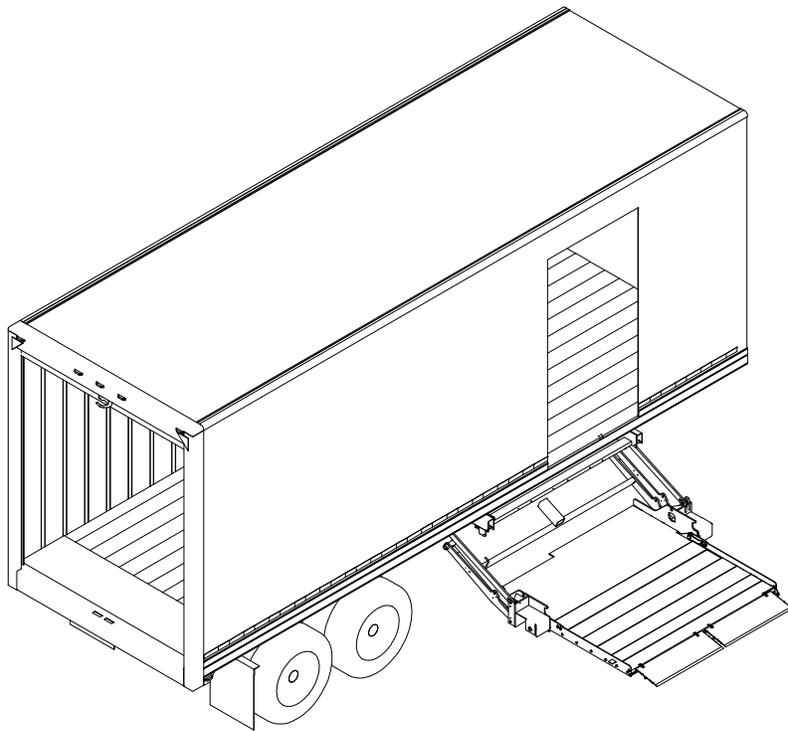


# Installation Manual

## GTSL-33, 44, 55

3300, 4400, 5500 lb. Capacity Flipaway Liftgates



GR10039

Last Change:

Date	Pages	Description
10-2015	-	RELEASED FOR PRODUCTION

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# Table of Contents



**Improper installation of this liftgate could result in severe personal injury or death.**

**Read and understand the contents of these instructions before proceeding.**

**When installed, this liftgate must not alter or prevent vehicle compliance to any existing state or federal standards.**

**Each chassis manufacturer's recommendations should be consulted for compliance.**

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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.

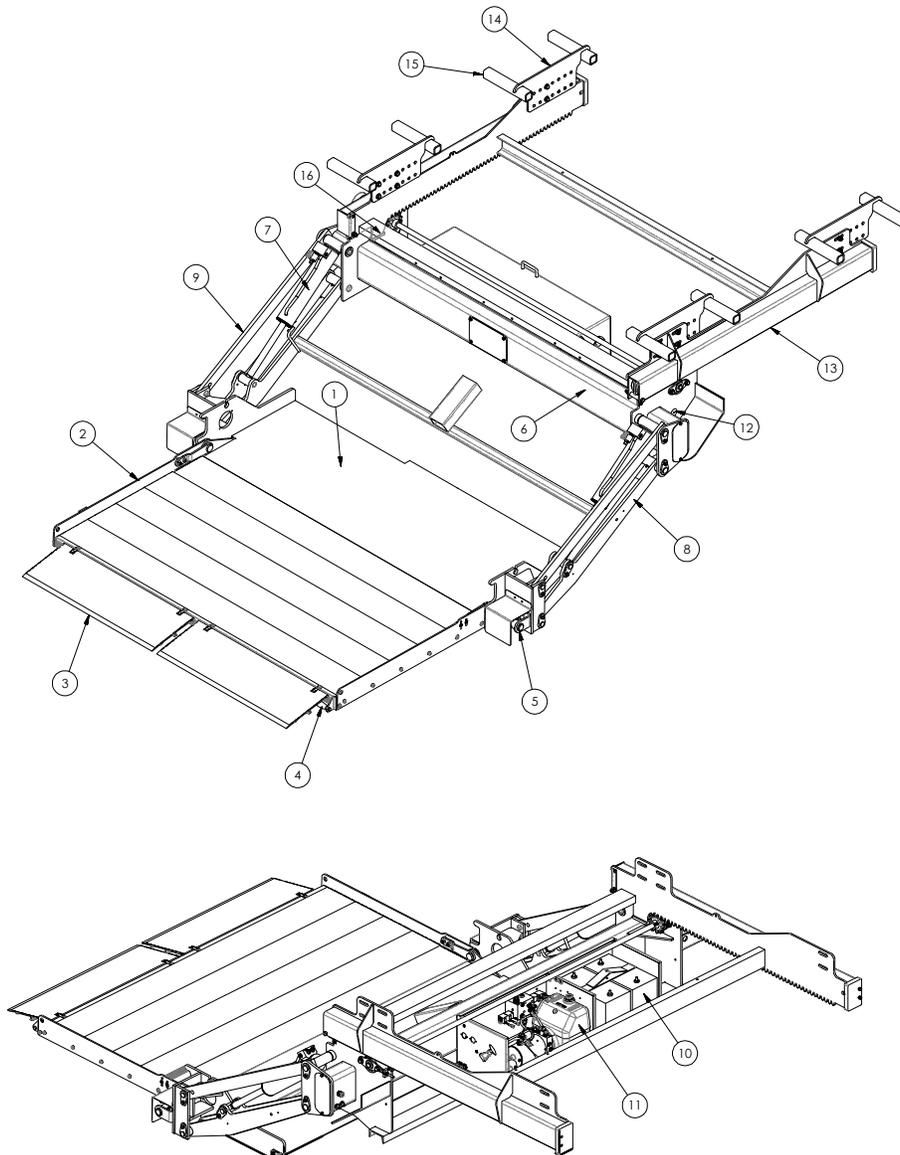
### NOTICE

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



# Chapter 2 Liftgate Terminology

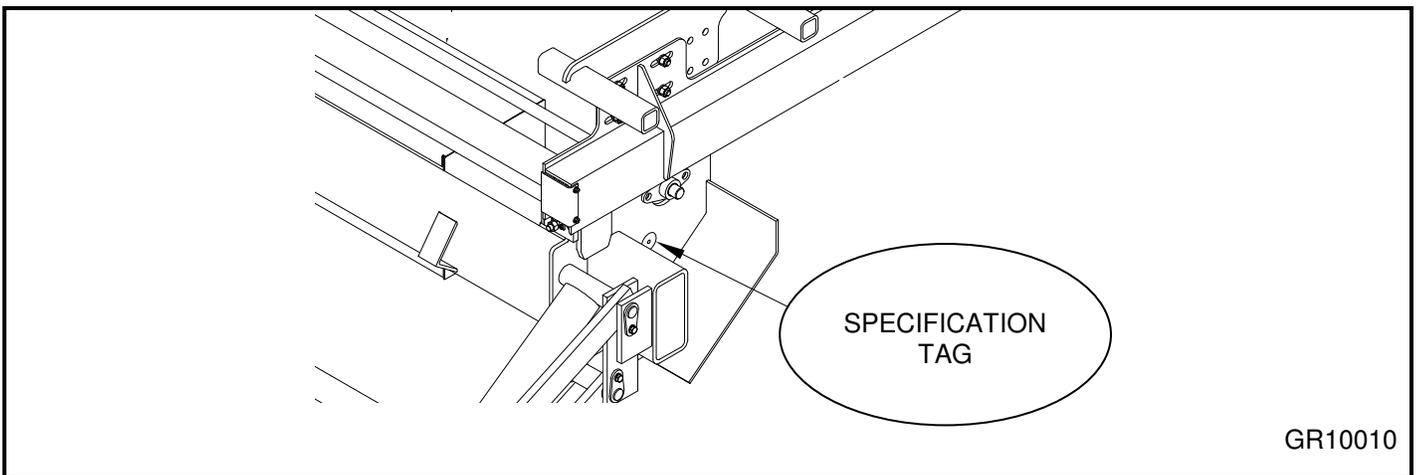
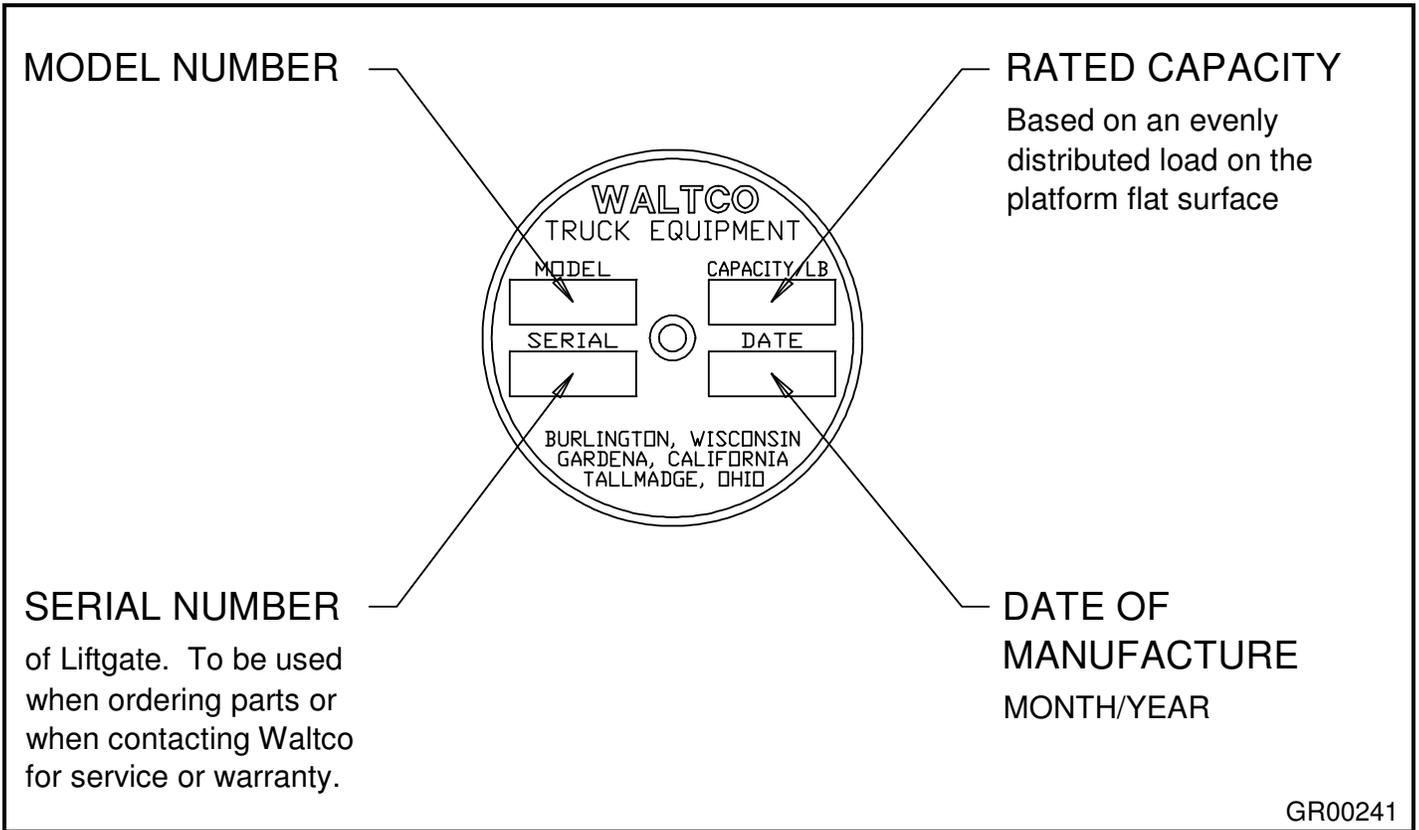
1. Deck
2. Deck Extension
3. Loading Ramp
4. Platform Handle
5. Torsion Spring
6. Mount Tube
7. Lift Cylinder
8. Lift Arm
9. Parallel Arm
10. Battery Box
11. Pump Box
12. Identification Tag
13. Slide Tube
14. Mount Plate
15. Mount Support Tube
16. Up-Stops



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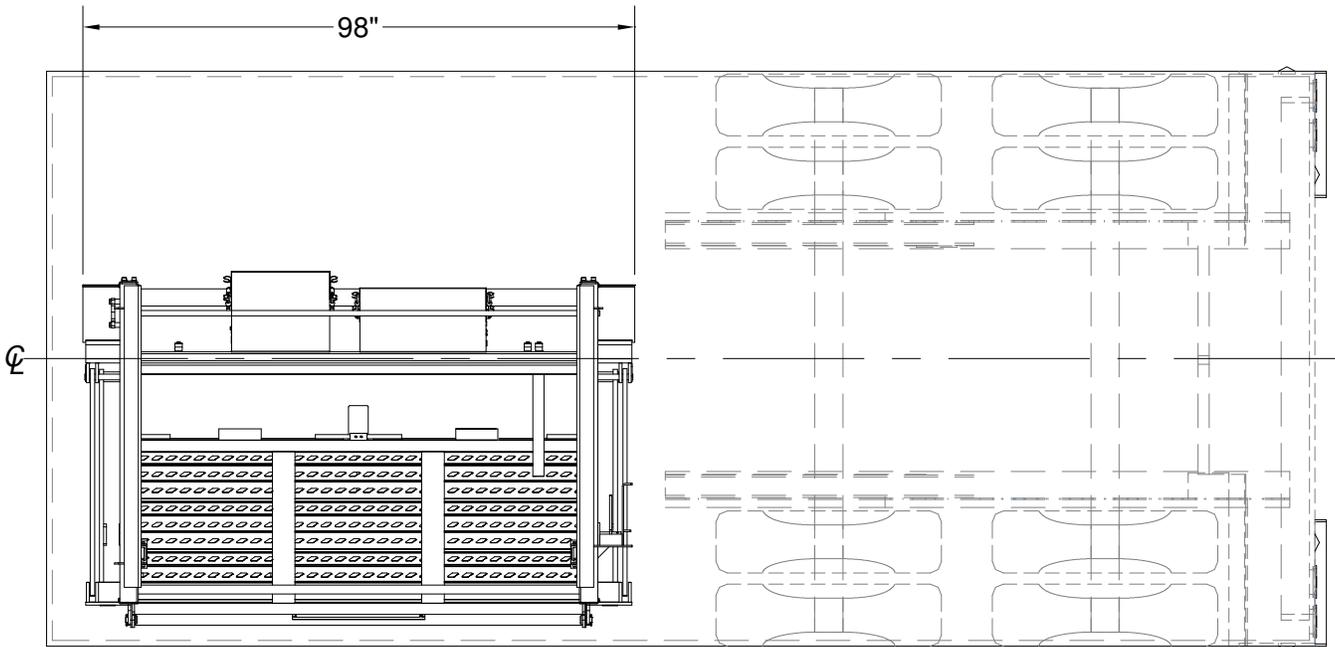
# Chapter 2 Liftgate Terminology

EXPLANATION OF SPECIFICATION TAG		
MODEL NAME	DESCRIPTION	CAPACITY
GTSL-33	GTSL-33 SLIDER LIFTGATE	3300 LBS.
GTSL-44	GTSL-44 SLIDER LIFTGATE	4400 LBS.
GTSL-55	GTSL-55 SLIDER LIFTGATE	5500 LBS.



# Chapter 3 Basic Mounting Requirements

TOP VIEW OF TRAILER

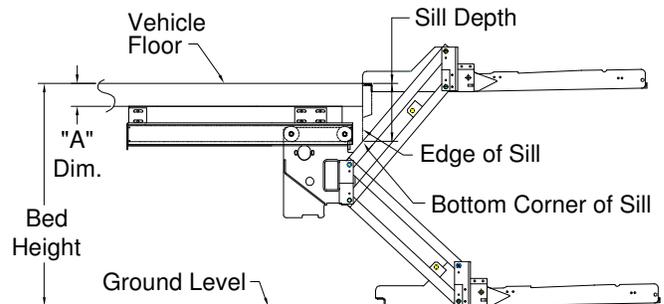


GR10007

## DETERMINE MOUNTING DIMENSIONS

**NOTE:** Measure all dimensions when trailer is unloaded and on a flat horizontal surface.

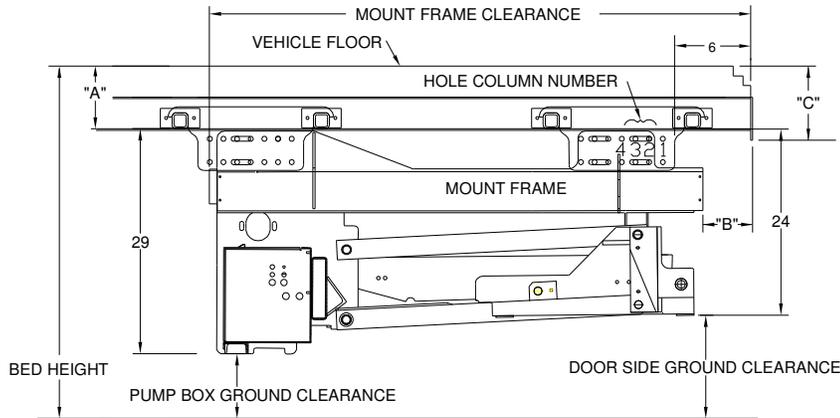
1. Determine the Bed Height. Measure from top of trailer floor down to ground level.
2. Determine "A" dimension = Bed Thickness. Measure from top of trailer floor to bottom of the trailer's cross members.
3. Determine Sill depth.



GR02257

# Chapter 3 Basic Mounting Requirements

## GTSL INSTALLATION DIMENSIONS STANDARD MOUNT (SHOWN IN STORED / TRANSPORT POSITION)



### 70X80 PLATFORM, SHORT ARMS (37-3/8"), SHORT TRACK (64")

"A"	MAX B.H.	"B" GATE PROTECTION	MAX SILL DEPTH "C"	HOLE COLUMN NUMBER	MOUNT FRAME CLEARANCE
4"	57"	3-1/8	13	3	67-1/4
5"	58"	2	15	2	66
6"	59"	3/4	17	1	64-3/4
6-1/4"	59-1/4"	1/2	17-3/4	1	64-1/2

### 80X80 PLATFORM, SHORT ARMS (37-3/8"), LONG TRACK (72-3/4")

"A"	MAX B.H.	"B" GATE PROTECTION	MAX SILL DEPTH "C"	HOLE COLUMN NUMBER	MOUNT FRAME CLEARANCE
4"	57"	3-1/8	13	3	76
5"	58"	2	15	2	74-3/4
6"	59"	3/4	17	1	73-1/2
6-1/4"	59-1/4"	1/2	17-3/4	1	73-1/4

### 70X80 PLATFORM, LONG ARMS (40-1/8"), MID TRACK (66-3/4")

"A"	MAX B.H.	"B" GATE PROTECTION	MAX SILL DEPTH "C"	HOLE COLUMN NUMBER	MOUNT FRAME CLEARANCE
6-1/2"	61"	4-1/2	13-1/2	3	71-1/2
7-1/2"	62"	3-1/4	15-1/2	3	70-1/4
8-1/2"	63"	1-7/8	17-3/4	2	68-3/4
9-1/2"	64"	1/2	20-1/2	1	67-1/2
9-3/4"	64-1/4"	1/4	21-1/4	1	67

### 80X80 PLATFORM, LONG ARMS (40-1/8"), LONG TRACK (72-3/4")

"A"	MAX B.H.	"B" GATE PROTECTION	MAX SILL DEPTH "C"	HOLE COLUMN NUMBER	MOUNT FRAME CLEARANCE
6-1/2"	61"	4-1/2	13-1/2	3	77-1/2
7-1/2"	62"	3-1/4	15-1/2	3	76-1/4
8-1/2"	63"	1-7/8	17-3/4	2	74-3/4
9-1/2"	64"	1/2	20-1/2	1	73-1/2
9-3/4"	64-1/4"	1/4	21-1/4	1	73

"A" : MEASURED FROM THE TRAILER'S FLOOR TO THE BOTTOM OF TRAILER'S CROSS MEMBERS.

"MOUNT FRAME CLEARANCE": AREA REQUIRED TO MOUNT LIFTGATE, MEASURING FROM DOOR SILL TOWARDS FRONT OF VEHICLE.

NOTE: BATTERY BOX WILL EXTEND 1-1/2" BEYOND THE "MOUNT FRAME CLEARANCE," IN THE MIDDLE OF THE LIFTGATE. CHECK CLEARANCES TO ANY AUXILIARY EQUIPMENT.

"GROUND CLEARANCE": DISTANCE FROM LOWEST POINT OF LIFTGATE TO GROUND LEVEL.

PUMP BOX GROUND CLEARANCE = "BED HEIGHT" - "A" DIM. - 29".

DOOR SIDE GROUND CLEARANCE = "BED HEIGHT" - "A" DIM. - 24"

NOTES: 1) ALL DIMENSIONS GIVEN IN INCHES AND FIGURED WITH A FLAT SILL MEETING THE FLOOR AT A SQUARE 90 DEGREE CORNER (NO ADDITIONAL STEPS). IF YOUR SILL HAS ADDITIONAL STEPS, HOLE COLUMN NUMBER MAY NEED INCREASED OR A FLIP RAMP MAY NEED TO BE FABRICATED OR FILLER STRIPS ADDED TO BRIDGE THE STEPS FROM THE TRAILER TO THE LIFTGATE.

2) "HOLE COLUMN NUMBER" IS THE HOLE IN WHICH THE REARMOST TOP SLOT OF THE MOUNT FRAME BOLTS INTO THE MOUNT ANGLE TO PLACE THE LIFTGATE INTO THE CORRECT INITIAL POSITION.

3) ALWAYS POSITION THE MOUNT PLATE 6" FROM THE BACK OF THE DOOR SILL AS SHOWN.

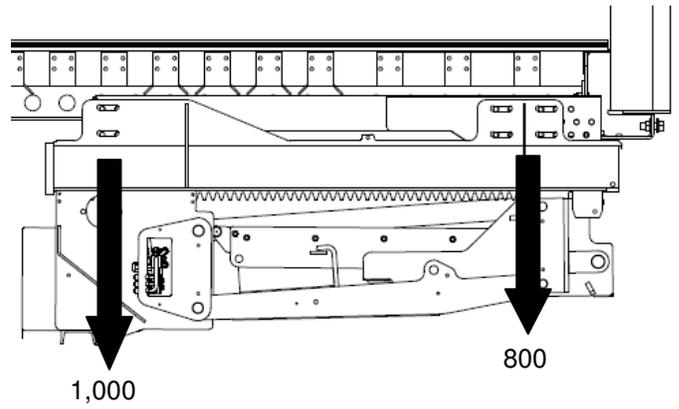
GR10008

# Chapter 3 Basic Mounting Requirements

## INSTALLATION WEIGHT

Make sure that trailer is capable of supporting liftgate forces when liftgate is in stored position and when liftgate is loaded to full capacity.

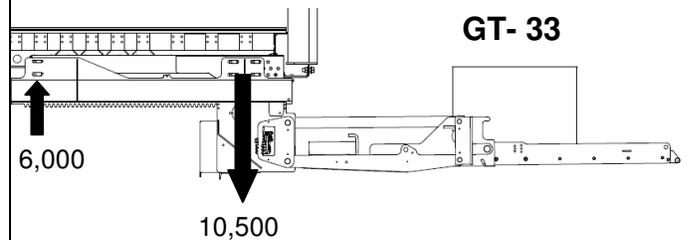
Note that forces shown here are in pounds and are distributed over two liftgate rails.



**GATE STORED**

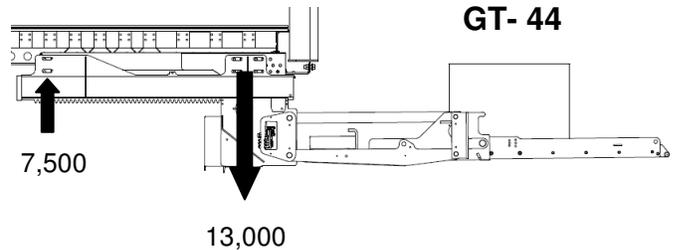
GR10027

## GATE DEPLOYED



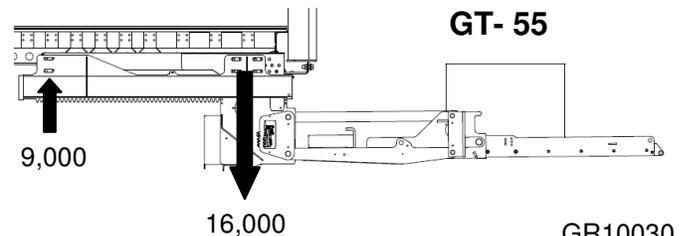
**GT- 33**

GR10028



**GT- 44**

GR10029



**GT- 55**

GR10030

# Chapter 4 Liftgate Installation

## CONNECT BATTERIES

Connect Positive Cable inside Battery Box to positive terminal on Battery via Circuit Breaker as shown. Studs on Circuit Breaker are labeled BAT and AUX. Connect Battery Stud to Bat Terminal and Battery Cable to Aux Terminal. Connect Ground Cable as shown.

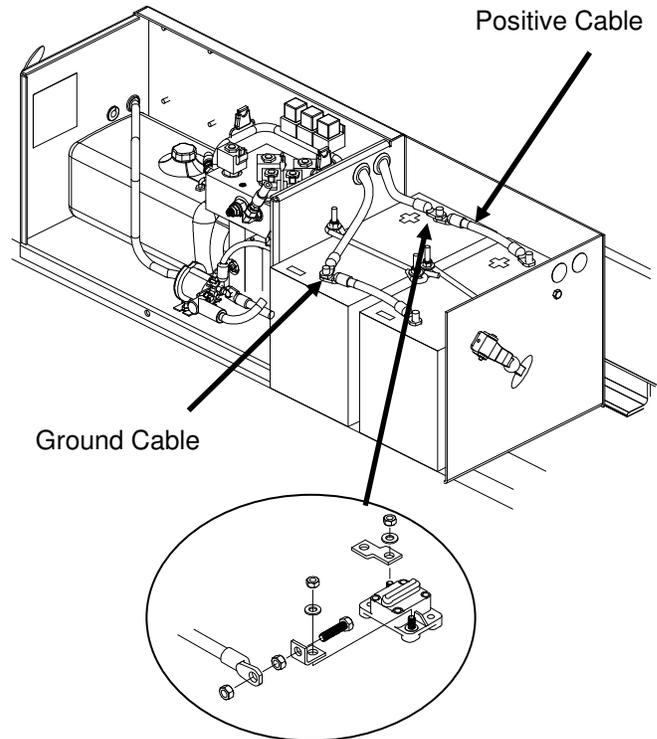
Make sure that Batteries are secured tightly.

**Note!** Add dielectric grease to all Connectors.

**NOTE!** Make sure Batteries are fully charged and connected before moving Liftgate underneath Trailer!

 **Do not connect any other wires at this time.**

 **Be certain Wires are protected from any sharp edges or holes that may abrade insulated covering of Wires**



GR01481 & GR02593

## PREPARATION OF BODY

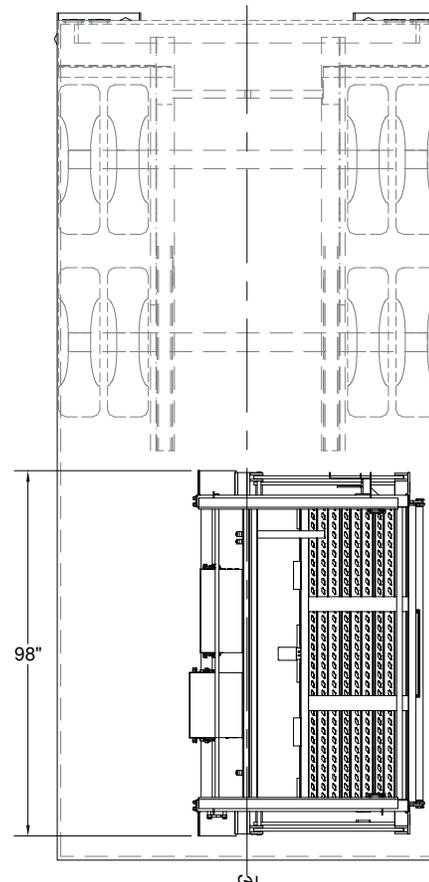
Remove all obstructions that will interfere with Liftgate mounting or operation.

- Ladder/Steps
- Marker Lights (to be relocated later)
- Tool Boxes
- Other projections

Move Slide-Axles rearward if necessary to attain required (liftgate) **Mount Frame Clearance**.

If equipped, relocate forward Mud Flaps as close to wheels as possible.

 **Make sure that Trailer Cross Members are relatively straight and can support forces from Liftgate. It may also be necessary to remove extensive rust or anti-rust protection from Cross Members to have a good surface for welding.**



GR10007

# Chapter 4 Liftgate Installation

## LOCATE THE MOUNT PLATES TO THE CROSS MEMBERS

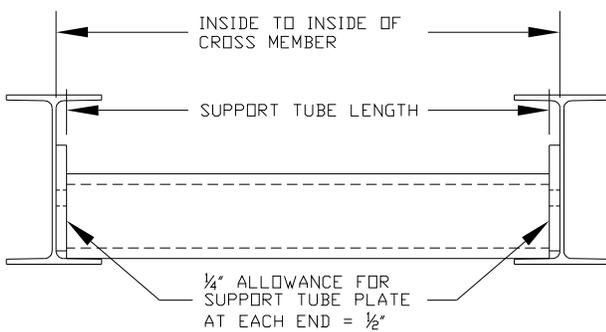
**NOTE:** The following mounting procedure is for a door with the hinge on the left side and the gate shifted to the right of the door. For doors with a hinge on the right side, mirror the installation procedure such that the gate is shifted to the left of the door.

1. Check to see where Support Tubes need to be located to hang Mount Plates at location shown at right. If a Mount Plate falls directly under a Cross Member such that these dimensions can't be achieved, shift location of both Mount Plates equally to left until Mount Plates can be mounted between cross members.

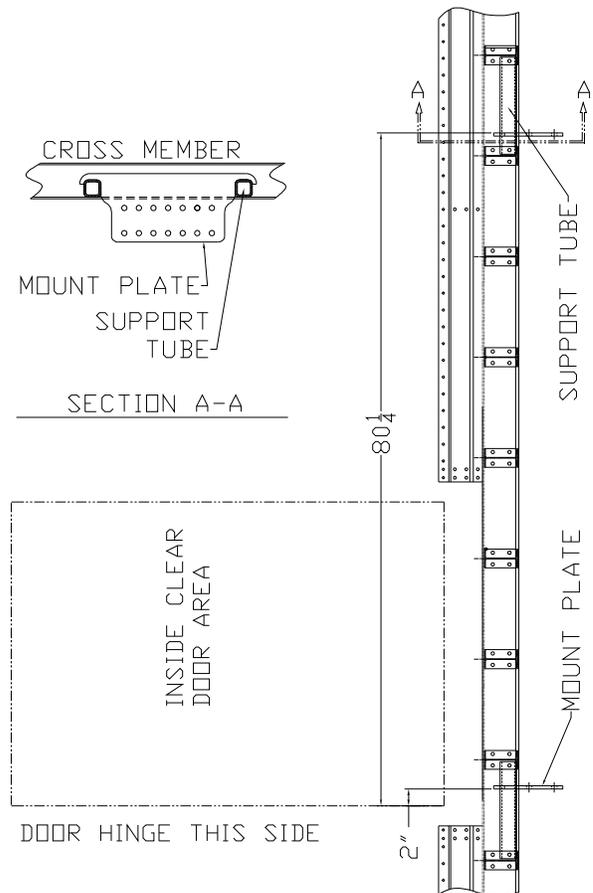
Mark Cross Members between which the Support Tubes will mount.

2. Measure distance between Cross Members where Mount Plates will hang inside web to inside web. Subtract  $\frac{1}{2}$ " from this dimension. This is length to which Support Tubes need to be trimmed. See below.

Trim Support Tubes provided



GR02586



GR02579

# Chapter 4 Liftgate Installation

## WELD/BOLT SUPPORT TUBES IN PLACE

Place Support Tubes in position and put Support Tube Plates against Web of I-beam as shown at bottom right. Avoid the radius at bottom of I-beam.

Hang Mount Plates at locations shown at top right and position Support Tubes to achieve dimensions shown. Do not weld Mount Plates yet.

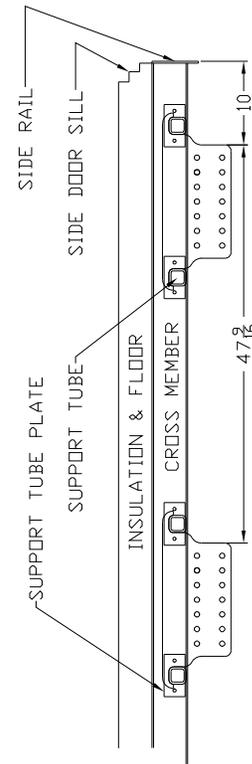
For Installation on Aluminum Cross Members, place Mylar or Melinex, on Support Tube Plates and drill and bolt Support Tube Plates to Cross Member tape side in as shown in step 1 bottom right with 3/8" Bolts provided. Sandwich I beam between steel plates. Do not weld.

For Installation on Steel Cross Members either bolt Support Tube Plate like Aluminum Cross Member installation **or** Weld in place as shown in step 1 bottom right. Only one Support Tube Plate is required for steel Cross Members per side. Do not weld Mount Plates yet.

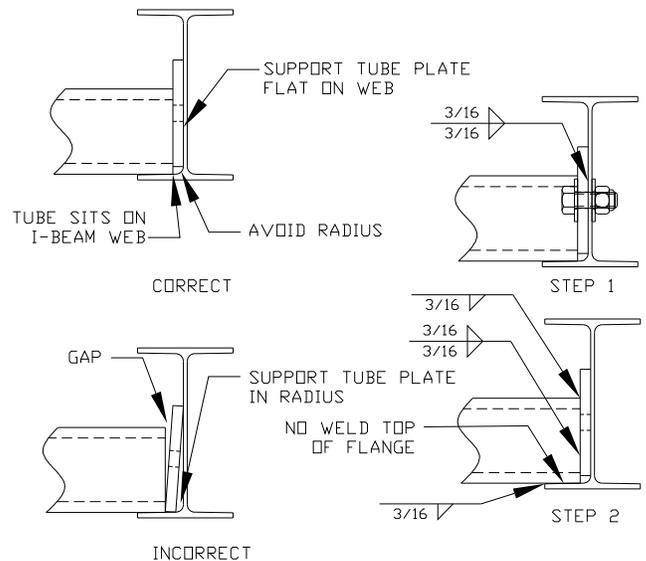
Make any final adjustments needed to achieve dimensions shown at top right and weld in the Support Tubes to the Support Tube Plates as shown in step 2 bottom right. For Aluminum Cross Members ignore bottom weld callout on the Cross member. Do not weld Mount Plates yet.



When welding on Cross Member web, weld parallel to Cross Members. Never perpendicular to Cross Members, as structural damage to Trailer could result.



GR2580



GR02582

# Chapter 4 Liftgate Installation

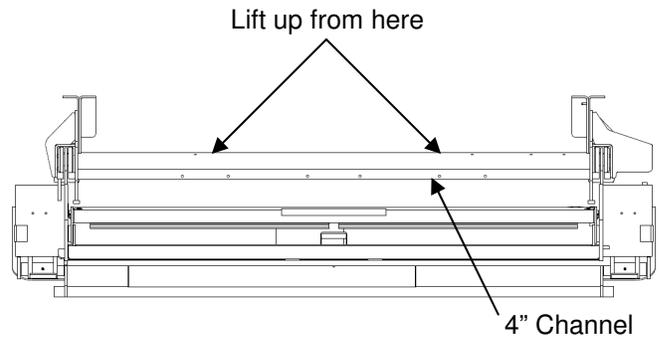
## LIFTING THE GATE

Always lift gate up from shown position (under 4" channels).

**NOTE:** Set forks to widest width possible to avoid bowing of 4" channels.

Use fork extensions if needed.

**NOTE:** Failure to lift gate up according to instructions can damage the gate.



GR10013

## BOLTING GATE INTO POSITION

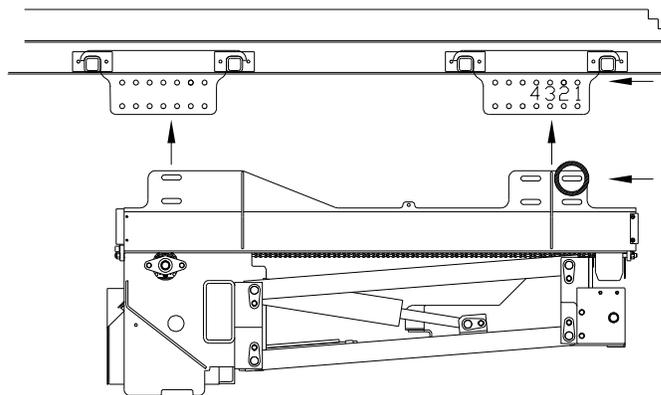
Using the chart on page 3-1 find the proper Hole Column Number.

The adjustable slot shown in circle at right is bolted into top row of Mount Plate nearest to Side Rail into Hole Column Number that matches your application.

Place Bolt head and Flat Washer on slot side of joint and Nut and Lock Washer on hole side of joint. Install all twelve Bolts. Temporarily torque Bolts. Remove Fork Lift.



Do not go underneath of Liftgate or Platform before the liftgate is fully welded!



GR02583

## SECURE INBOARD MOUNT PLATE

Clamp or tack weld Mount Plate farthest from Side Rail to prevent it from raising away from Support Tube in the next step.

Make sure Mount Plates are parallel to each other and perpendicular to the Side Rail.



Do not go underneath of Liftgate or Platform before the liftgate is fully welded!



GR02585

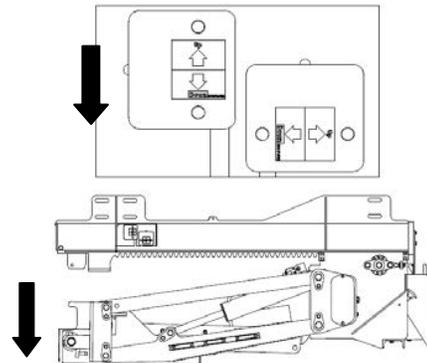
# Chapter 4 Liftgate Installation

## POSITION PLATFORM

**!** Always make certain area in which Platform will open is clear.

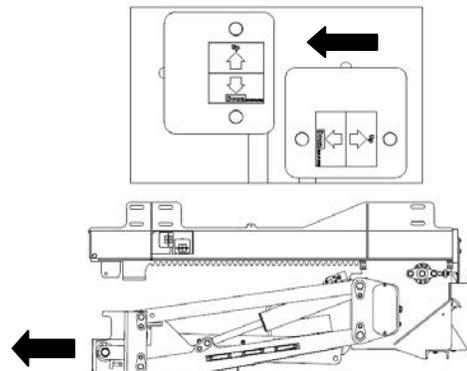
Push Lower Switch to lower Platform from storage position.

Do not lower Platform to ground level, lower just enough to clear Storage Stops.



GR10014

Push Open Switch to move Platform to working position.

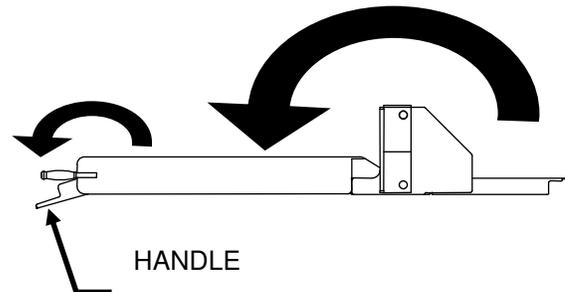


GR10015

Lower Platform to ground.

Open Platform Extension and Loading Ramps manually.

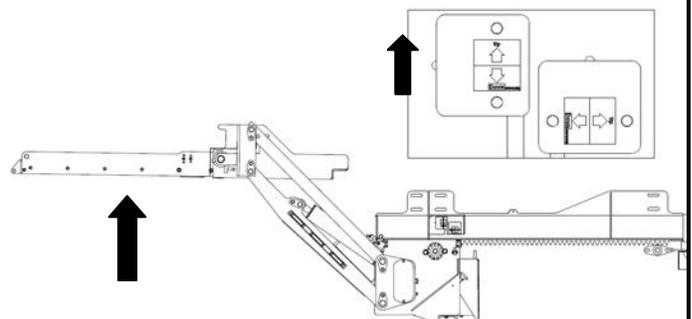
**Note!** Use handle to open Platform Extension.



GR01233

Raise Platform almost to bed level.

**Note!** Liftgate has not yet been aligned. Be careful not to hit Trailer with Platform.



GR10016

# Chapter 4 Liftgate Installation

## ALIGNING LIFTGATE WITH DOOR

NOTE: If unable to obtain dimensions on top of page 4-3 then skip this step.

With Trailer Door open and Liftgate raised almost to top, measure distance "X" from inside edge of Door Jamb to inside edge of Side Bar. Note which direction Liftgate needs to be moved for inside of Side Bar to be flush with inside edge of Door Jamb. See drawing at right.

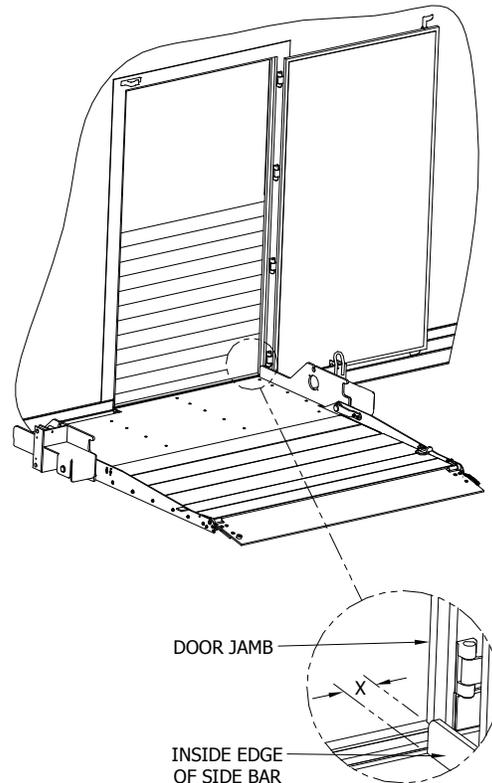
Store gate back under trailer.

Unclamp (or break tack welds on) Mount Plates from page 4-4 and move Liftgate and Mount Plates so that Roll Off Guard and inside of Door Jamb will be flush.

Re-clamp and check.



Do not go underneath of Liftgate or Platform before the liftgate is fully welded!



GR10011

## WELD MOUNT PLATES

NOTE: If unable to obtain dimensions at top of page 4-3 then move Liftgate as far to right as possible before welding.

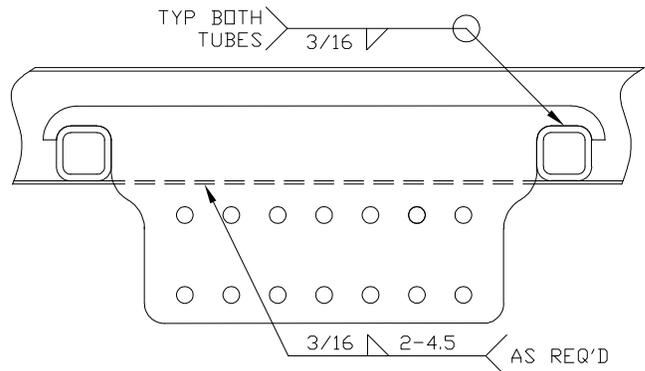
Make sure Mount Plates are vertical, parallel to each other and perpendicular to Side Rail of Trailer.

Weld all Mount Plates to Support Tubes as shown from both sides.

If welds can't be put on both sides of Mount Plate because Mount Plate contacts Cross Member, weld plate to Cross Member as shown.



Do not go underneath of Liftgate or Platform before the liftgate is fully welded!



GR02589

# Chapter 4 Liftgate Installation

## FINE TUNING PLATFORM POSITION

Platform Edge must align with Door Sill as shown (just over Door Sill Radius allowing upstops to contact the Door Sill).

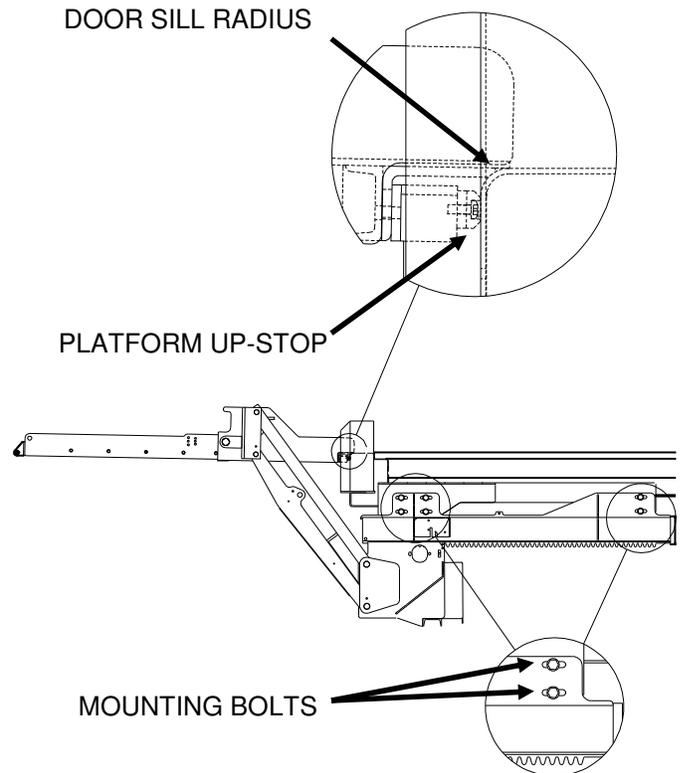
### If Platform is hitting Door Sill too low:

Loosen Mounting Bolts from Mount Plates (12 plc's).  
Pull liftgate out as much as needed.  
Approximately 1" out will raise platform 1".  
Test that platform aligns properly.  
Tighten all Mount Bolts (12 plc's) to 80 ft-lbs.

### If Platform is hitting Door Sill too high:

Loosen Mounting Bolts from Mount Plates (12 plc's).  
Push Liftgate in as much as needed.  
Approximately 1" in will lower platform 1".  
Test that Platform aligns properly.  
Tighten up all bolts (12 plc's) to 80 ft-lbs.

It is important that both sides of Liftgate be adjusted in or out by equal amounts. Adjusting one side more than the other may result in the Liftgate binding when running Liftgate in or out of the stored position.

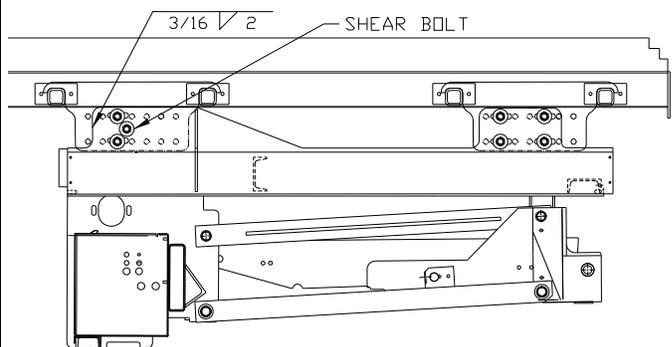


GR10017

## SECURING WELDS

Weld OR bolt Track Frame to Mount Angles as shown.

**Note!** Bolt Mount Plate to Track Frame with 9/16" Shear Bolt if easy Liftgate removal is desired. This requires a 9/16" hole through the Track Frame an existing Mount Plate hole and insert a 9/16" shear bolt.



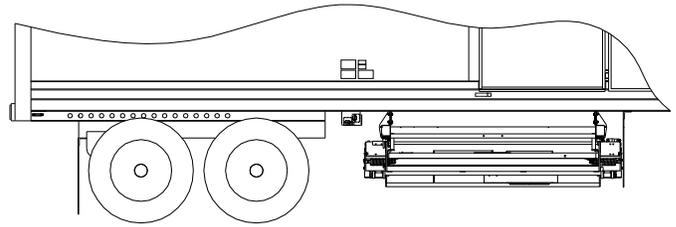
GR10018

# Chapter 4 Liftgate Installation

## INSTALL FULL LENGTH MUDFLAP

Sandwich the 30" x 100" Mudflap (provided) between the 100" Angle and 100" Flatbar (provided), with the bolts and hardware (provided). Install the full length Mudflap forward of liftgate as close to liftgate as possible.

**IMPORTANT: Failure to install full length mudflap voids warranty on pump box components and hydraulic cylinders.**

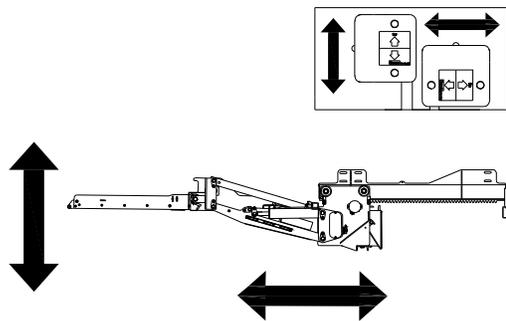


GR10012

## CHECK THE LIFTGATE OPERATIONS

Check that Liftgate operates freely and smoothly, and that there are no unusual noises or vibrations.

Run all movements several times to remove any air from hydraulic system.



GR10019

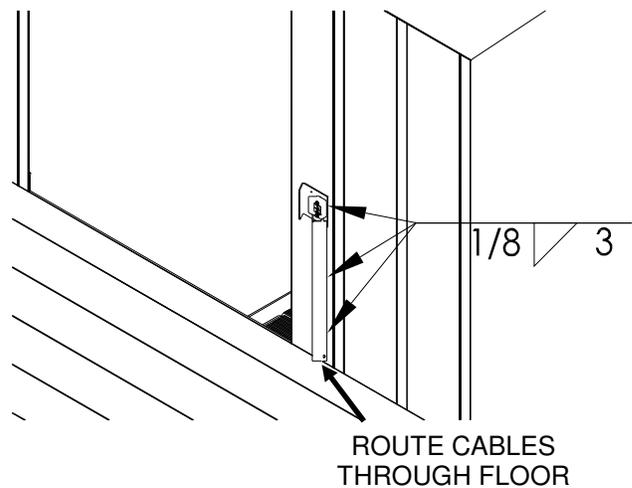
## INSIDE SWITCH

Drill hole (1" dia.) for cable in trailer floor.

Weld inside switch to door frame as shown.

Route cable to pump unit box and connect using supplied connectors.

Make sure that cable doesn't pinch when gate moves. Use wire ties to secure cable.



GR10021

# Chapter 4 Liftgate Installation

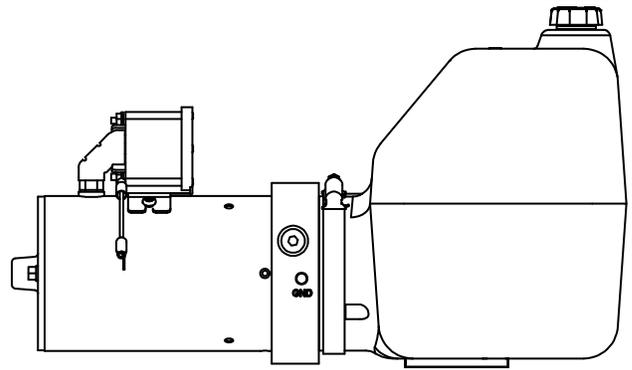
## CHECK OIL LEVEL

See chart below for proper platform position for oil check.

Oil level should be within 1/2" to fill line (over or above) marked on the side of Oil tank.

Fill as may be required

Follow oil recommendations.



GR10020

## LIFTGATE POSITION FOR OIL LEVEL CHECK

	Gravity Down Pump:	Power Down Pump:
Deck should be in this position:	Lowered to Ground Level	Raised to Bed Level

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

### NOTE:

**Do not use the following fluids:**

- Brake Fluid**
- Power steering fluid**
- Automatic Transmission Fluid (ATF)**

Rev 06

# Chapter 4 Liftgate Installation

## FINISH WIRING

For Direct Power kits run the charge line to the single or dual pole charge plug at the front of the trailer.

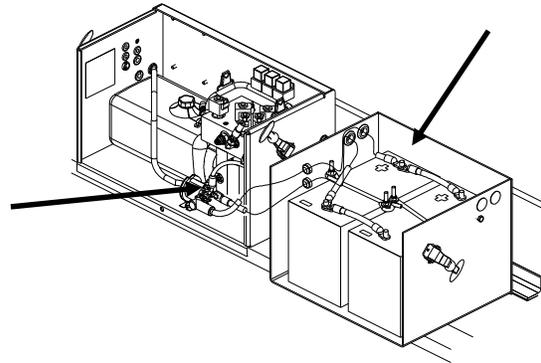
For Trail Charger kits run the trail charger cable to the front of the trailer and follow supplied trail charger installation instructions.

Establish a good ground between the tractor and trailer (not through fifth wheel).

## ADD DIELECTRIC GREASE TO CONNECTORS

All connectors must be covered with dielectric grease (not supplied).

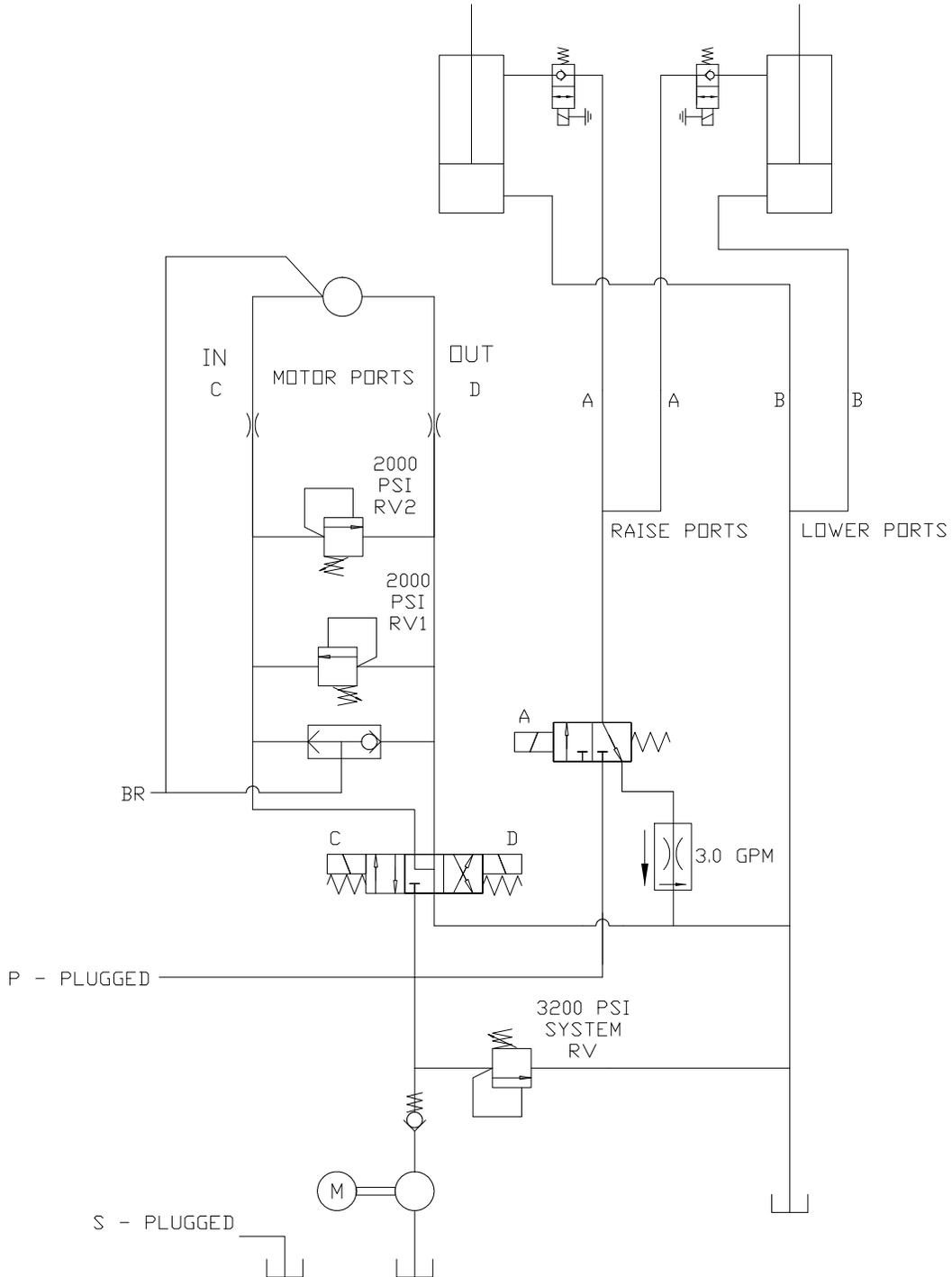
Note especially following locations:  
Positive battery pole  
Control switch cables



GR01408

# Chapter 4 Liftgate Installation

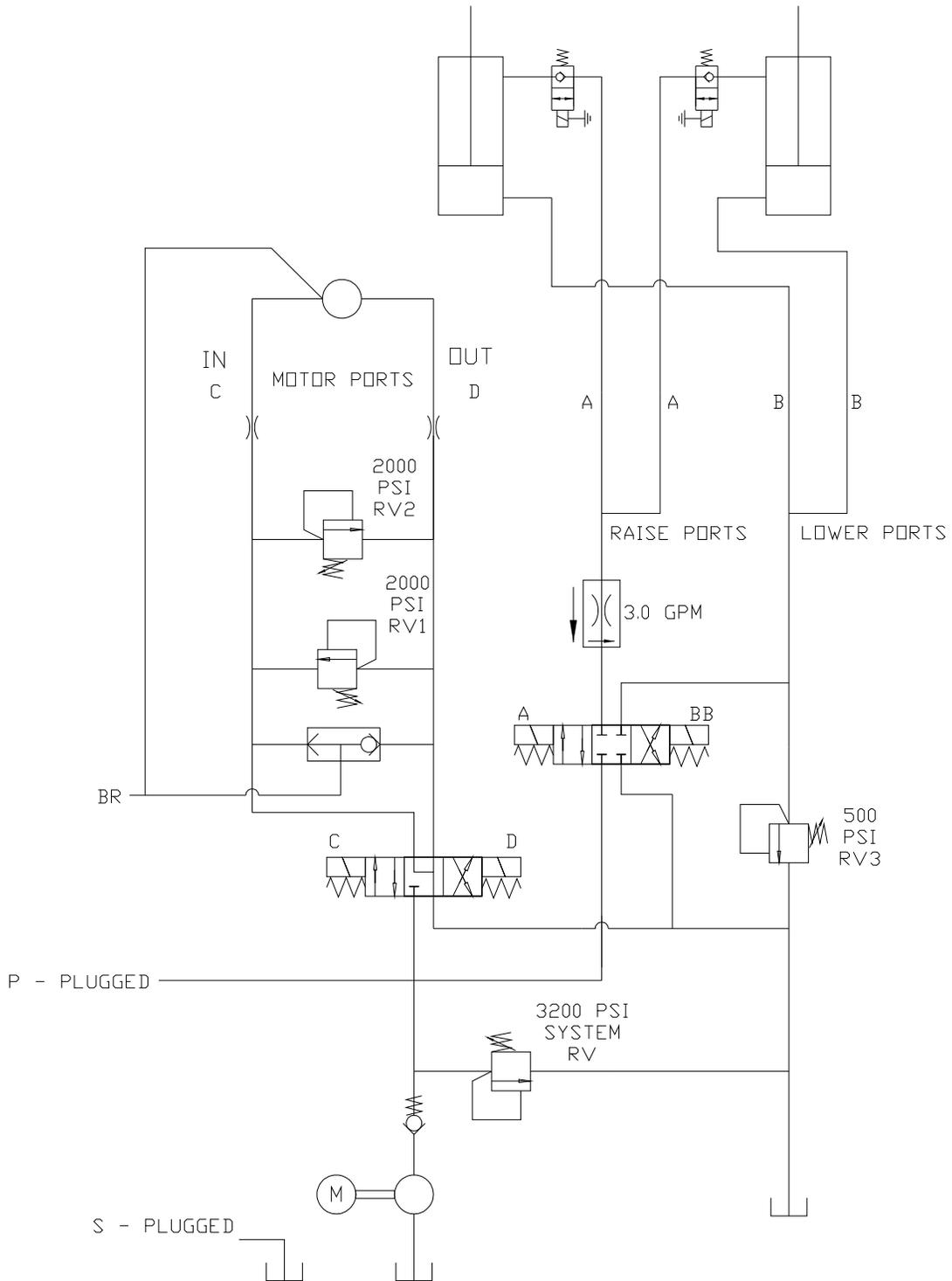
## Hydraulic Schematic - Single Pump Gravity Down



GR10031

# Chapter 4 Liftgate Installation

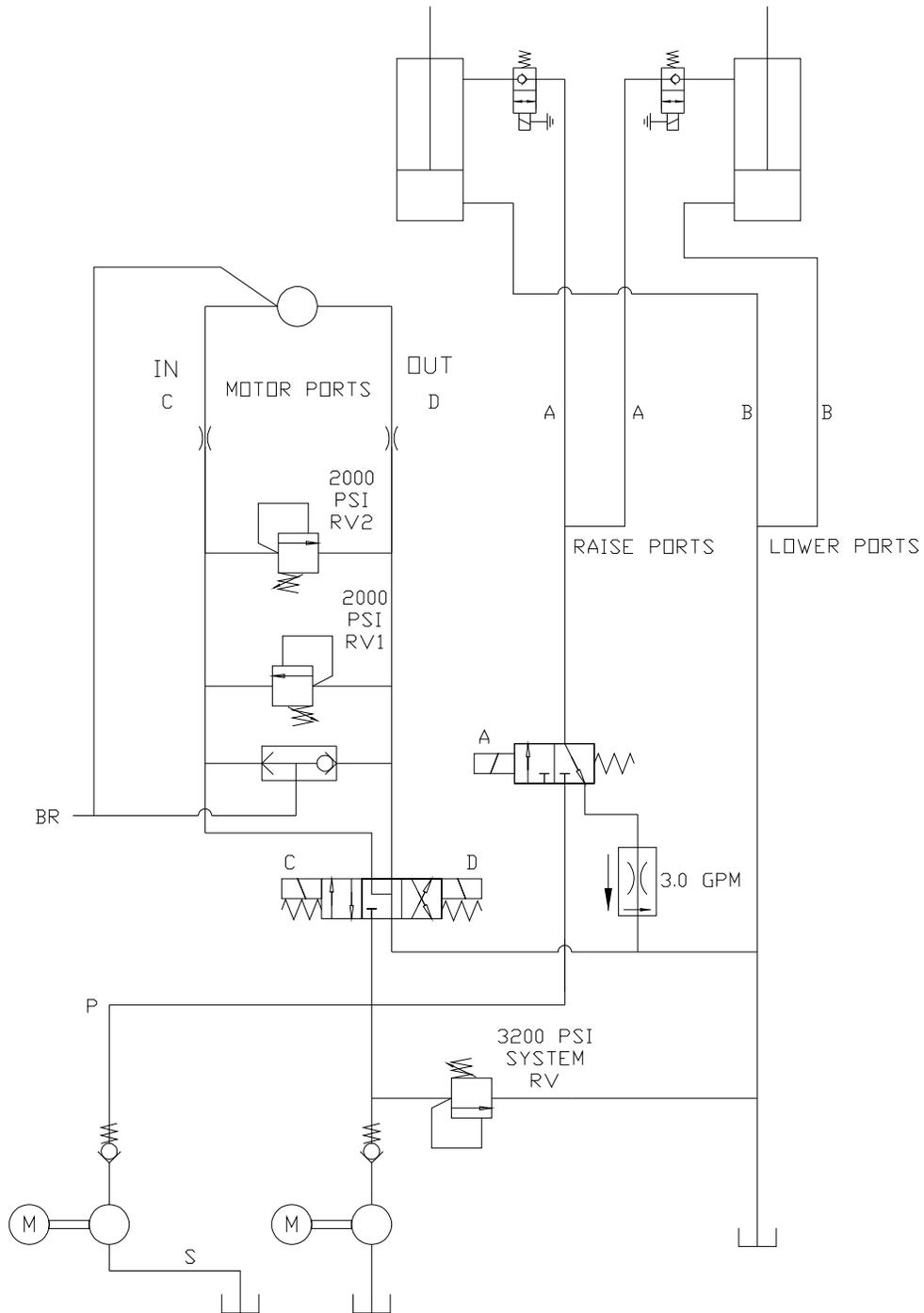
## Hydraulic Schematic - Single Pump Power Down



GR10032

# Chapter 4 Liftgate Installation

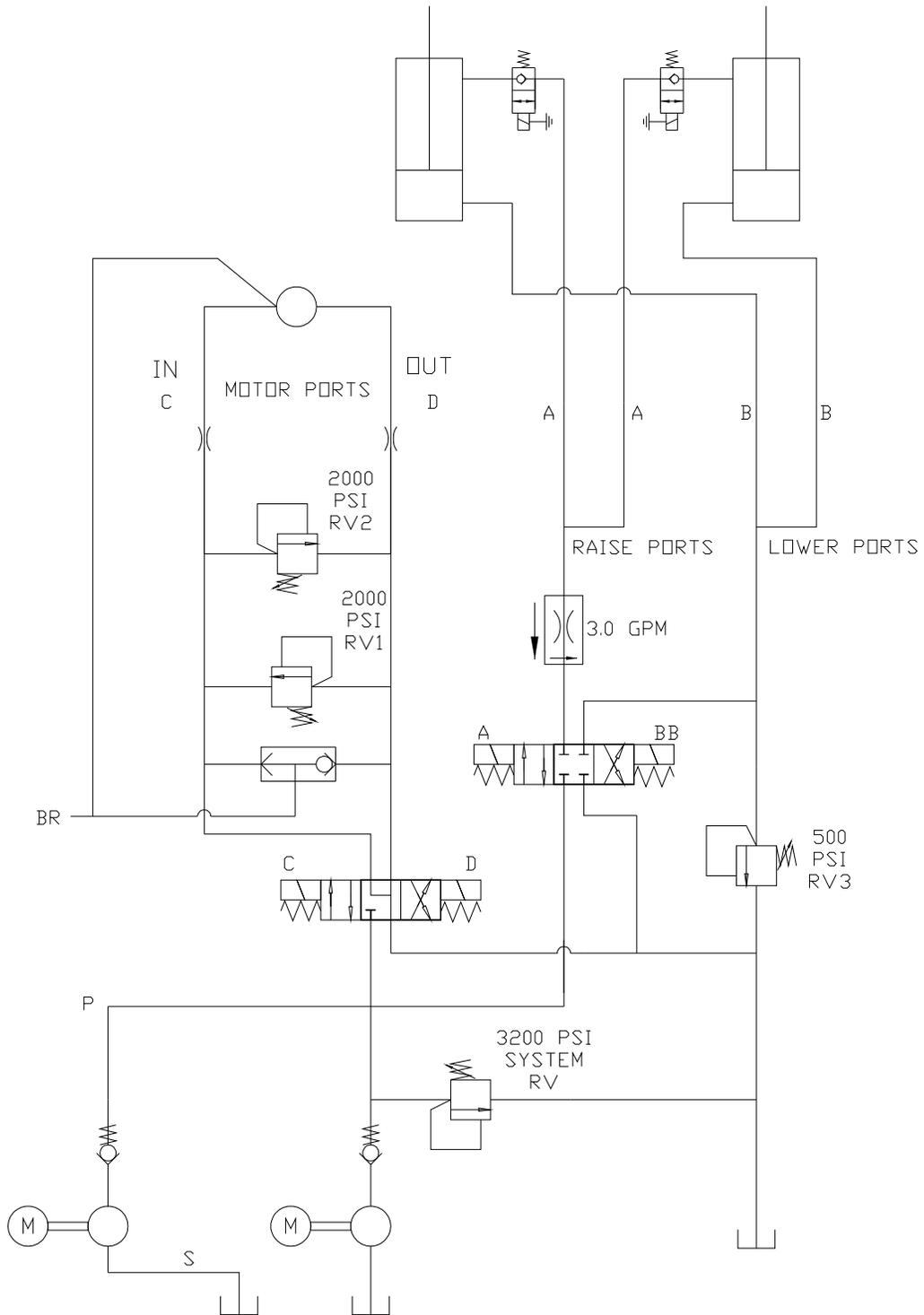
## Hydraulic Schematic - Dual Pump Gravity Down



GR10033

# Chapter 4 Liftgate Installation

## Hydraulic Schematic - Dual Pump Power Down

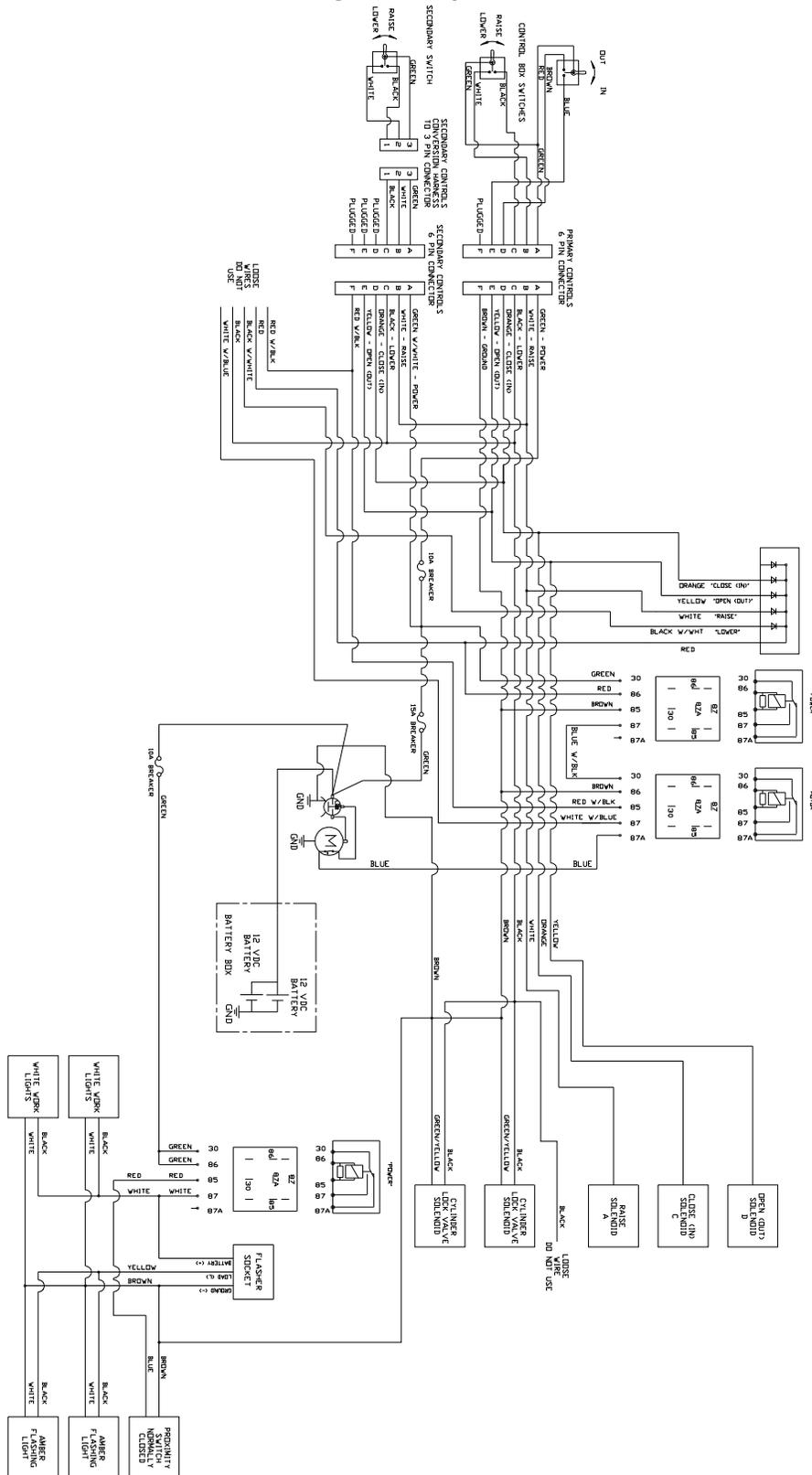


GR10034

# Chapter 4 Liftgate Installation

## Electrical Schematic – Single Pump Gravity Down

\*Lights are Options

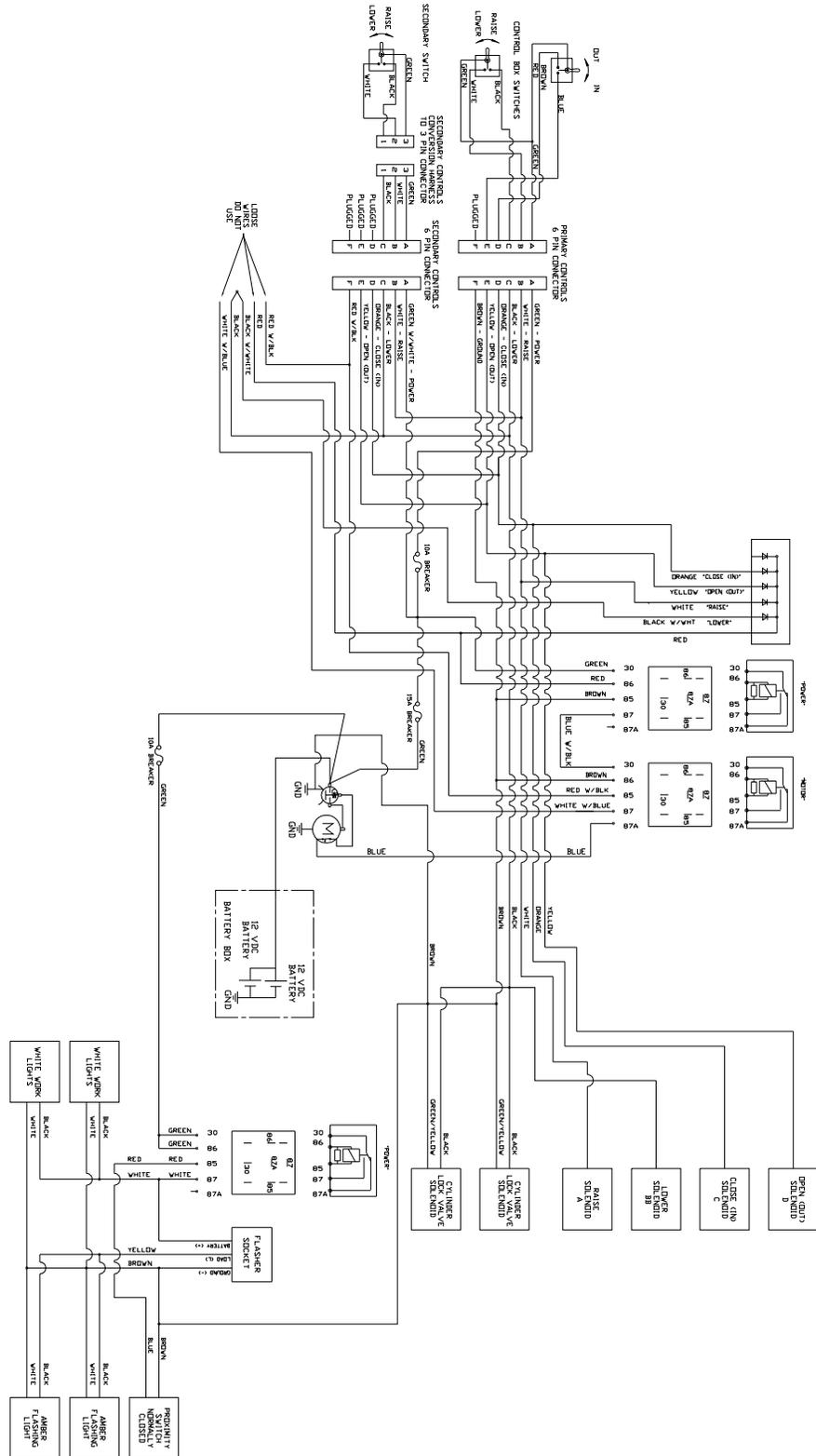


GR10035

# Chapter 4 Liftgate Installation

## Electrical Schematic – Single Pump Power Down

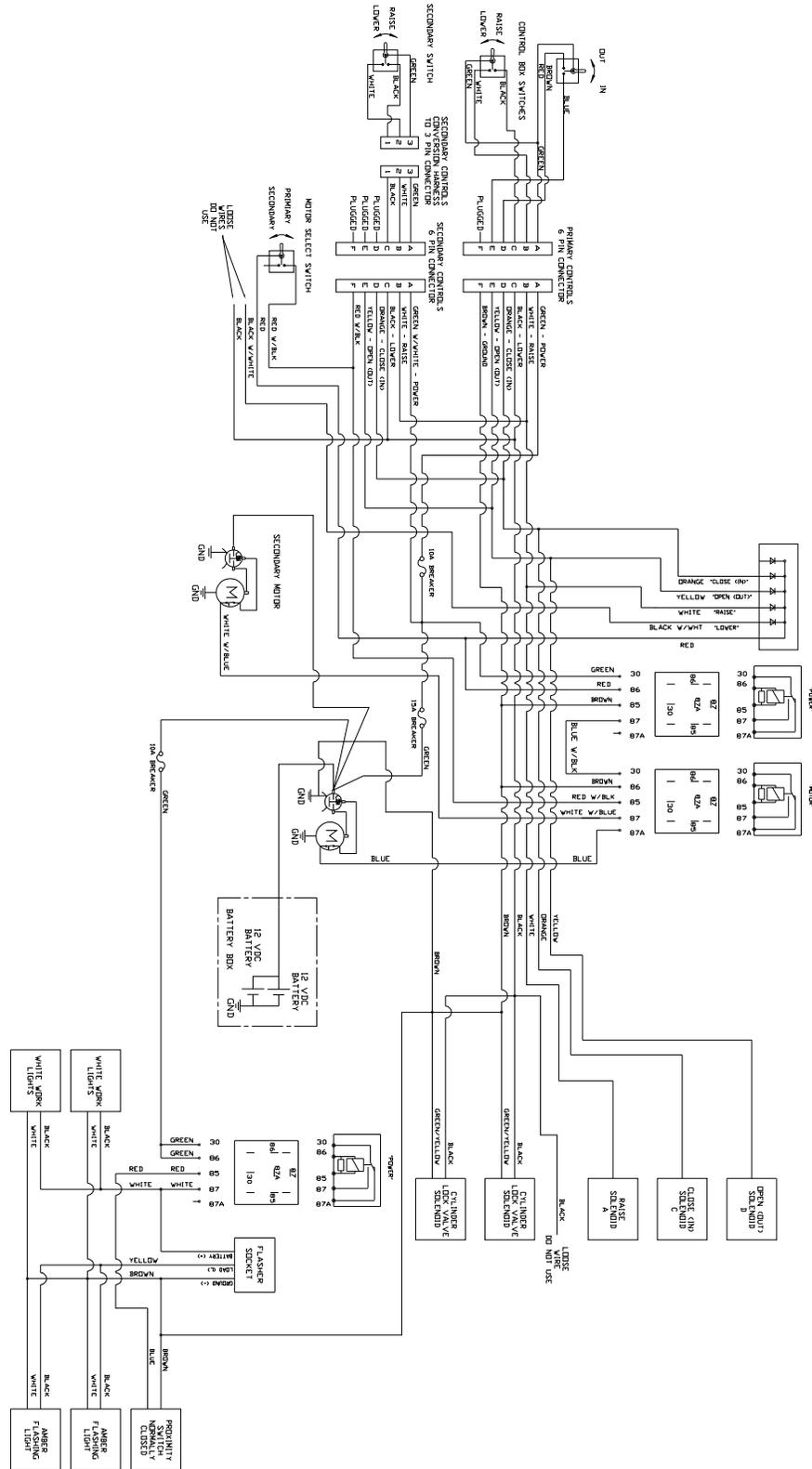
\*Lights are Options



# Chapter 4 Liftgate Installation

## Electrical Schematic – Dual Pump Gravity Down

\*Lights are Options

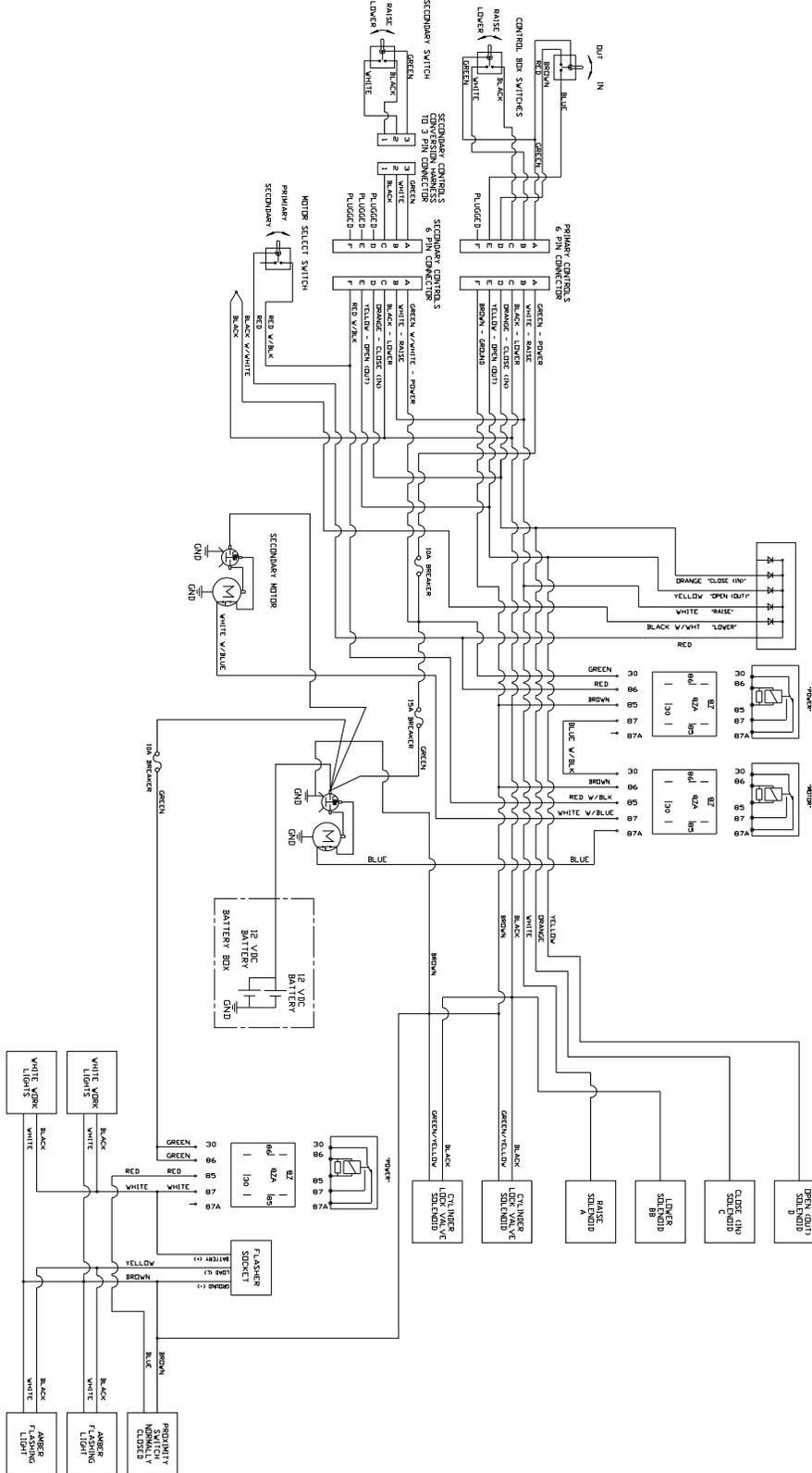


GR10037

# Chapter 4 Liftgate Installation

## Electrical Schematic – Dual Pump Power Down

\*Lights are Options



GR10038

# Chapter 5 Placement of Decals

To order complete set of GTSL-Series liftgate decals, order kits below:

GTSL-33 = Kit part number 80002238

GTSL-44 = Kit part number 80002239

GTSL-55 = Kit part number 80002240



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

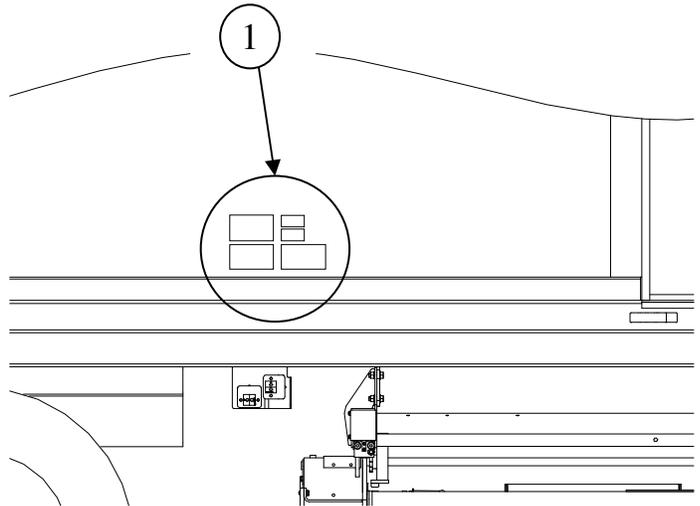
## DECAL CHART

AREA	DECAL	QTY	PART NUMBER	LOCATION
1	3300 lb Capacity or	1	80100585	<b>Locate in a conspicuous place near controls.</b>  <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 the controls.</b>  Refer to the following diagram showing decal locations.
	4400 lb Capacity or		80100587	
	5500 lb Capacity		80101308	
	Operation Decal	1	80101445	
	Safety Decal	1	80100850	
	Stand Clear	1	75089296	
	Hazard	1	80101370	
2	3300 lb Capacity or	2	80100585	<b>Locate on parallel arms</b>
	4400 lb Capacity or		80100587	
	5500 lb Capacity		80101308	
	Stand Clear	2	75089296	
3	Use Handle Decal	1	75089295	<b>Locate next to handle on platform extension</b>

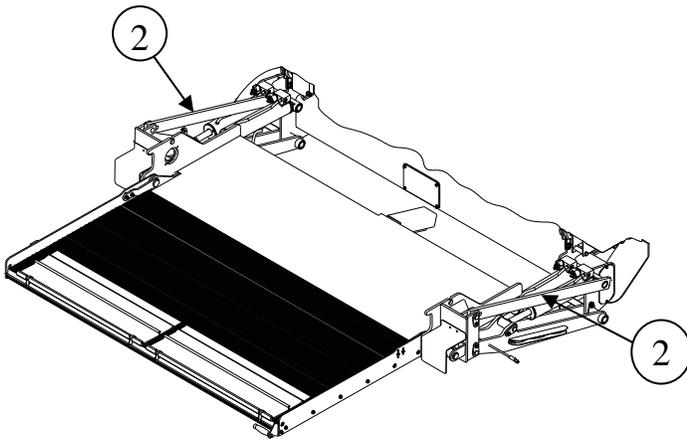
# Chapter 5 Placement of Decals

To maximize decal adhesion to surfaces:

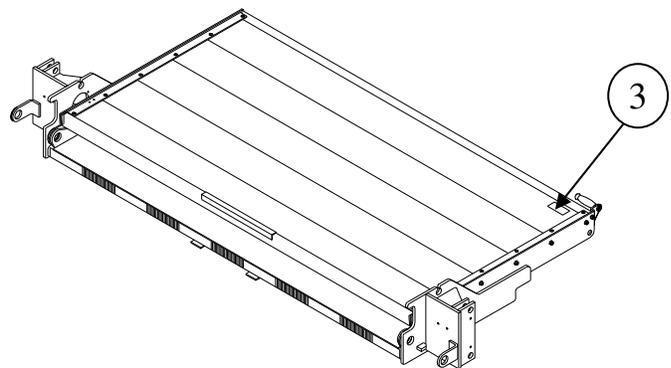
- Surface must be dry and clean
- Firm pressure must be applied to decal
- Minimum surface temperature 65°  
Heat gun may be used to heat surface



GR10022



GR10023

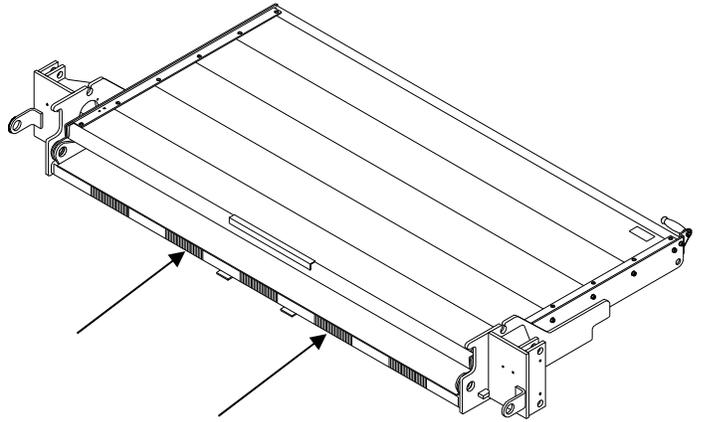


GR10024

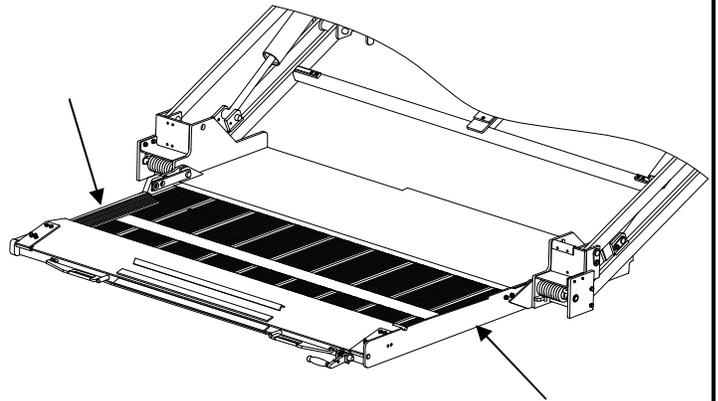
# Chapter 5 Placement of Decals

## CONSPICUITY TAPE

Conspicuity tape is attached to Main Deck Tube as shown.



GR10025



GR10026

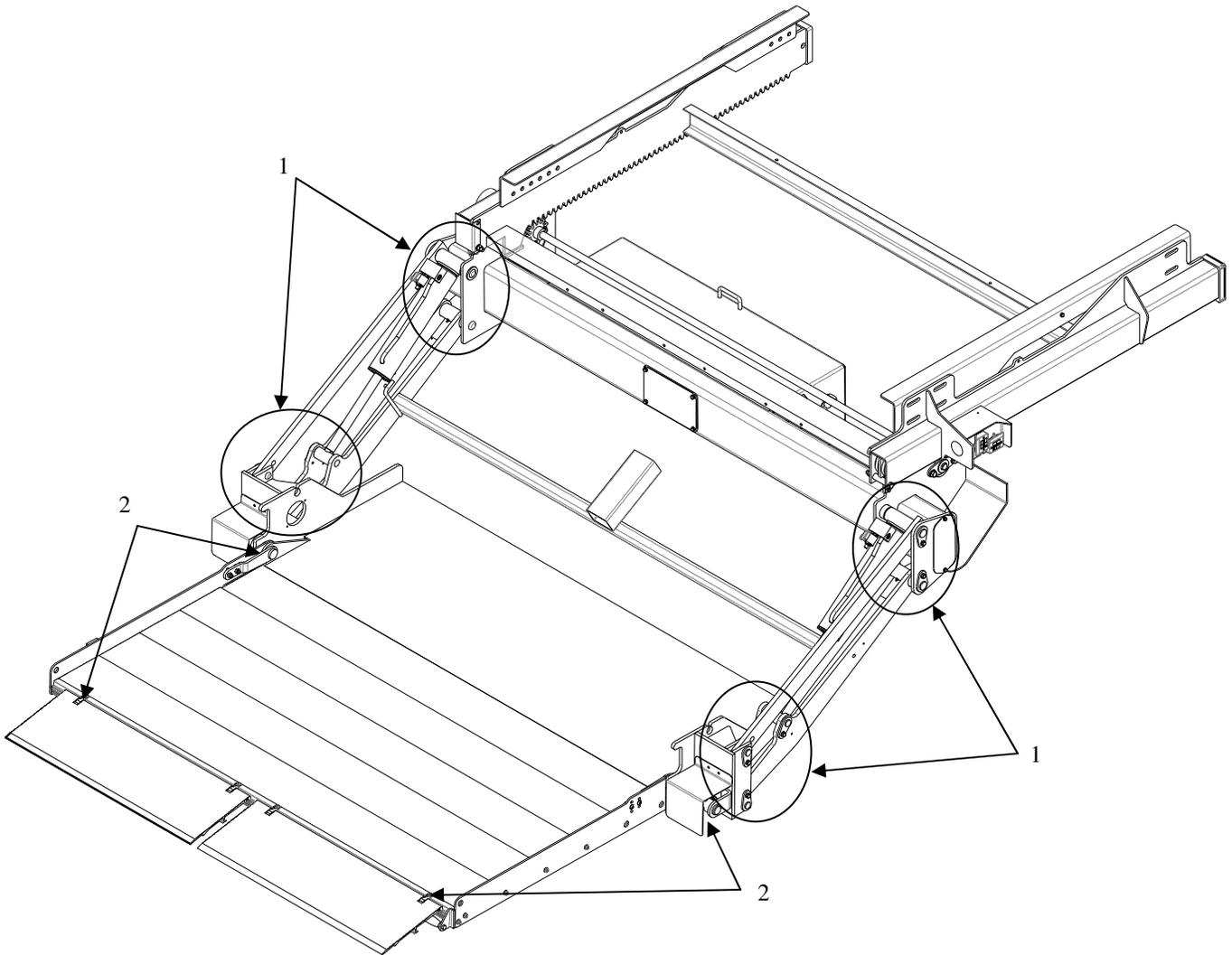
# Chapter 6 Lubrication

## LUBRICATION INSTRUCTIONS

The points indicated should be lubricated approximately once every three (3) months, or as outlined in the lubrication schedule for heavier usage. If not sure of duty or cycles, always lubricate more frequently.

- 1) Grease all grease fittings in liftarm and cylinders with grease gun.
- 2) Lubricate ramp hinges, deck extension hinges, and springs with a light weight machine oil.

Suggested Minimum Lubrication Schedule (In Days)			
Monthly Cycles	Light Duty	Med. Duty	Heavy Duty
250 Or Less	45	30	21
250-350	30	21	14
350-450	21	14	7
More Than 450	Contact Factory for Instructions		



# Ch 7 FINAL INSPECTION SHEET

## IMPORTANT:

All of the following are to be checked and verified before installation is complete.

- A.** Are all fasteners securely in place?
- B.** Does liftgate fold and unfold properly?
- C.** Does the platform meet the vehicle properly?
- D.** Is the platform held tightly when stored away?
- E.** Are hydraulic hoses and fittings properly connected with no leaks?
- F.** Do controls operate properly?
- G.** Is battery cable attached and clamped tight?
- H.** Are all electrical connections coated with dielectric grease?
- I.** Are all parts properly lubricated according to the lubrication instructions?
- J.** Is 150 amp circuit breaker installed at battery?
- K.** Is battery cover installed and securely latched?
- L.** Are all decals properly in place and legible according to the decal placement drawings?
- M.** Is pump cover installed and securely latched?
- N.** Has hydraulic system been properly bled of all air?
- O.** Is pump reservoir full of oil?
- P.** Is the owner's manual in the vehicle?
- Q.** Is safety chain installed in proper location and orientation?



**Do not use liftgate if any of the above are not checked and verified. If you have any questions not covered in this manual, contact your nearest Waltco distributor, or the nearest Waltco factory.**

# 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

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## 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**

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## PLEASE NOTE:

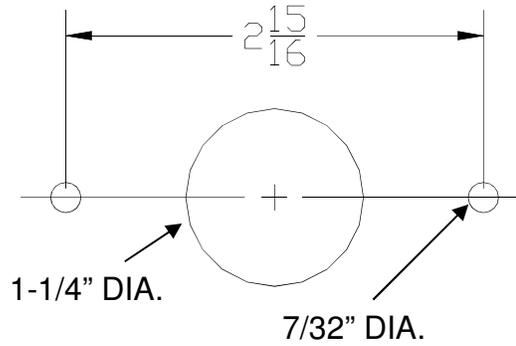
**To assure you of continuing and effective quality control, our warranty policy permits replacement of hydraulic cylinders, valves and motor pump units when their factory seals are intact. Parts under warranty will be exchanged promptly after careful inspection of the returned assemblies.**

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# Hand Held Remote Installation

## DRILL SOCKET HOLES

Using dimension shown, drill mounting holes in desired location for socket.



GR00036

## INSTALL SOCKET

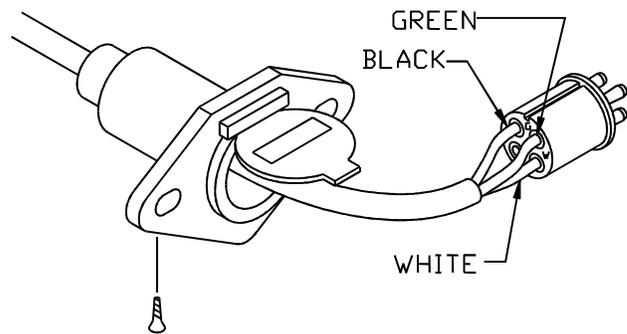
Assemble socket as shown.

Install wires according to colors:

W = White (Raise)

B or BK = Black (Lower)

G = Green (Power)



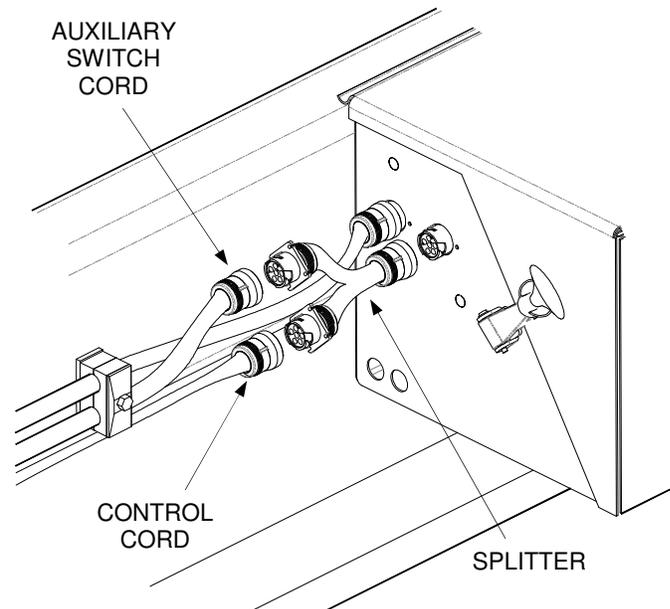
GR02240

## CONNECT WIRES TO PUMP UNIT

Route Control Cord to pump enclosure.

First connect Splitter cord assembly to Pump Box connector as shown.

Connect Control Cord connector and the standard auxiliary switch to Splitter as shown.



GR02934

# Auxiliary Battery Kit w/Dual Cables

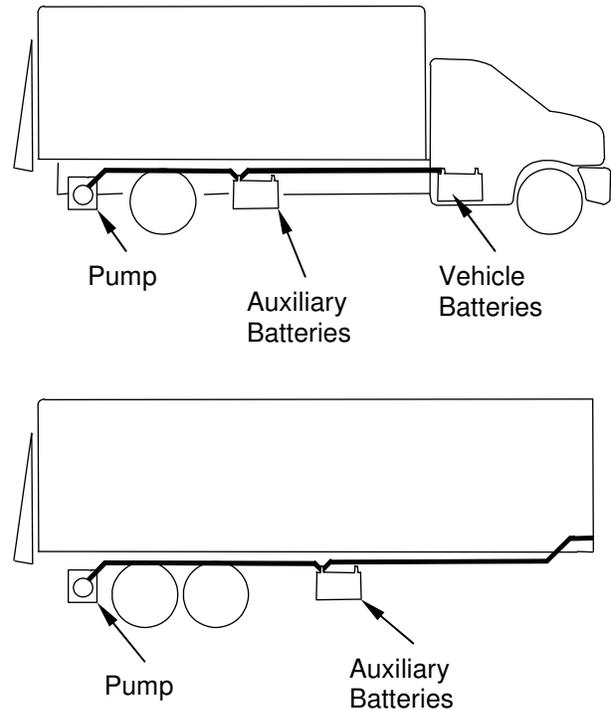
80101569

## DETERMINE BATTERY LOCATION AND CABLE ROUTING

Determine where auxiliary battery box will be mounted on the vehicle.

For trucks your installation will use cables supplied with liftgate.

For trailers additional cables are supplied with the trailer kit.

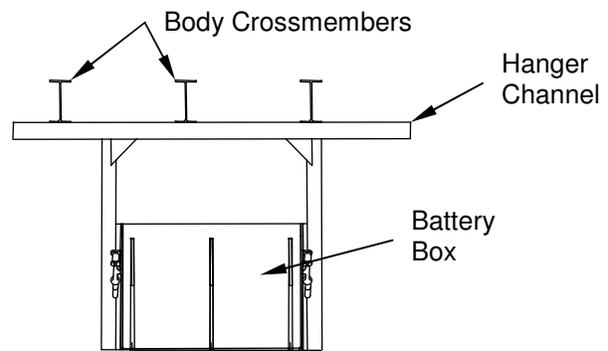


GR02768

Locate battery box in a suitable location under the vehicle body.

Weld hanger channel to body crossmembers.

Install batteries into box.



GR02769

Install #1 ga. power and ground cables to liftgate pump unit per liftgate instructions.

Route cables along chassis frame towards auxiliary battery box, securing them every 24" with cable ties provided.

Do not connect any cables to batteries at this time.



**Be certain cables are protected with grommets when passing through metal holes or over sharp edges.**

Cut cables to required length.

Use remaining length of cables to connect from auxiliary batteries to vehicle batteries (for truck applications only, trailers will use additional 0 ga. cables).

Install terminal lugs on ends of cables as shown below.

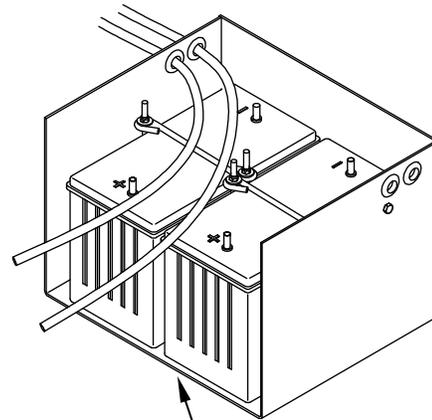


**Protect wires from any sharp edges or holes that may abrade insulated covering of wires.**



**Secure battery cable so it does not come near, or in contact with, other vehicle wiring, fuel lines, brake lines, air hoses, exhaust system, etc.**

Install cable lugs as shown below.



AUXILIARY OR VEHICLE BATTERIES

GR01961

## INSTALLATION OF TERMINAL LUG

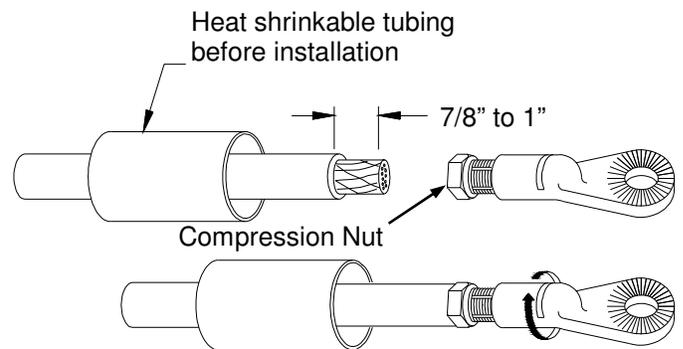
Strip 7/8" to 1" of insulation from end of cable.

Slide heat shrinkable tubing onto cable.

Insert bare wire into compression nut until it seats.

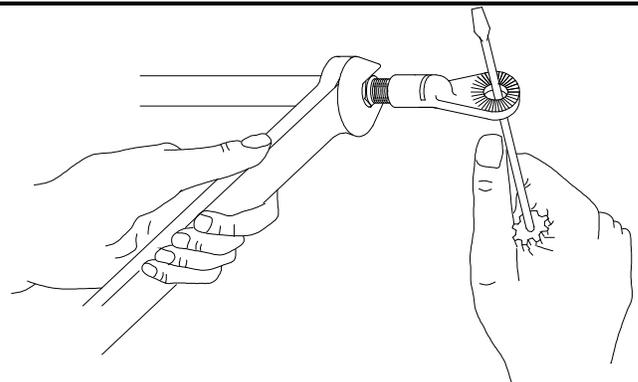
**IMPORTANT: Be sure to use correct compression nut, use 1&2 gauge nut for 1 gauge cable, use 0 gauge nut for 0 gauge cable.**

Note: Copper wire should be flush with, or slightly past nut



GR00299

Grip nut with wrench and turn terminal until nut seats



GR00300

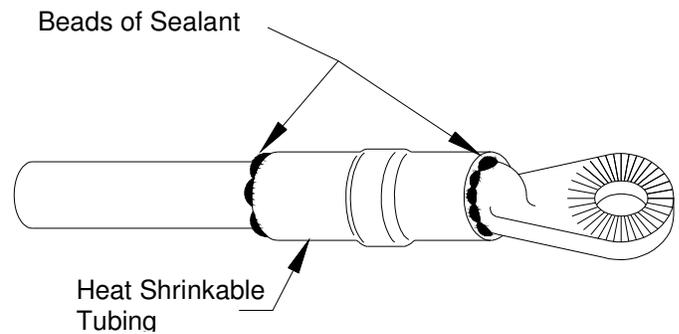
Position heat shrinkable tubing over terminal and end of cable.

**Note: Red heat shrink is applied to power cable and black heat shrink to ground.**

Shrink tubing using electric heat gun or torch.

**Note: To reduce chance of damaging tube and cable, a heat gun is recommended**

Apply sufficient heat to produce thin bead of sealant all around tube edges



GR00301

## INSTALLATION OF CIRCUIT BREAKER(S)

Batteries on a truck will require circuit breakers at both the auxiliary batteries and the vehicle batteries.

Locate and mount circuit breaker directly to batteries using copper terminal link supplied.

Circuit breakers must be mounted to give good protection against any objects coming into contact with circuit breaker terminals and causing a short. Positions must also be readily accessible to reset breakers.

**Note: Circuit Breaker is to rest solidly on battery to prevent vibration during transit.**

If unable to connect circuit breaker direct to batteries, an optional 24", maximum length, 2 Ga. battery cable may be used.

Connect cables as shown.

Apply a generous amount of Dielectric Grease to all Positive (Hot) Battery terminals and Circuit Breaker terminals.

Install circuit breaker decal, 80100829, near the circuit breaker.

For trucks, use remaining length of cables supplied with liftgate, and route from auxiliary batteries to vehicle batteries.

Install terminal lugs on cables as required per previous instructions.

Install circuit breaker and cables to vehicle batteries per previous instructions.



**Protect wires from any sharp edges or holes that may abrade insulated covering of wires.**

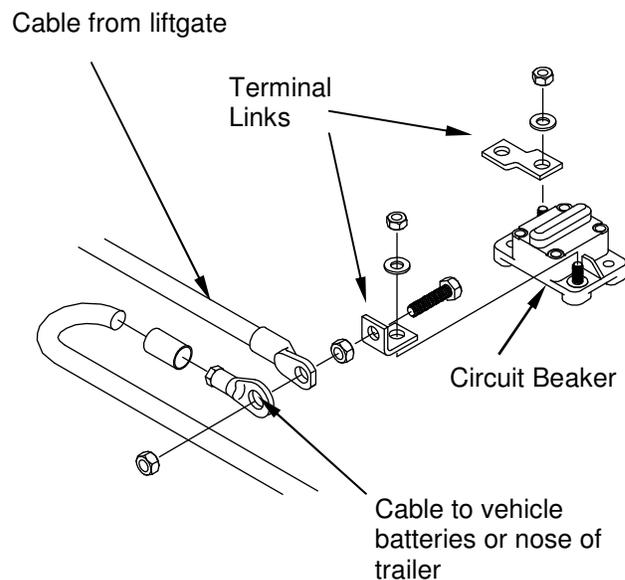
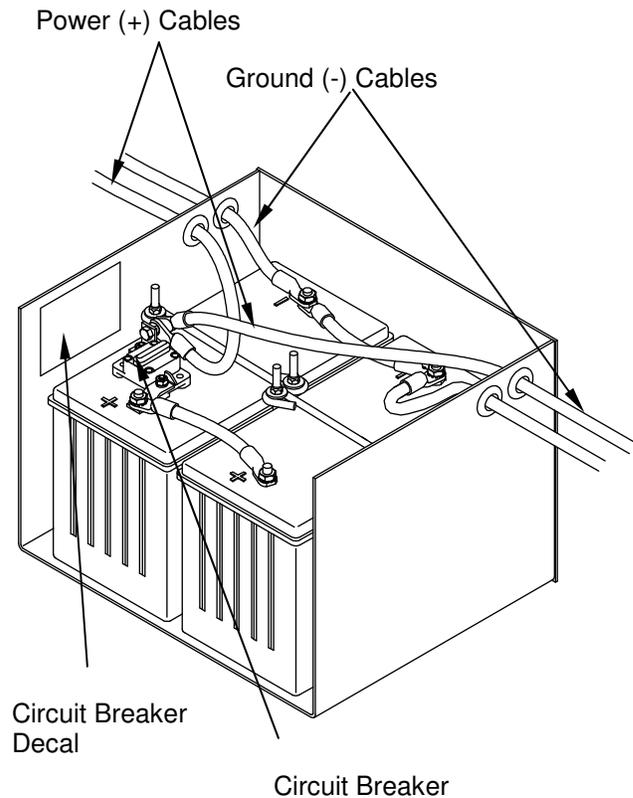


**Secure battery cable so it does not come near, or in contact with, other vehicle wiring, fuel lines, brake lines, air hoses, exhaust system, etc.**

### IMPORTANT:

**DO not operate liftgate until Mounting Bar has been removed from liftgate.**

See below for trailer applications.



GR01962

**For trailer applications with dual pole socket:**

Using 0 ga. cables, supplied with trailer kit, feed each end through battery-box wall and install a compression terminal on both red and black cables.

**Do not connect any cables to batteries at this time.**

Run cables from battery box to trailer nose, securing them every 24" with cable ties.

**For trailer applications with dual pole socket:**

Install dual pole socket in nose of trailer. Drill 1-3/4" hole in trailer and mount with hardware provided.

Route cables from auxiliary batteries to nose of trailer.

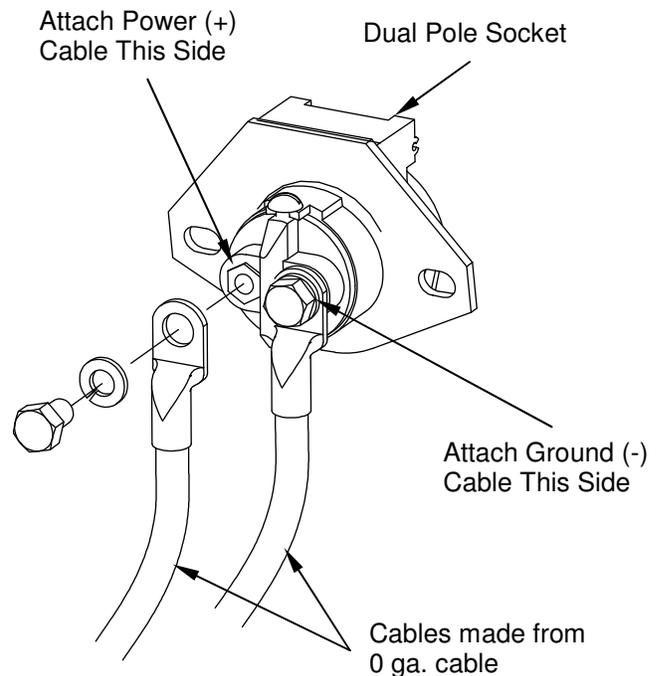
Install cables to socket as shown.

Apply a generous amount of Dielectric Grease over cable terminals.

**IMPORTANT: Be sure to orientate cables as shown, power (+) to the left, ground (-) to the right.**



**Power (charge) cable from tractor batteries to trailer must also be protected with a 150 amp circuit breaker at the tractor batteries.**



GR02770

**Note:**

**While these instructions can be used for single pole sockets, Waltco recommends dual pole sockets be used for their superior grounding abilities.**

**For trailer applications with single pole socket:**

Using 0 ga. cable, supplied with trailer kit, feed the end through battery-box wall and install a compression terminal on that end.

**Do not connect any cables to batteries at this time.**

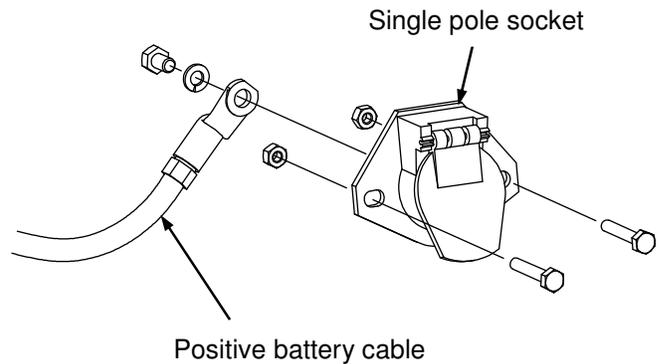
Run cable from battery box to trailer nose, securing them every 24" with cable ties.

# Auxiliary Battery Kit w/Dual Cables

80101569

## For trailer applications with single pole socket:

Drill 1-3/4" hole in nose of trailer for trailer socket.  
Mount socket to trailer with bolts and nuts provided.  
Attach cable to back of socket with bolt provided.  
Apply a generous amount of Dielectric Grease over cable terminal.

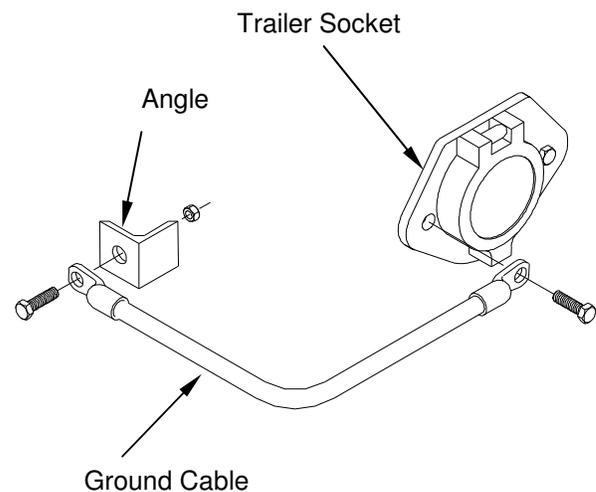


GR02739

Ground trailer socket to main structure of trailer.

Use the 18" ground cable, supplied, and bolt it to the trailer socket and suitable structure on the nose of the trailer.

An angle has been provided, it can be used by welding it to the crash plate, or other suitable structure.



GR01414

## For all trailer applications:

After single or dual pole socket is installed:  
Connect cable(s) to terminals in the battery box as shown on page 4; using a 150 amp circuit breaker to protect the charge circuit.

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Rev 04  
7-27-15

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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.

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**NOTE:**

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

---

# ***IMPORTANT***

## **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**