional above floor travel is desired, contact Waltco Technical Services for assistance. Ability to increase travel varies with each specific model of liftgate and bed height of vehicle.

# Chapter 4 Preventative Maintenance

## HYDRAULICS

Inspect for oil leaks in:

Hydraulic Cylinder(s)

Hydraulic hoses - Replace hoses if they show signs of excessive abrasion.

Hydraulic fittings and valves

Tighten or replace all hydraulic components as may be required to stop oil leakage.

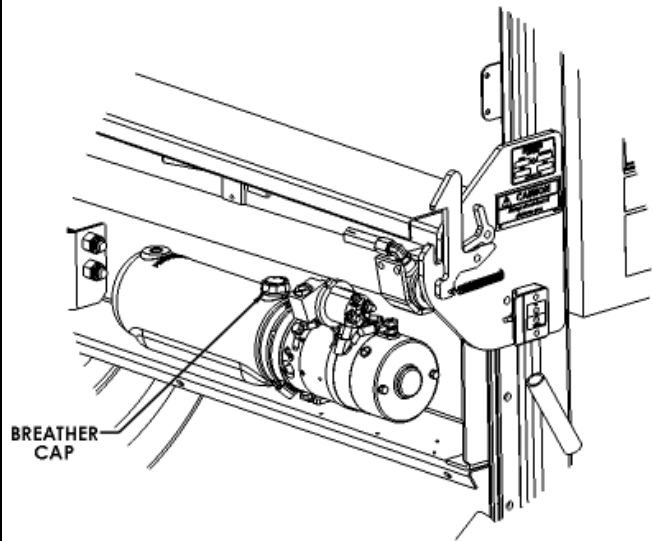
## CHECK AND FILL HYDRAULIC RESERVOIR

Lower platform to ground and remove access door.

Remove breather and fill reservoir with hydraulic fluid until 1/2" from top. (See recommended fluids below)

Cycle liftgate several times to release trapped air from system.

Replace breather cap.



## HYDRAULIC FLUIDS

Fluids are available from the Waltco Parts Dept.  
1-800-411-5685 [www.waltco.com](http://www.waltco.com)

### NOTE:

Do not use the following fluids:

Brake Fluid

Power steering fluid

Automatic Transmission Fluid (ATF)

### Recommended Fluids

Temperature Range	Acceptable Fluids
0° to 120° F	Waltco Biodegradable Liftlube™ part #85803860
	Shell Tellus S2 VX 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 VX 15
	Mobil DTE 10 Excell 15 Chevron Rando HDZ 15

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

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## Chapter 4 Preventative Maintenance

**There is no speed adjustment on this liftgate.**

Lowering speed is controlled by the Pressure Compensative Flow Valve plumbed at cylinder.

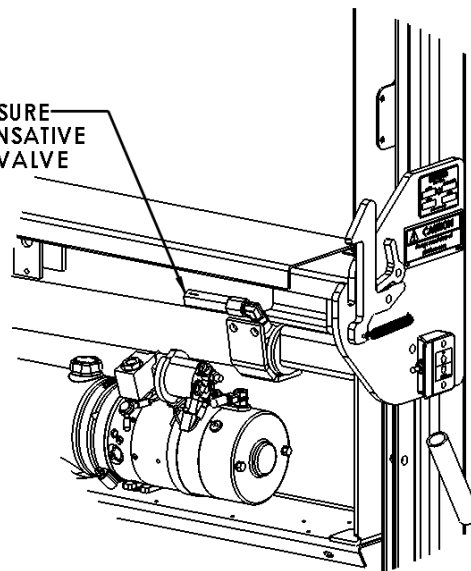
Regardless of weight on platform, liftgate should lower at approximately six (6) inches per second.

$$\frac{\text{Bed height (inches)}}{6} = \text{Lowering Time (seconds)}$$



**This liftgate must have correct pressure compensative flow valve installed!**

PRESSURE  
COMPENSATIVE  
FLOW VALVE



### INSPECT DECALS AND LUBRICATE LIFTGATE

Inspect all decals per Chapter 5 of this manual.

Replace any that are missing or damaged.

Lubricate liftgate per Chapter 6 of this manual.

### ANNUAL INSPECTION

Drain hydraulic fluid and replace with new fluid per recommended fluids chart.

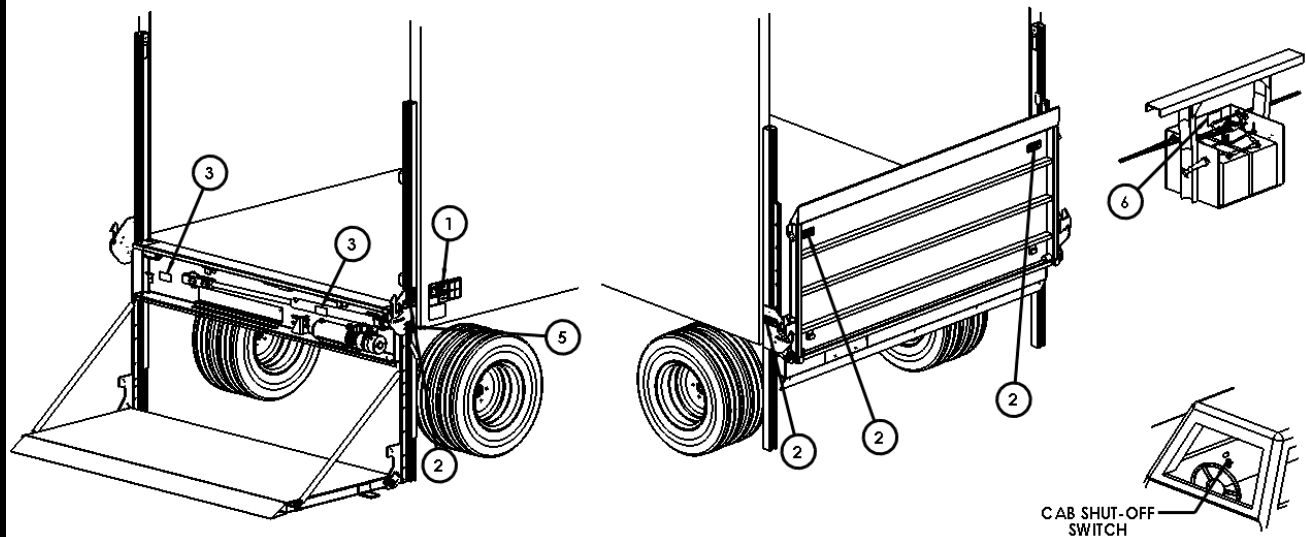


# Chapter 5 Placement of Decals



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

ITEM	DECAL	QTY	PART NO.	LOCATION
1	Safety Instructions	1	80100850	Locate in a conspicuous place near controls.
	Operation Decal	1	80101575	
	Hazard Decal	1	80101370	
	Motor Thermal Switch Decal	1	80101480	
	Important Decal	1	80100828	
	1250 lb Capacity Decal	2	80100266	Locate one in a conspicuous place near controls. Locate one on curbside of platform.
	1600 lb Capacity Decal		80100252	
	2000 lb Capacity Decal		80100253	
2	Caution Stand Clear Decal	4	75089296	Locate one in a conspicuous place near controls. Locate one in a conspicuous place on driver side of vehicle.
3	Access Door Decal	2	75089282	Locate one on hydraulic cylinder. Locate one on back of crossbeam box.
4	Cab Shut off Decal (Optional)	1	75089267	Locate next to cab shut-off switch inside vehicle
5	Switch Decal	1	80101532 80101533	Locate on switch housing (single toggle switch) Locate on switch housing (2 toggle switch)
6	Warning Decal	1	80100829	Locate next to liftgate circuit breaker. In applications where more than one circuit breaker is used, decal must be placed in both locations.
To maximize decal adhesion to surfaces: <ul style="list-style-type: none"> <li>- Surface must be dry and clean</li> <li>- Firm pressure must be applied to decal</li> <li>- Minimum surface temperature 65 degrees F (Heat gun may be used to heat surface)</li> </ul>				<b>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 controls.</b>



## Chapter 6 Lubrication Instructions

Lubricate lifting chains including sections in crossbeam box, rails & runner assemblies with machine oil or motor oil.

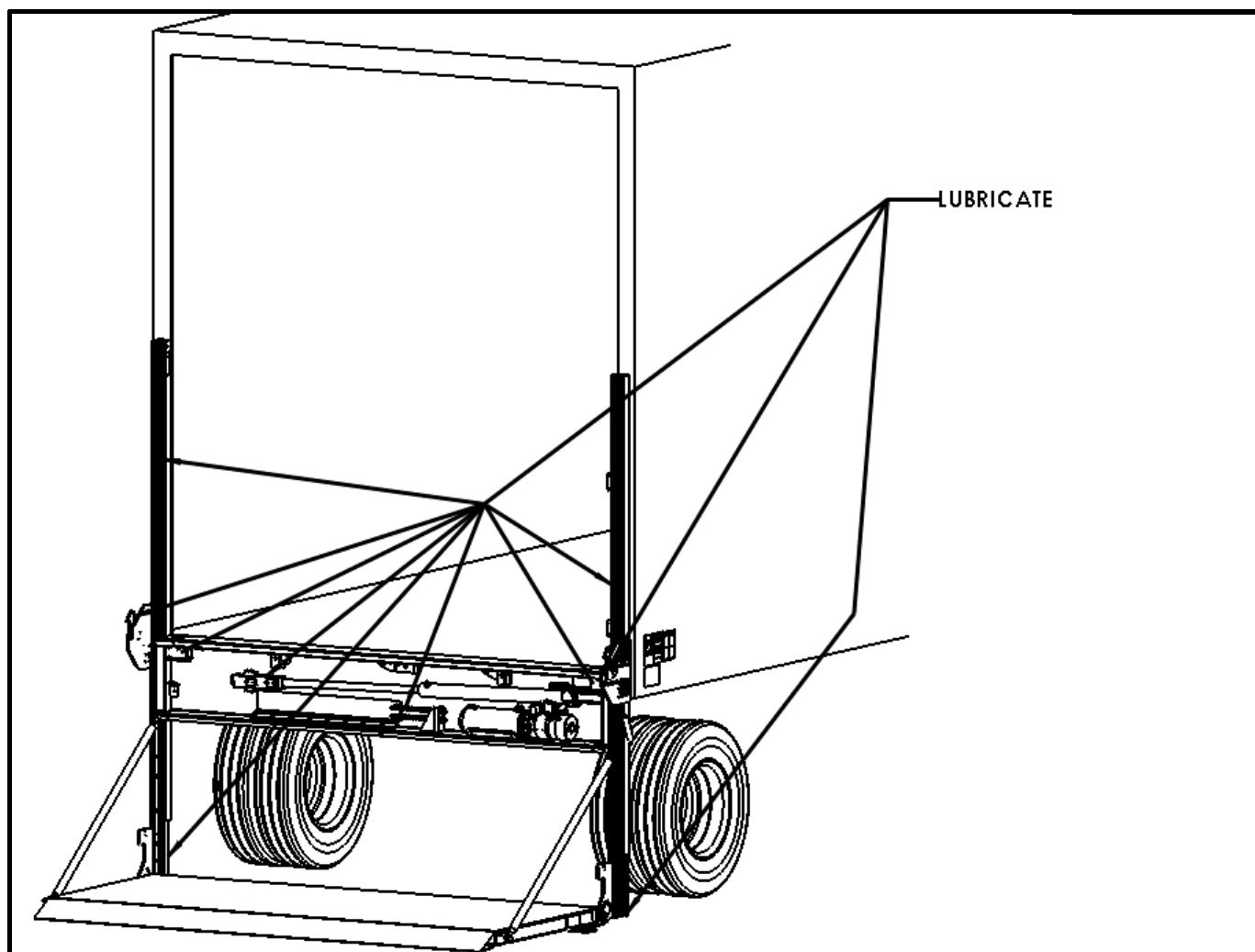
Lubricate latch, inside rails, crossbeam box and platform hinges with machine oil or motor oil.

Lubricate driver and passenger side rails.

### Suggested Minimum Lubrication Schedule (in days)

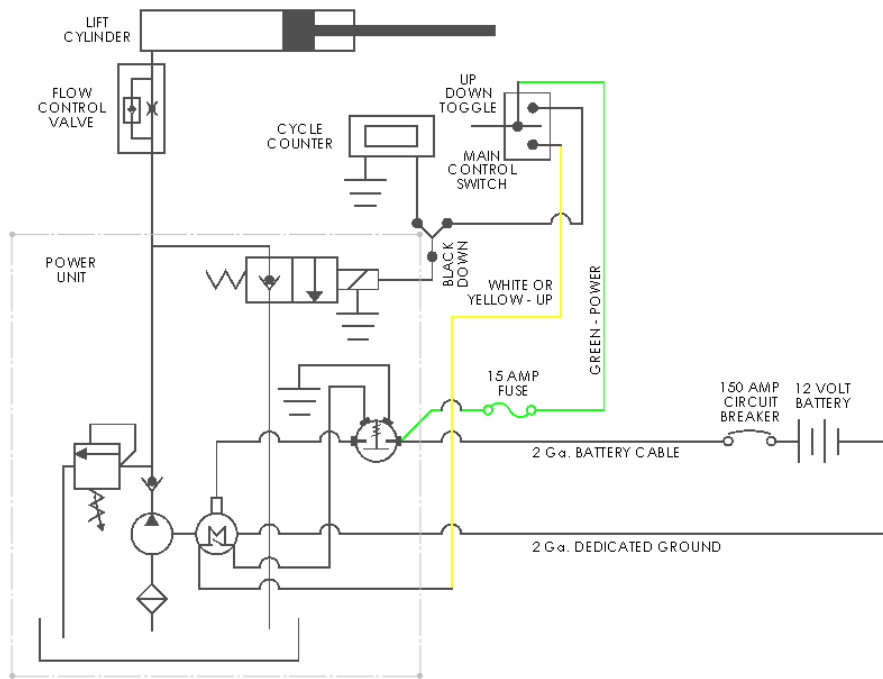
Monthly Cycles	Light Duty	Medium Duty	Heavy Duty
< 250	45	30	21
250 - 350	30	21	14
350 - 450	21	14	7
> 450	Contact Factory		

\* Lubricate every 30 days if cycles are unknown.

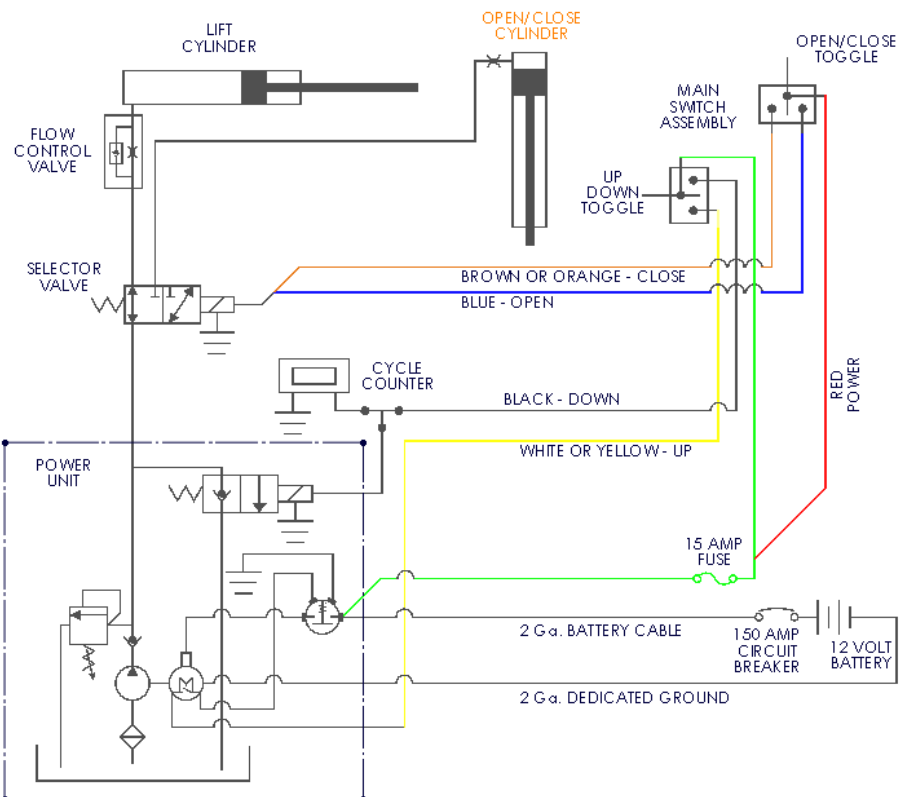


# Chapter 7 SCHEMATICS

ELECTRICAL / HYDRAULIC SCHEMATIC (MANUAL CLOSE)

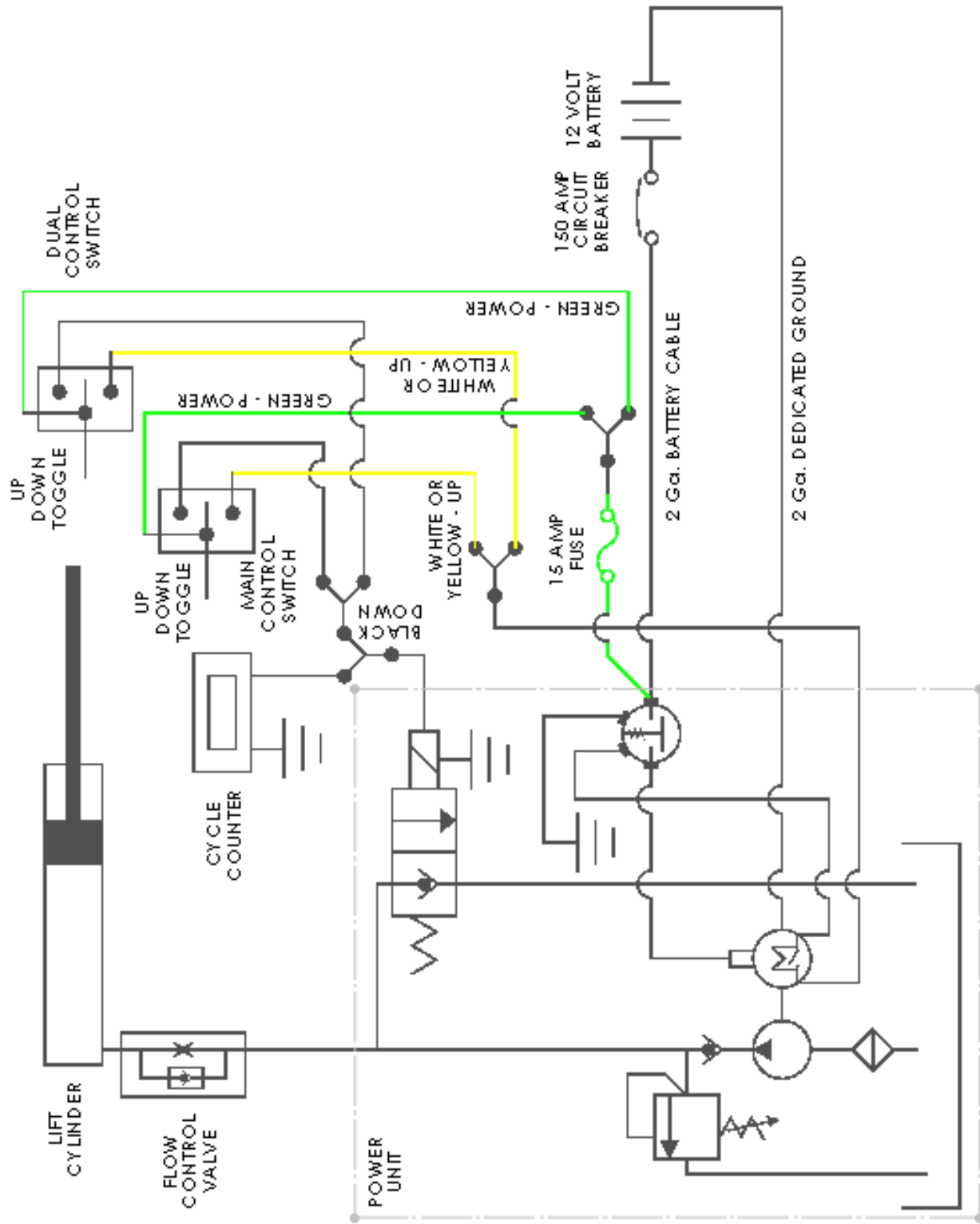


ELECTRICAL / HYDRAULIC SCHEMATIC (POWER CLOSE)



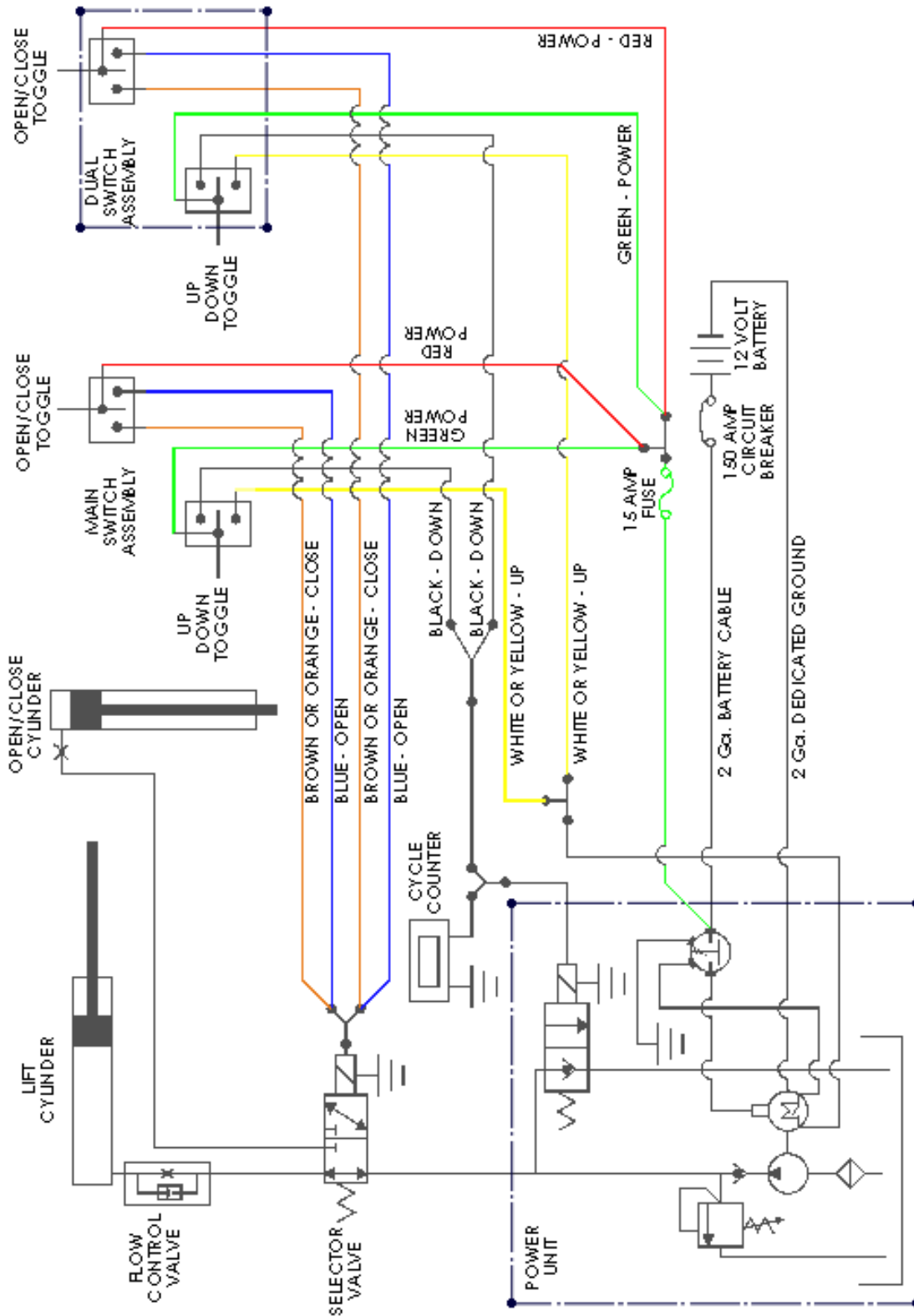
# Chapter 7 Schematics

## DUAL CONTROL ELECTRICAL / HYDRAULIC SCHEMATIC (MANUAL CLOSE)



# Chapter 7 Schematics

**DUAL CONTROL ELECTRICAL / HYDRAULIC SCHEMATIC (POWER CLOSE)**



# How To Order Parts

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

When ordering repair or replacement parts, please include all of 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 lift Corp.**  
1777 Miller Parkway  
Streetsboro, OH 44241  
1-800-411-5685  
FAX: 1-800-411-5684  
E-MAIL: [parts@waltco.com](mailto:parts@waltco.com)

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

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## 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 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 LIFT CORP.

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**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**