

PALFINGER



LIFTGATES

ILT / ILT-WR / ILT-PD OWNER'S MANUAL

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Visit our website at www.palfinger.com for up to date information and notifications

If you received this product with damaged or missing parts,

Please contact PALFINGER Liftgates at (888)-774-5844

Company Information:

Company Name: _____

Advisor Name: _____

Truck/Trailer Year Make & Model: _____

Liftgate Information:

Liftgate Serial Number: _____

Liftgate Model Number: _____

Date of Purchase: _____

Date of Installation: _____

Introduction

Thank you for purchasing a PALFINGER Liftgate! Your ILT series liftgate is an example of the latest engineering technology in the industry. With proper care and operation your liftgate will provide you with reliable, dependable service for years to come.

PALFINGER Liftgates is ready to provide you with fast action when you need sales, parts, or technical assistance. You can call the customer service department Monday to Friday 7 am to 5 pm Pacific Time or reach PALFINGER Liftgates 24 hours a day, 7 days a week through the internet home page (www.PALFINGER.com) or voice message system. Providing quality, value and service to the customers is what our business is all about.

Read this manual carefully to learn how to operate and how to take care of your liftgate properly.

Maintenance (other than the simple routine maintenance we ask you to perform within this manual, inspections, and repairs) must be completed by an **Authorized Service Center Only**. If you do not know who the **Authorized Service Center** in your area is, please contact us.

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1 Safety Information

This manual follows the Guidelines set forth in "ANSI Z535.4-2007" for alerting you to possible hazards and their potential severity.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

DANGER

! **DANGER** indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

! **WARNING** indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

! **CAUTION** indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

CAUTION

CAUTION without the safety alert symbol is used to address practices not related to personal injury. *(In this manual we use it to alert you to potentially hazardous situation which, if not avoided, may result in property damage.)*

NOTICE

NOTICE without the safety alert symbol is used to address practices not related to personal injury. *(In this manual we use it to alert you to special instructions, steps, or procedures.)*

2 **Important Information**

Before Getting Started

“READ FIRST”

NOTICE

Before starting any operations of the liftgate, please read and understand this Owner's Manual. The intention of this manual is to provide the user a guide for the operation as well as preventive maintenance. Do not attempt to modify or repair the liftgate unless performed by qualified personnel. Please contact your nearest PALFINGER Liftgates distributor or PALFINGER Liftgates in California or New Jersey for assistance if you have any questions regarding installation, operation or maintenance at 888-774-5844.

This owner's manual applies to the following models: **ILT, ILT Walk Ramp and ILT Power-Down**

2.1 **Important notes**

The electric supply is taken from the vehicle battery. If the vehicle battery is not sufficient, an auxiliary battery kit needs to be installed. The electric control power is secured via a 15-Amp fuse and an on-off switch located inside the cab.

Trailer applications have an on/off switch near the rear curb side corner post.

The liftgate is operated from a standard toggle switch. A hand held remote control is optional with up and down functions. A variety of different control options can be purchased with the PALFINGER Liftgates product.



The valves do not prevent overloading of the platform when lowering or tilting down.

⚠ WARNING

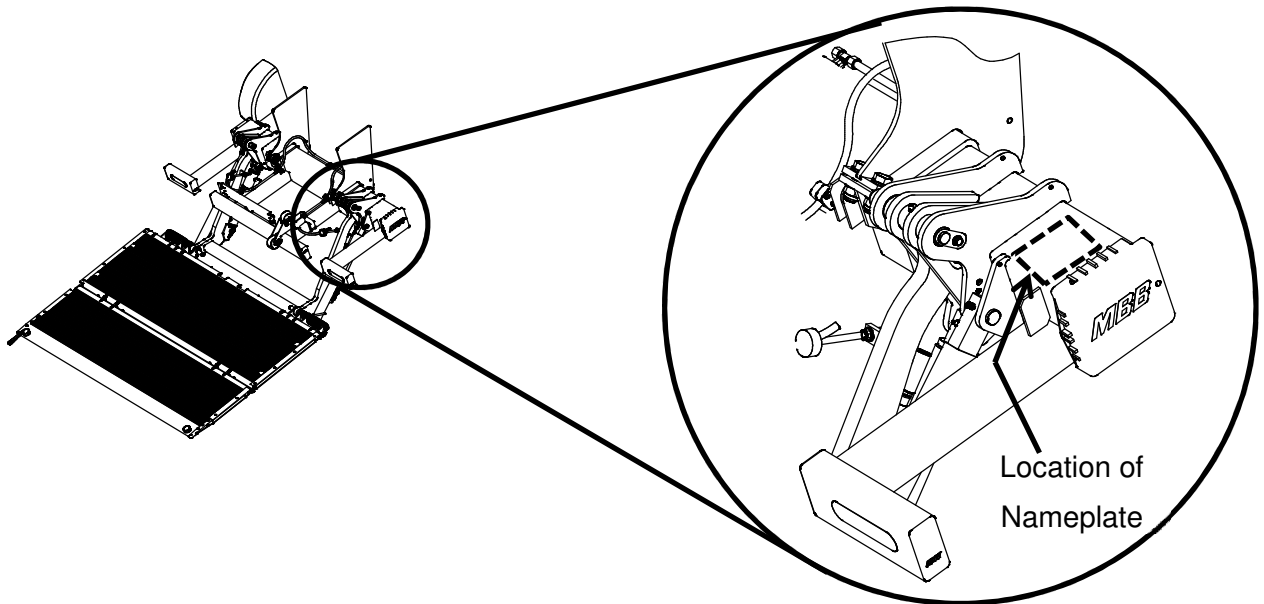
Improper operation of this liftgate may result in severe personal injury or death. **DO NOT** operate unless you have been properly instructed, have read and are familiar with the procedures in this manual. This manual has been designed to illustrate the steps needed for the basic operation of the ILT liftgate. It also provides safety information and simple preventive maintenance tips.

NOTICE

This manual is not intended for use as a repair or troubleshooting guide. Repairs should be performed by a PALFINGER Liftgates Authorized Service Center.

This Manual has been designed for use in conjunction with the ILT series liftgates only which are designed for different capacities. There are four options available to determine the model and serial number of the installed liftgate:

- 1) Refer to the serial number tag on the liftgate (Driver Side on Top of Mount Frame- See figure below).



- 2) Ask your employer or lessor;
- 3) Call your PALFINGER Liftgates Authorized Service Center for assistance.
- 4) Call PALFINGER Liftgates for assistance in the USA at 888-774-5844. You can also contact PALFINGER Liftgates by fax (562) 924-8318 or on the internet- www.palfinger.com

For technical support, contact PALFINGER Liftgates or an authorized PALFINGER service center. www.palfinger.com

Replacement manuals are available at no charge by contacting Customer service at 888-774-5844

3 General Information

3.1 Before Operation

REMEMBER:

It is the fleet manager's responsibility to educate the operator on the liftgate and its intended use. The operator's attention should be drawn to the permitted load limits and an understanding of the operation to ensure the safety throughout the operation.

ONE-MAN OPERATION:

Never let an "outsider" operate the liftgate while you are handling the cargo.

A "misunderstanding" can result in serious personal injury.

In the interest of safety it is important that all operating personnel properly understand the functions of the liftgate, possible hazards, dangers, the load limits and load positioning for that specific unit.

3.2 Liftgate Function and Usage Information

WARNING

Before the operator uses the liftgate, they should be thoroughly familiar with the liftgate functions and usage according to the following:

1. Improper operation of this lift can result in serious personal injury. Do not operate unless you have been properly instructed, have read and are familiar with the operation instructions. If you do not have a copy of the instructions please obtain them from your employer, distributor, or lessor as appropriate before you attempt to operate the lift.
2. Be certain the vehicle is properly and securely stopped before using the lift.
3. Always inspect this lift for maintenance or damage before using it. If there are signs of improper maintenance, damage to vital parts or slippery platform surface, do not use the lift. Do not attempt your own repairs unless you are specifically trained.
4. Do not overload. See the Rating Label on the unit for the rated load. Remember that this limit applies to both raising and lowering operations.
5. Each load should be placed in a stable position as near as possible to the body of the truck/trailer.
6. Never stand in, move through or allow anyone else to stand in or move through the area in which the lift operates, including that area in which a load might fall.
7. This Lift gate is intended for loading and unloading of cargo only. **DO NOT** use this Liftgate for anything but its intended use. This is not a passenger lift. Do not ride the lift with unstable loads or in such a manner that a failure would endanger you. The lift is not equipped with a back-up system to prevent falling cargo in the event of a failure.



The maximum loads must be observed and followed!

3.3 Improper Useage

Some examples of improper use of the liftgate may include, but are not limited to:

- Using the liftgate as an elevating work platform
- Using the liftgate to push, pull, or low loads or other objects.
- Using the liftgate to carry people (Only the operator may travel on the platform)
- Using the liftgate to clear snow
- Trying to use the liftgate as a “launching pad”
- Using force of the hydraulic system to bend, shear, or break objects
- Driving a forklift over the liftgate
- Driving the truck or trailer with the platform open
- “Plowing” with the platform

Please read through the operational and technical description of the PALFINGER Liftgate.

Thank you for choosing PALFINGER Liftgates

4 General View of Liftgate

NAMEPLATE

4.1 General Figures

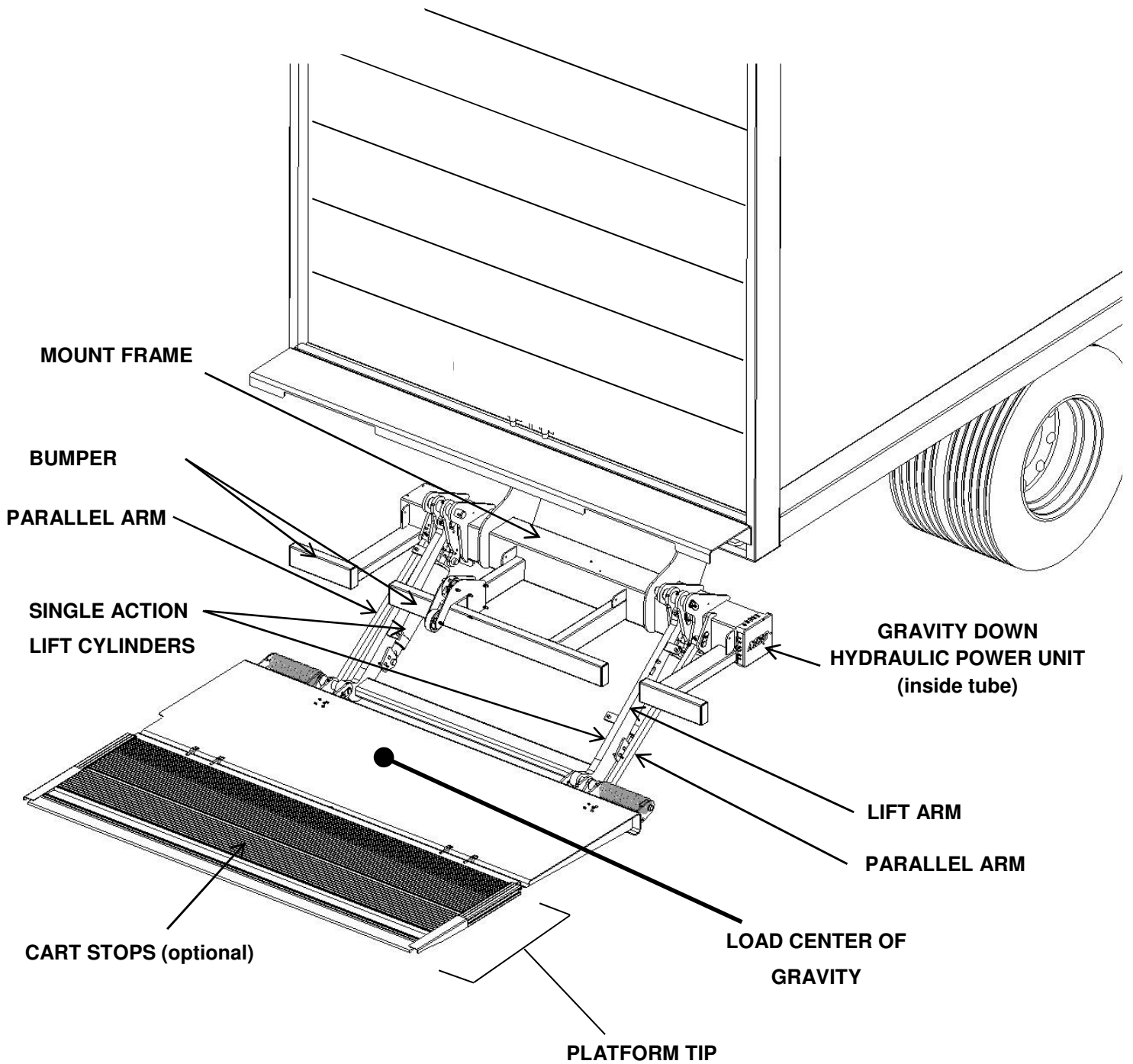


Figure 4-1: ILT Twifold, general view

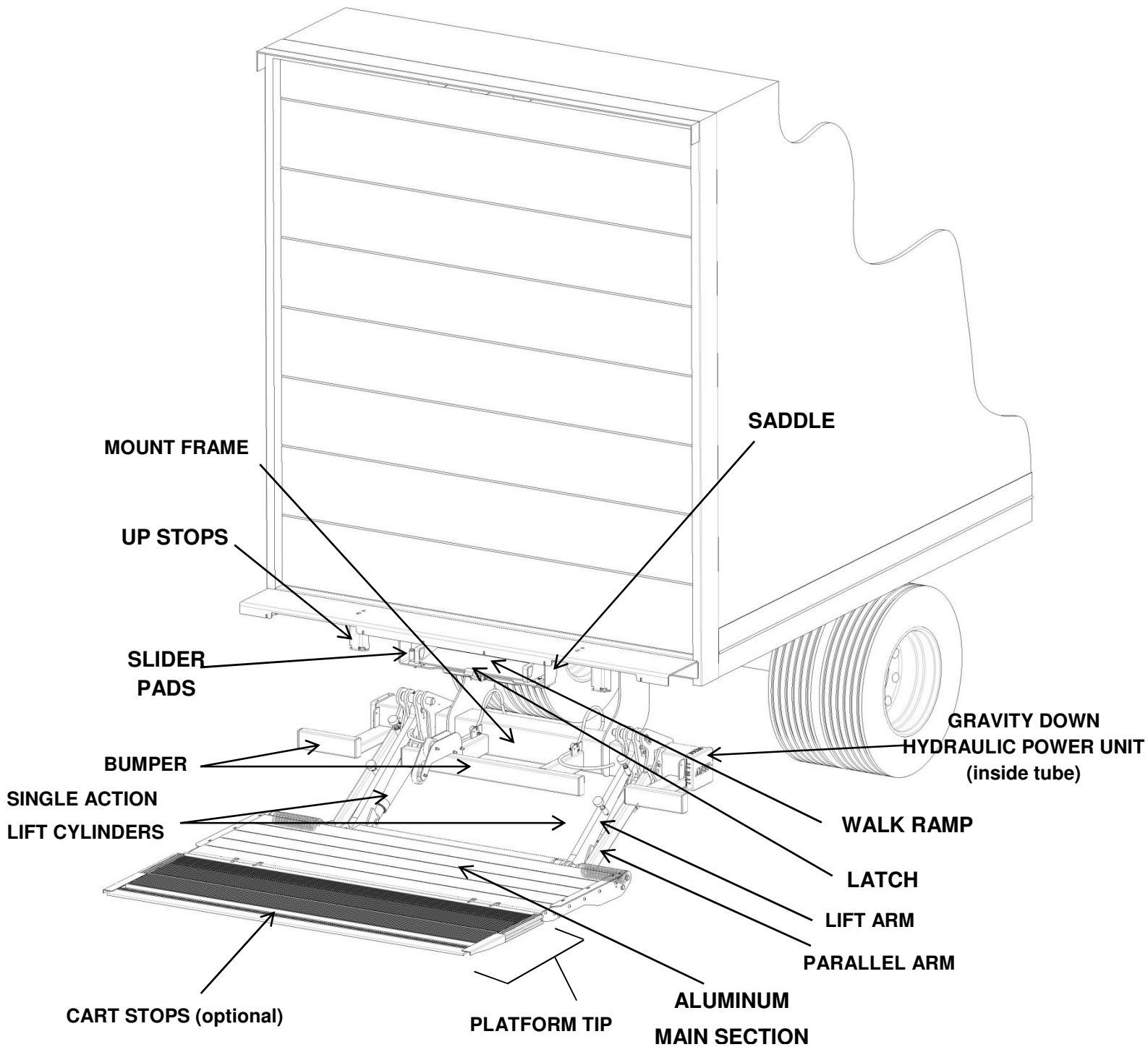


Figure 4-2: ILT-WR (All Aluminum), general view

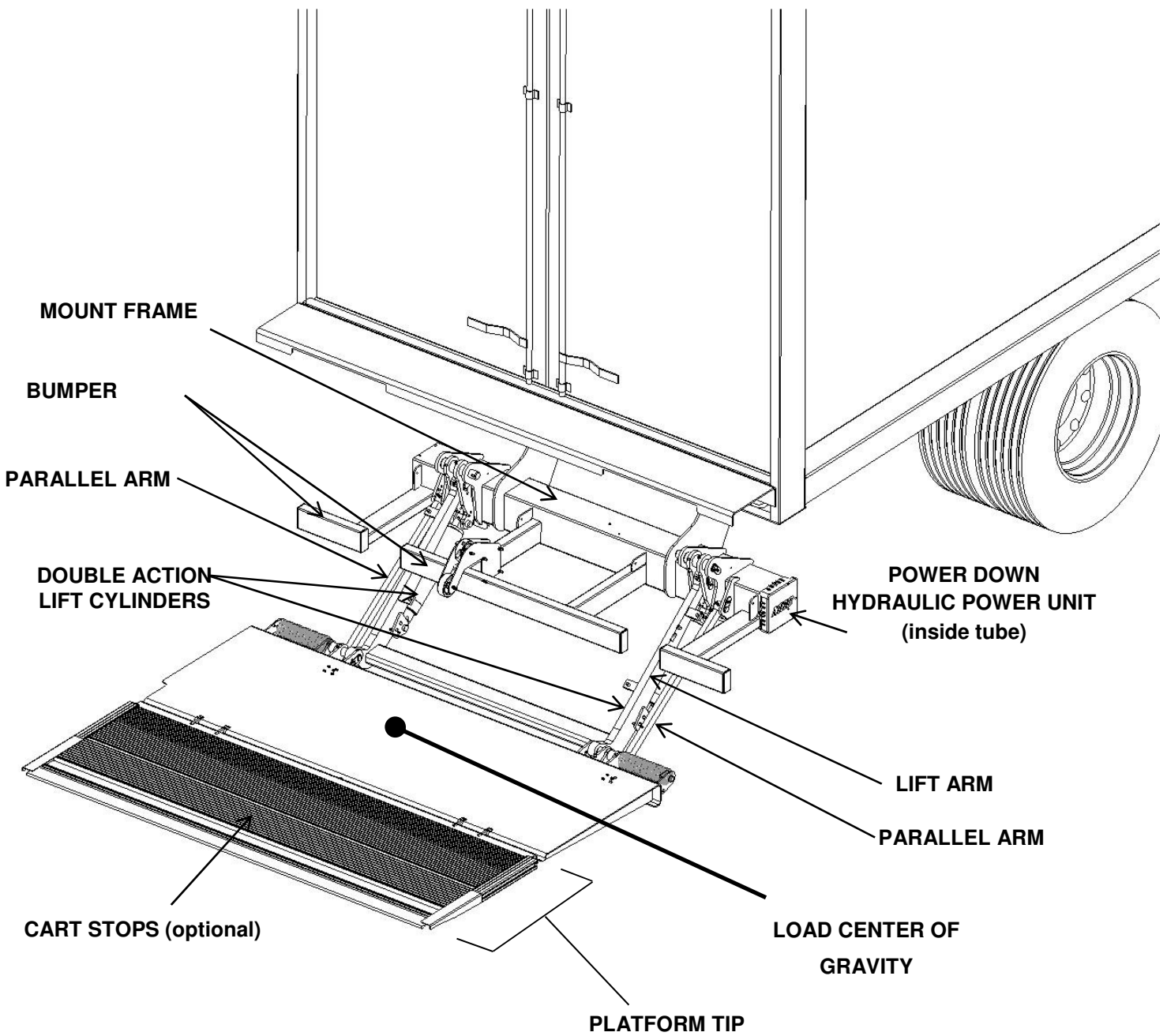


Figure 4-3: ILT Power Down, general view

5 Maximum Load and Placing of Load on Platform

Every PALFINGER Liftgate is rated up to a maximum load. The point of maximum load is rated at a defined distance. The center point of maximum load is at distance "A" from start of truck or trailer body, as shown in *Figure 5-1*.

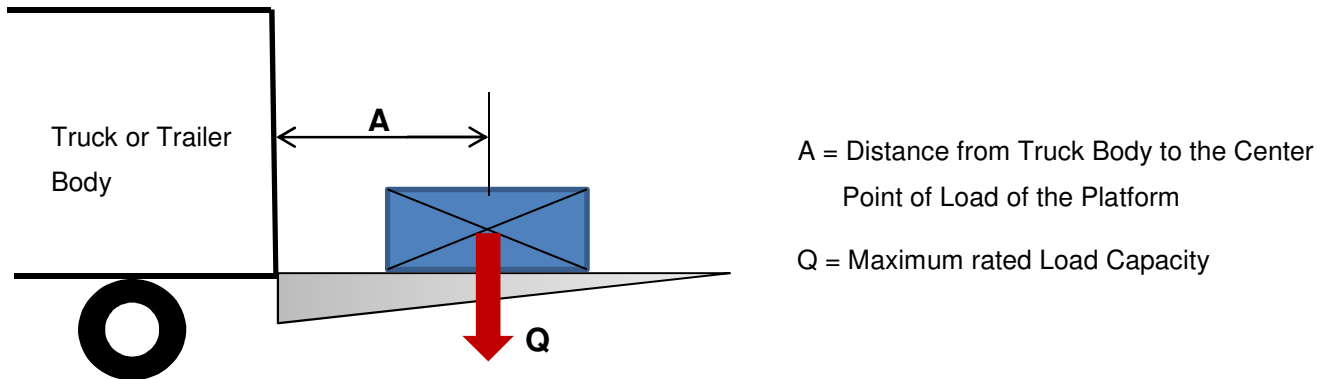
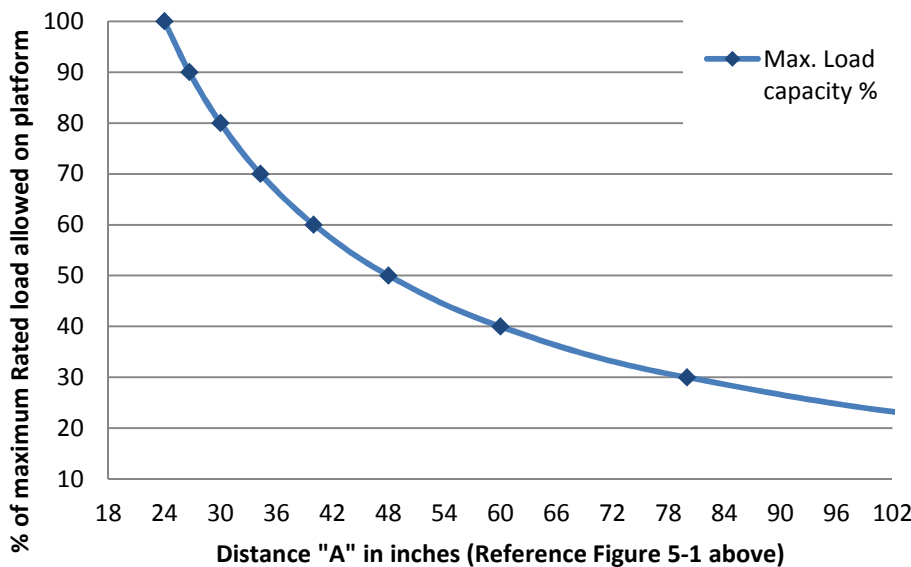


Figure 5-1: Center Point of a Load on the Platform



By increasing this distance "A" the maximum load of the lift gate is decreasing. Make sure not to overload the liftgate. Place the cargo in the middle of the platform. Operating a gate with a misplaced load might cause serious damages or even injuries to the operator. A Chart is provided on the next page to show load capacities at different distances.

Load Capacity vs Distance "A"



- Note that Maximum capacity is rated at 24" from the truck. As the load is placed further away from the truck, the overall capacity of the liftgate decreases.
- Never apply a load that exceeds your liftgate's maximum load rating.

Figure 5-2: Load Capacity vs. Distance "A" graph

6 Operation of Liftgate (ILT and ILT- WR)

Before use: Turn Control power to "ON" by toggling the cab switch to the on position. All lift gate functions can be controlled with the toggle switch on the curb side of the truck or trailer.

6.1 Operation by outside mounted switch

Open Platform

1. Toggle or pull cab cut off switch to the on position (if applicable).
2. Use up/down toggle at rear of vehicle or optional hand held control to lower the lift all the way to the ground.
3. Grab the platform-handle and pull it down to the ground.
4. Use the handle to unfold the tip of the platform.
5. Use the down function to automatically tilt the platform down to the ground.



NEVER ride the Liftgate. This is not a personnel lift.

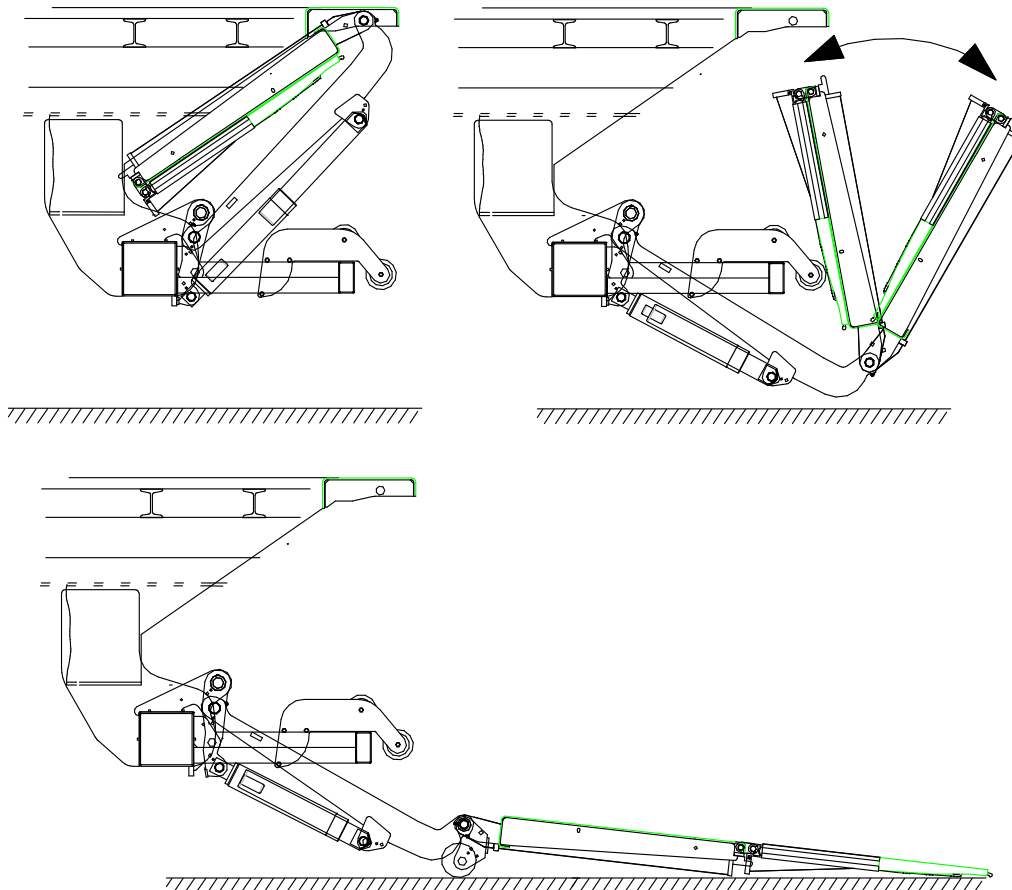


Figure 6-1: Folding Unit in Progress

Close Platform

1. Lower platform to approx. knee height.
2. Fold the tip of the platform onto main section using handle strap.
3. Use handle strap to hook platform tip to main section.
4. Lower the lift all the way to the ground and fold the platform up until it makes contact with the wheel.
5. Raise platform until it is stored tight underneath the bed extension.
6. Toggle or push the cab cut off switch to the off position to turn off the gate (if applicable).

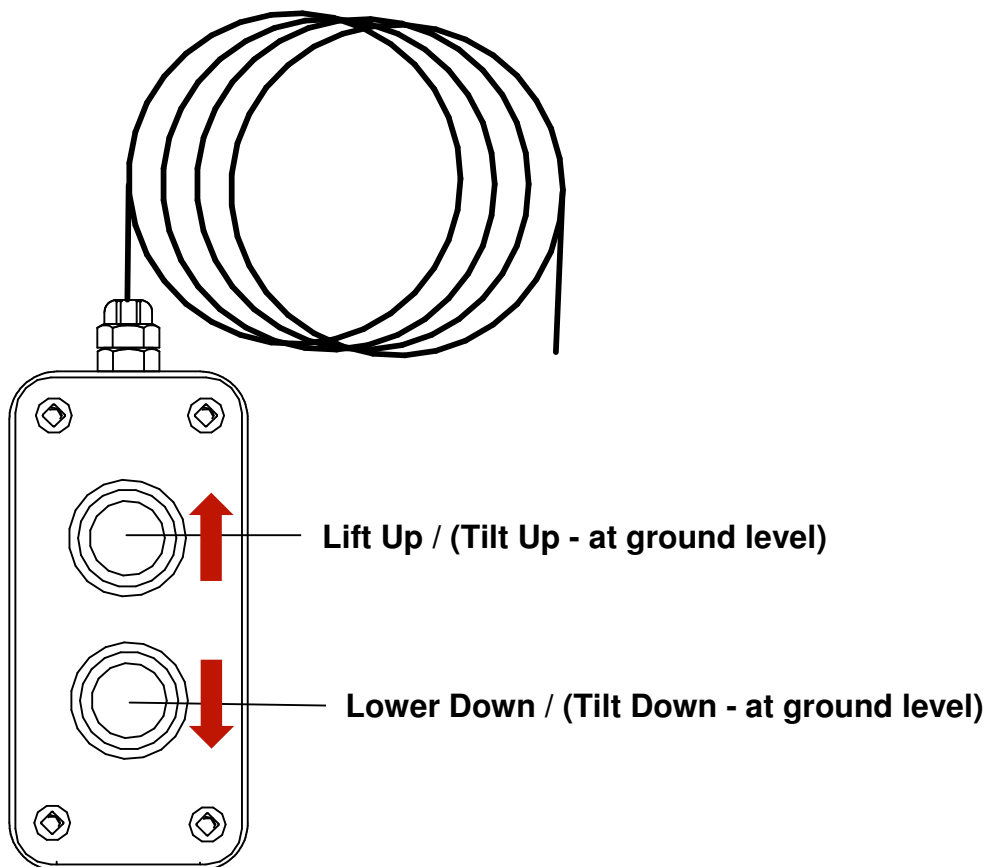


Figure 6-2: Button Hand Held Remote Control

7 Preventative Maintenance and Quick Check

The ILT needs preventive maintenance in order to achieve maximum performance. Lubricate and inspect regularly. Also, check that there are no damaged components such as hoses, cables, controls, etc.

7.1 Quick Check List

1. Operate the liftgate throughout its entire operation and check for noise and damage such as bent parts, scratches, or cracked welds.
2. Inspect all welds and fasteners that attach the mount frame to the truck, along with the lift arm to the mount frame and the platform.
3. Check all pin lock bolts for tight fit.
4. Visually inspect the hydraulic hoses for damage, scratches, bending or leakage. Also ensure that hoses are not fixed such that rubbing/wear on the hoses will occur- hoses should be securely fastened, not loose.
5. Inspect the cylinders for leakage and make sure the cylinder pins are secured.
6. Check the oil level when platform is down. The level should be approx. 1.5" below the top of the Oil Reservoir. PALFINGER Liftgates recommends replacing oil after the first 500 cycles, and then on a yearly basis in the fall before winter begins.
7. Check for oil leakage around the power pack. Tighten or replace components if needed. If you perform work on any hydraulic components, bleed the air out of the system by operating all functions several times to self-bleed the lift cylinders. Run the gate all the way up and down to remove air from the fluid.
8. Check all electrical connections. Clean the battery terminals.
9. Inspect all terminals on the solenoid-operated valves at the port of the cylinder. Lubricate the terminals for better protection from oxidation if needed.
10. Grease all zerks on the liftgate and make sure that they all accept grease. It helps to operate the liftgate while you do this.
11. Test all liftgates functions, if possible with maximum loads placed according to load diagram.
12. Check the function of the pressure relief valve.
13. If you find any kind of damage that can make the operation of the liftgate dangerous, DO NOT CONTINUE TO USE THE LIFTGATE. It must be completely repaired before using. All repairs must be made by an authorized technician. Use only original spare parts. If in doubt contact your PALFINGER Liftgates distributor or PALFINGER Liftgates directly.



Do not ignore any accidents or damage; it can be dangerous for you and your co-workers.



IMMEDIATELY REPAIR OR REPLACE FAULTY PARTS

7.2 Maintenance and Care

The following “inspection and maintenance” should be performed at the recommended intervals depending on operation and amount of cycles or at the time when the unit shows any signs of damage or abuse. Remember that the secret to a long life of your PALFINGER Liftgate is to maintain it through preventive care.

The **Daily Overall Inspection** (See **Table 7-1** below) should be performed by the operator each day. You should also perform the **Lubrication Plan** according to the following pages. The **Routine Maintenance Schedule** should be performed half-yearly by an Authorized Service Center.

Your first visit to your Authorized Service Center should occur once the liftgate has been in operation for 30 days. The importance of this initial inspection is to make sure that everything is working properly during this break in period. Once this is complete, return half-yearly to your Authorized Service Center.



Do not operate the liftgate if any issues or damages are noticed during its daily inspection. Liftgate malfunction may cause severe personal injury or death. Liftgate should be inspected IMMEDIATELY by an Authorized Service Center.

Table 7-1: Maintenance Schedule

* Recommended bases for inspection and maintenance	Depending on use	Daily	Monthly	Quarterly
cleaning	x			
general lubrication of pins and bushings				x
oil level inspection				x
oil change	x			
check hydraulic hoses and pipes for leaks				x
check controls and connections				x
check pins and pin retaining bolts			x	
check batteries and connections				x
check warning labels and other safety equipment for effectiveness and visibility		x		
visual check for loose or missing parts and un-usual noise during operation		x		
check lock bolts for tightness				x
check complete function of gate		x		

7.3 Lubrication

When kept properly lubricated, the PALFINGER ILT liftgate will ensure long lasting usage. Therefore, the liftgate should be lubricated at the same time as the truck/trailer. Grease more frequently if the lift gate is heavily used. The lift gate should be greased every 1200 cycles (depending on use – estimated every 3 month).

Check the oil level in the tank (Refer to sections 7.4 and 7.5 on pages 18 and 19). The level should be 1.5" below the top of the reservoir when the platform is opened and on the ground. Use a good quality hydraulic fluid, ISO 32. Change oil at least once a year, preferably in the fall before the weather gets cold. The operation of the liftgate will accumulate condensation and some dirt which can interfere with the liftgate functions.

Please reference *Figure 7-1* and *Figure 7-2* on the following pages.

Lubrication Locations:

All bearing points must be lubricated in accordance with the maintenance interval.

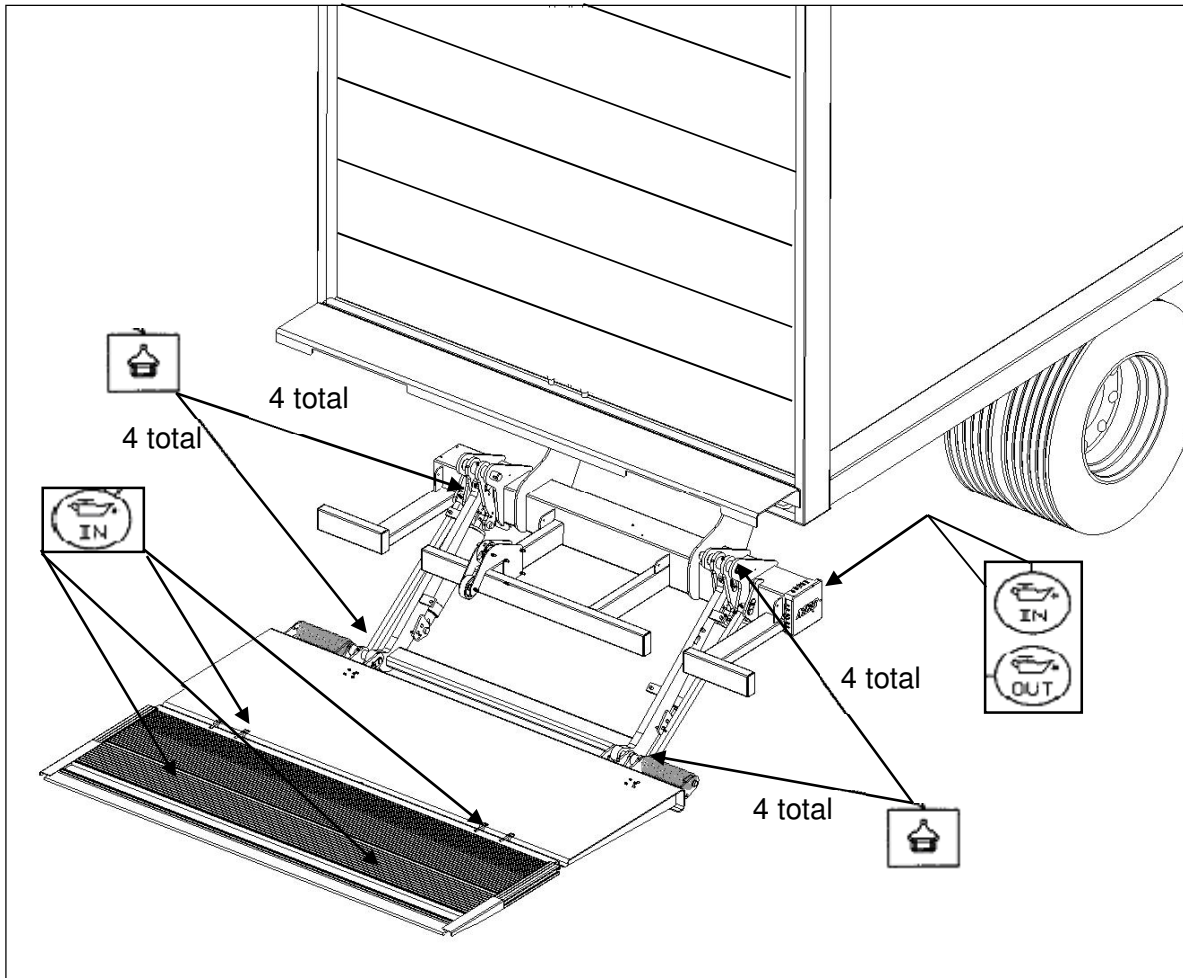


Figure 7-1: Grease Points, General View:



Lubricating nipple (8 on each side)



Oil level in the power pack tank (see marking inside of power pack reservoir)



Platform hinges and optional Cart Stops (use Penetrating Oil spray for lubrication)

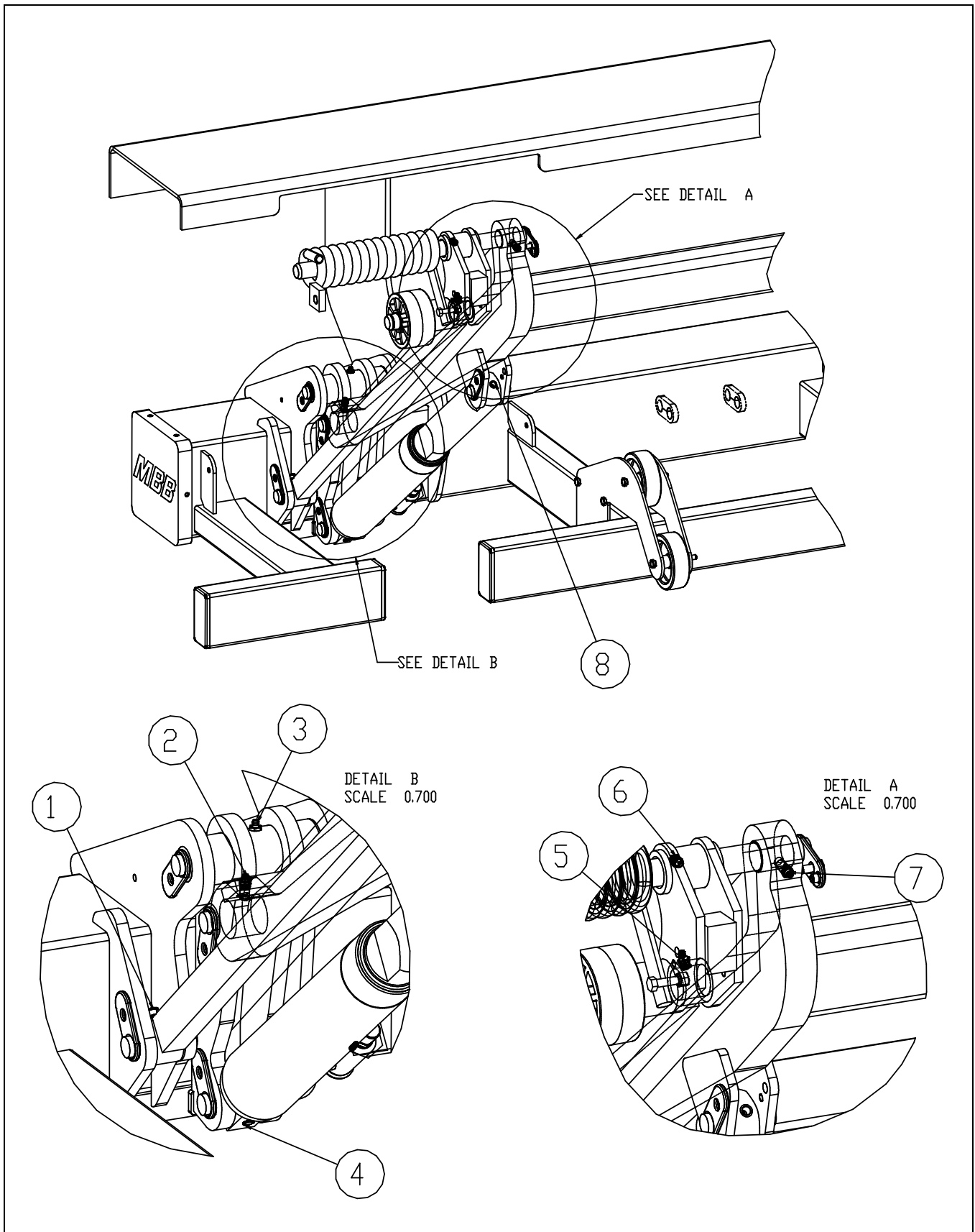


Figure 7-2: Grease Points, Detail View

7.4 Checking and Changing the Oil (ILT and ILT-WR)

To begin, lower gate to ground and tilt platform down. Open rubber cover on passenger side and remove lock bolt. Pull the power pack out till you can reach the oil filler cap. Unscrew the oil drainage bolt (bottom of tray) and let the fluid drain out of the reservoir into an approved container. When reservoir is empty fill it up with hydraulic oil, shown on table 2.

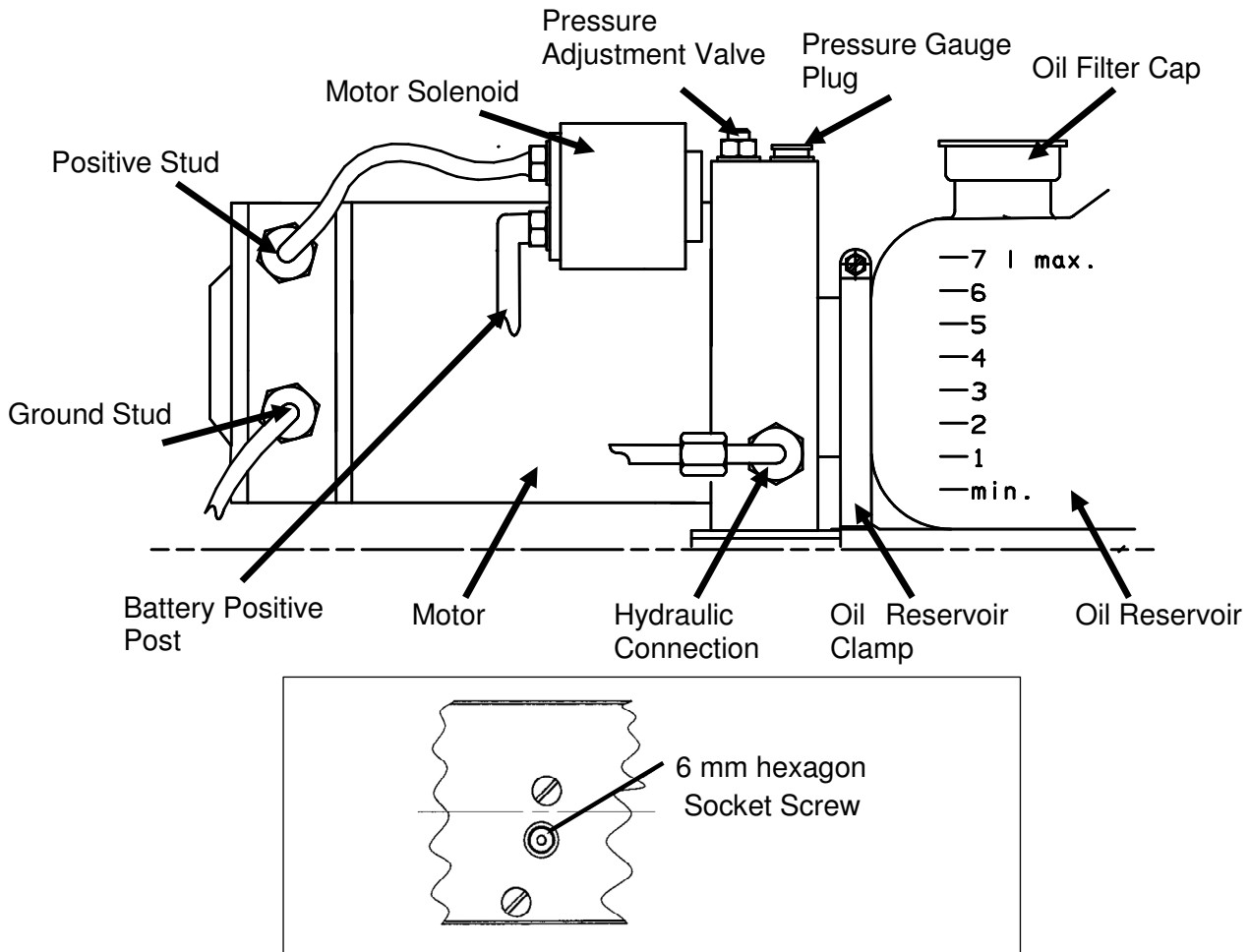


Figure 7-3: Power Pack (Side View) and Oil Drainage Screw (Bottom View)

Check the oil level in the tank. The level should be between the two marks 5 and 7 when the platform is tilted down at ground level. Use a good quality hydraulic fluid, ISO 32. Change oil at least once a year, preferably in the fall before the weather gets cold. The operation of the lift gate will accumulate condensation and some dirt which can interfere with the lift gate functions.

7.5 Checking and Changing the Oil (ILT - Power Down)

To begin, lower gate to ground and tilt platform down. Open rubber cover on passenger side and remove lock bolt. Pull the power pack out till you can reach the oil filler cap. Unscrew the oil tank cap (top of the reservoir) and pump the oil out of the oil reservoir into an approved container. When reservoir is empty fill it up with hydraulic oil, shown on table 2.

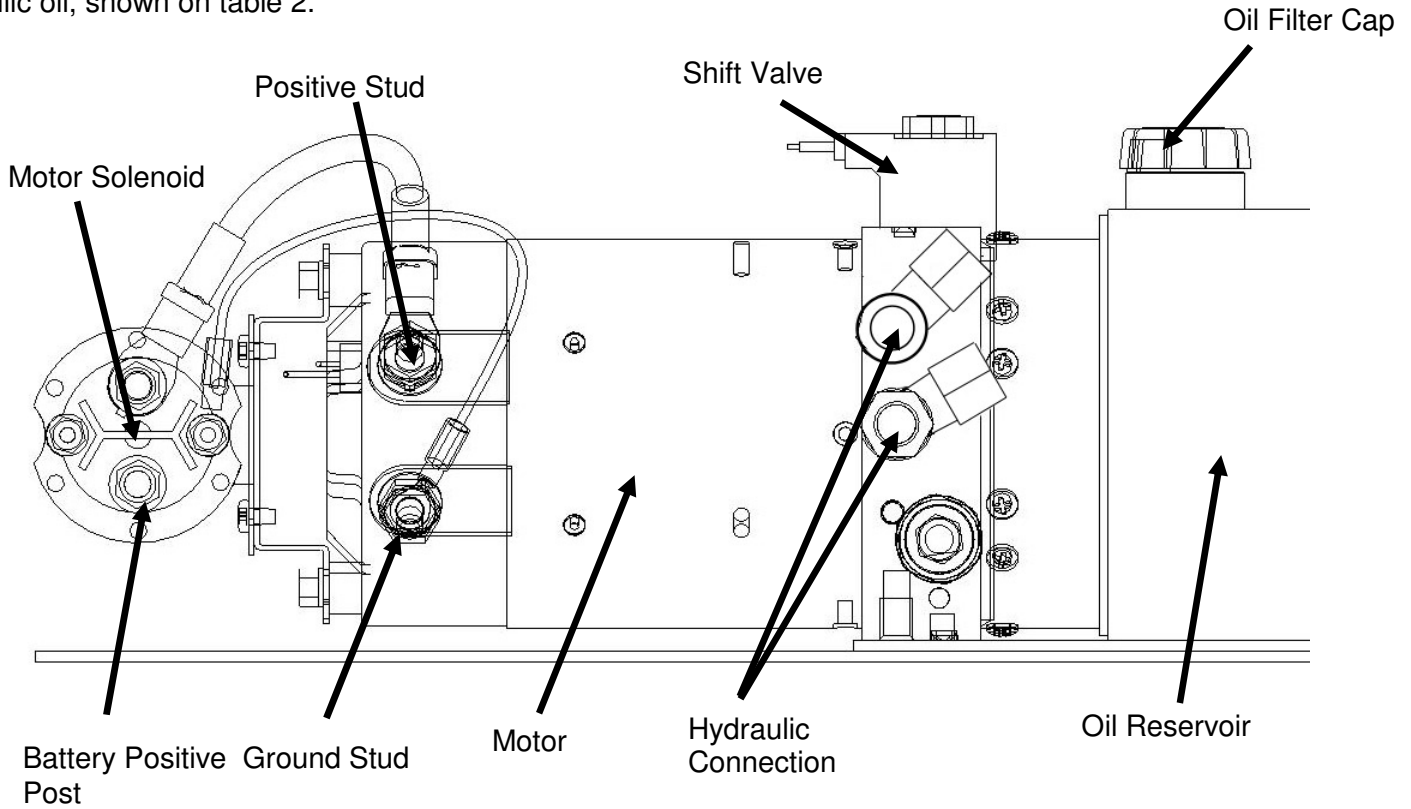


Figure 7-4: Power Pack Components

Check the oil level in the tank. The level should be between 1-1/2" to 2-1/2" from the top of the tank when the platform is tilted down at ground level. Use a good quality of hydraulic fluid, ISO 32. Change oil at least once a year, preferably in the fall before the weather gets cold. The operation of the lift gate will accumulate condensation and some dirt which can interfere with the lift gate functions.

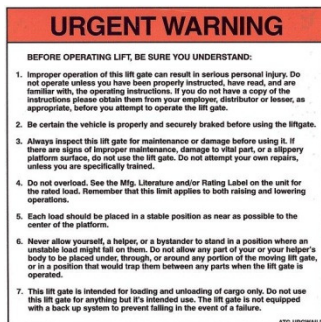
TEMP. RANGE	BRAND	
-10 TO 150 F	EXXON	UNIVIS J26
	MOBIL OIL	DTE 13M
	CHEVRON	AW MV32
	ROSEMEAD	MV 150 (32)
-50 TO 150 F	MOBIL	DTE 13M
	SHELL	AERO FLUID 4
EXTREME COLD TEMPERATURE:	USE MILITARY SPEC:	MIL H5606

Table 7-2: Recommended Hydraulic Fluids

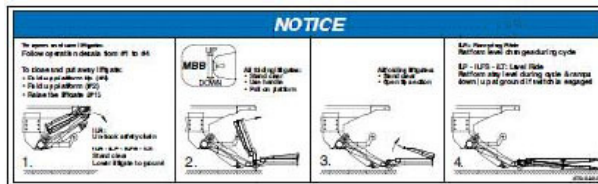
7.6 Decal Placement and Inspection

! For operator's safety, all decals appearing in "Decal Kit" must be placed visibly on control side of liftgate to be read by operator. This is typically a combination of decals on the liftgate and truck body. Please make sure to place the maximum capacity decal (D) on driver and curb side.

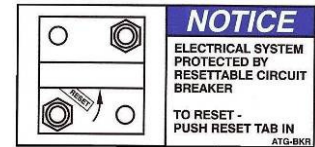
- (A) 1 ATG-URGWA - Urgent warning: Elevating gate instructions
- (B) 1 ATG-ILR-ILFS - Operational Instructions
- (C) 1 ATG-BKR - Circuit Breaker Reset (must be located at the circuit breaker)
- (D) 2 ATG-XXXX - Max. Capacity (please check the serial number plate to find out your specific capacity)
- (E) 1 ATG-RESET - Circuit Breaker Protection
- (F) 2 ATG-WLH - Warning: liftgate can crush
- (G) 2 ATG-CTN - Caution: Always stand clear of platform area
- (H) 1 ATG-CAB - Liftgate Shut-Off (Place Decal next to the On-Off Switch in the Cab)
- (J1) 1 ATG-UD - Toggle Decal OR (J2) 1 ATG-SWILMDC - Operational Instructions for Hand Control
- (K) 1 ATG-WNG - Warning: Use handle to open (must be located underneath handle (main section))
- (L) 1 ATG-ILTLUB - Lubrication and Fluid Points
- (M) Conspicuity Tape (If Applicable)



Decal - A



Decal - B



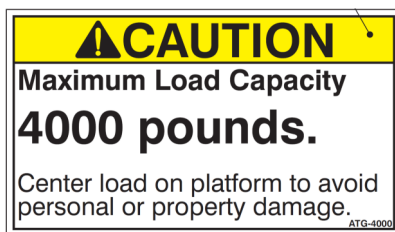
Decal - C



Decal - E



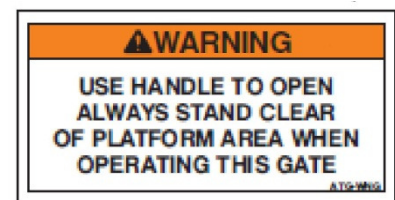
Decal - G



Decal - D



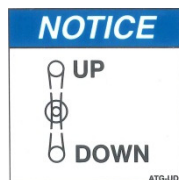
Decal - F



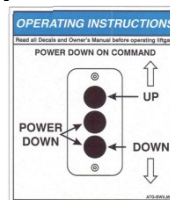
Decal - K



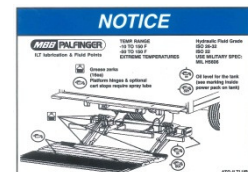
Decal - H



Decal - J1



Decal - J2
(PowerDown)



Decal - L



Decal - M

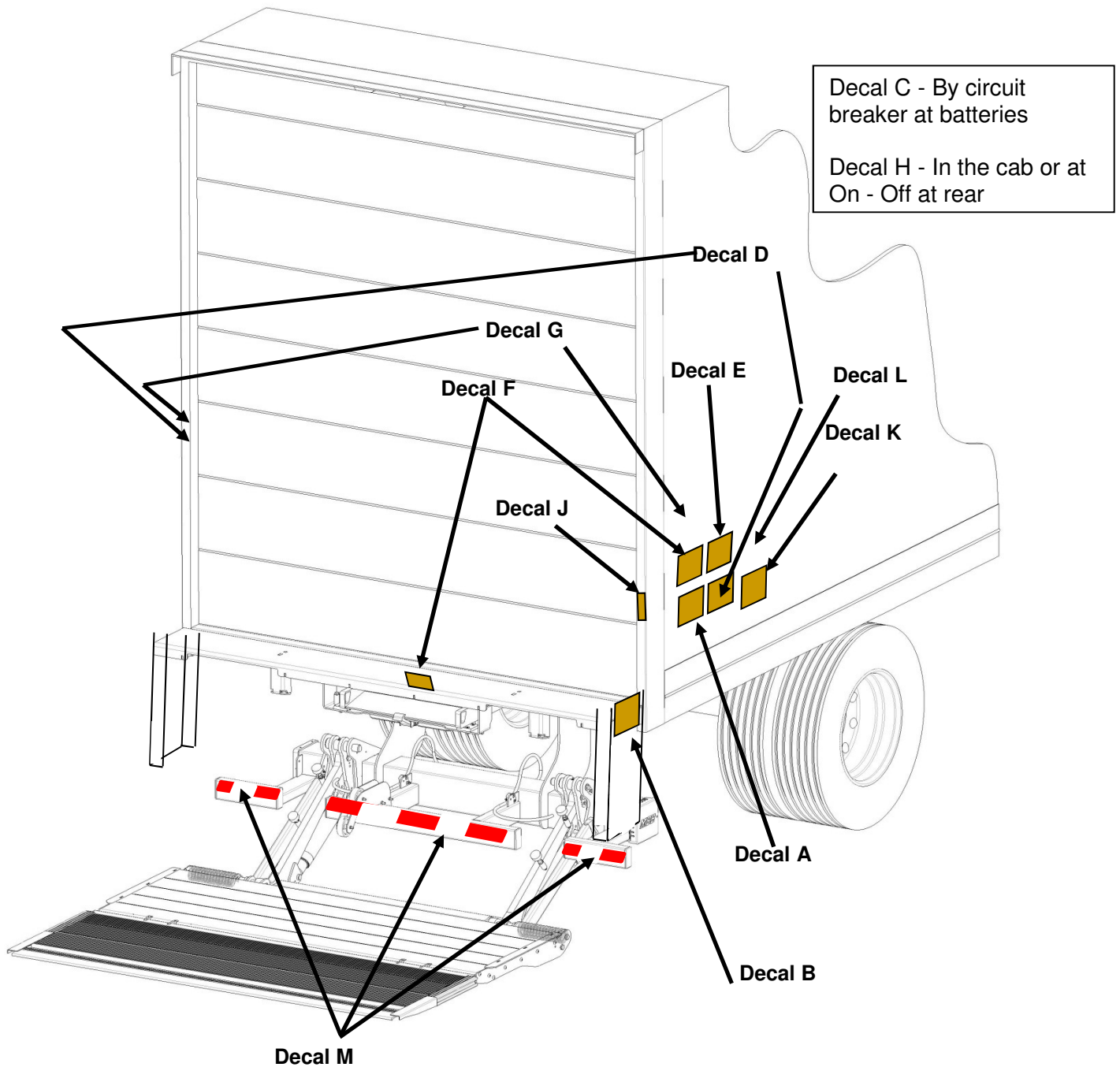
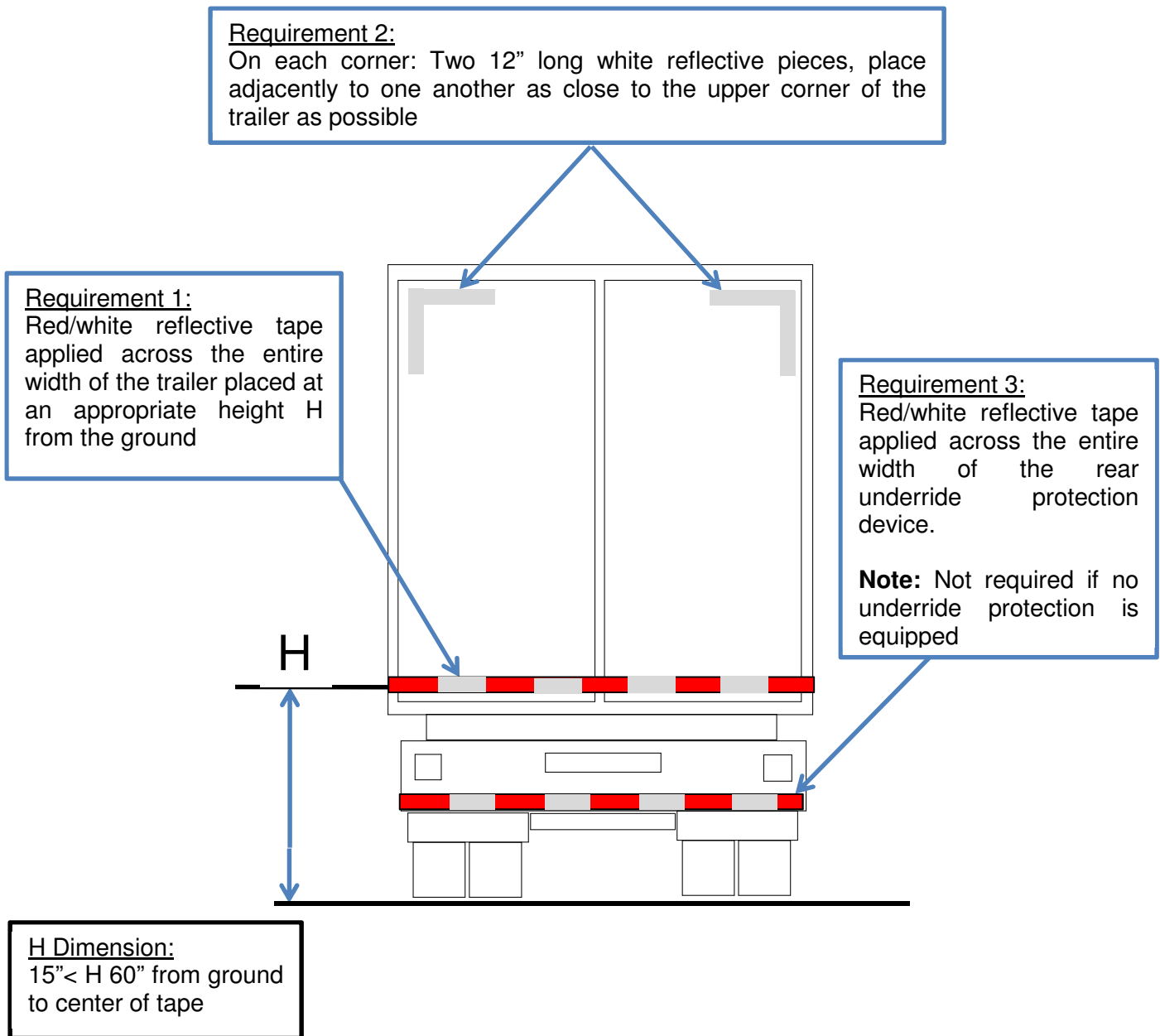


Figure 7-5: Decal Placement Guideline

NOTICE

It is the installer's responsibility to determine the proper application of the Conspicuity tape, and to ensure that the vehicle or trailer meets DOT and federal lighting regulations. The following diagram is a guideline for placement on trailers over 80" wide and GVWR of 10,000 Lbs or more. This document is not intended to replace published agency regulations, and it is strongly recommended that the installer refer to the Code of Federal Regulations (CFR) which can be viewed at <http://ECFR.gpoaccess.gov>.



8 Troubleshooting

⚠ WARNING

Dangerous injuries are possible from objects such as tools short circuiting main battery connections. Be sure that you are working in a safe environment.

NOTICE

Change oil after working on hydraulic unit (removal of valves, opening of cylinder etc).

There is a possibility of injury if somebody other than an authorized technician works on the electrical system!

8.1 Basic Function Checks

8.1.1 LIFTGATE is completely DEAD (No Clicking or Movement at all)

1. Check the cab shut off switch

Turn on cab switch, located in the cab next to the steering wheel. Location may vary by model and year of truck.

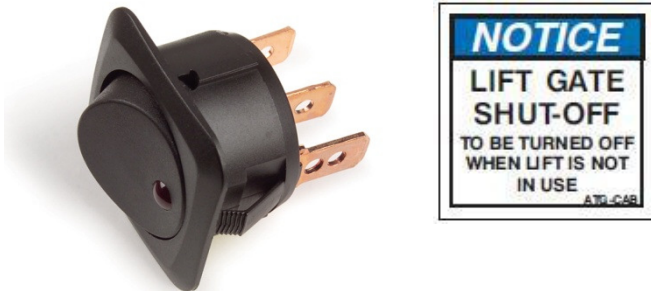


Figure 8-1: Cab Cutoff Toggle switch

On trailer units, you will find a toggle switch near rear curb side corner post to activate the gate.

2. Check the circuit breaker at the main batteries

Every truck has a circuit breaker on top of the main battery. If you have a studio unit, or a trailer, you will also find an auxiliary battery kit as shown in the pictures below ("Truck Battery" and "Auxiliary Battery").

If circuit breaker reset arm is popped out, push it back in as shown on the decal ATG-BKR next to your breaker or on battery box lid.

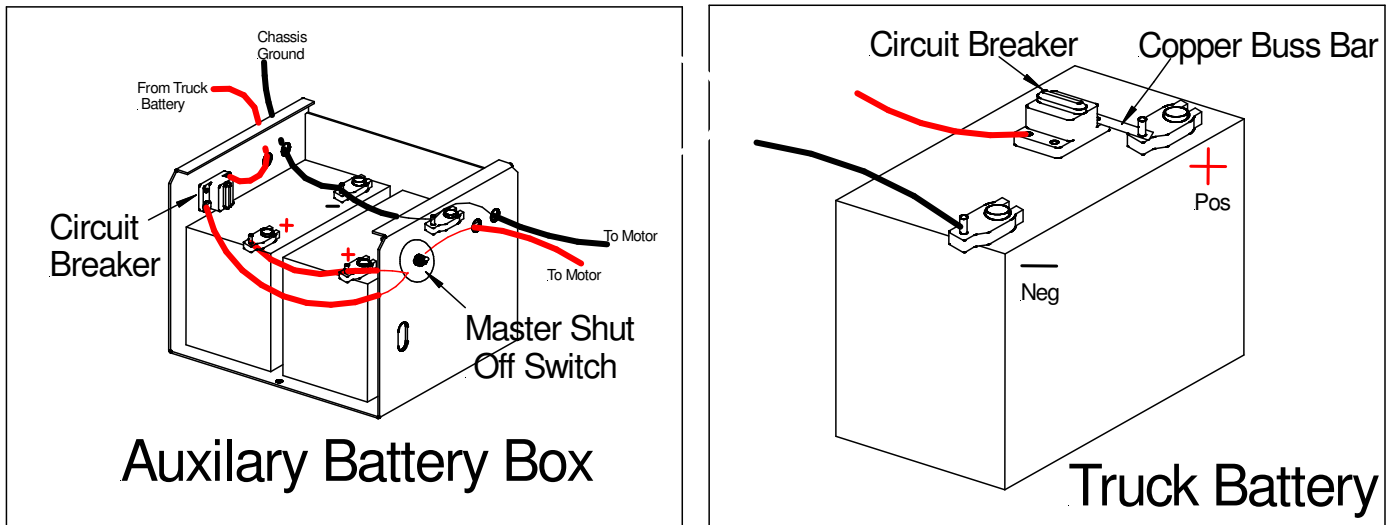


Figure 8-2: Location of circuit breaker, Trailer (left) and Truck (Right)

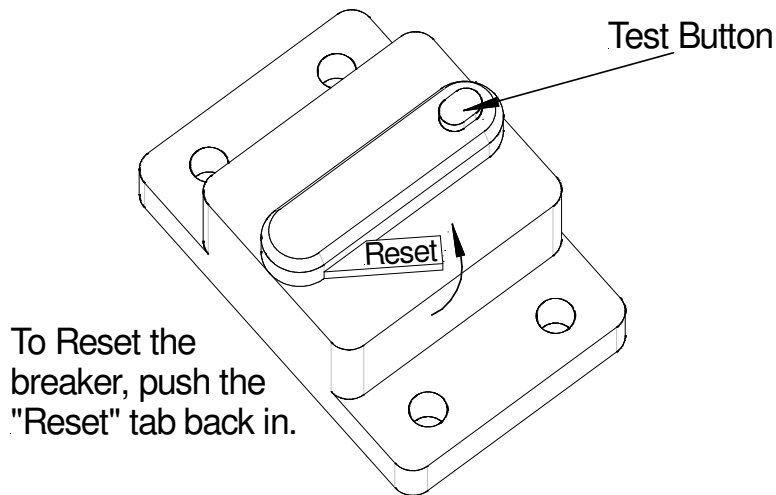


Figure 8-3: Circuit Breaker Reset Instructions

3. Are the vehicle batteries charged?

Check batteries and the truck/trailer charging system. Start truck and run engine in fast idle for charging the batteries. If the liftgate starts working, recharge batteries.

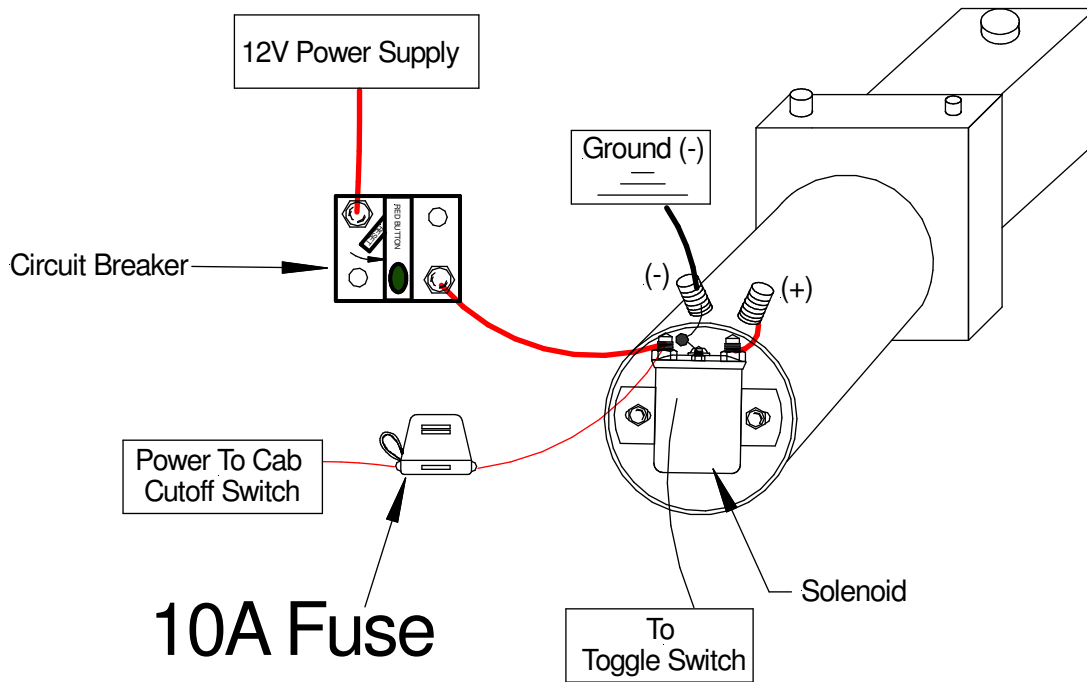
4. Check the fuse at the power pack.

On the curb side of the truck, you will find a fuse in the main frame. Check for burned fuse and replace it with the same type.



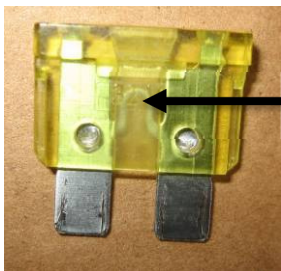
DO NOT use higher amperage fuse.





Pump & motor Assembly

Figure 8-4: Power Pack Fuse Location



Replace fuse when metal bridge is broken.

5. Is the connection to ground in power pack OK?
Is the ground connection from the tail lift to vehicle OK?
6. Check the oil level in the power pack reservoir.
7. Are there any damages on mechanical or electrical parts (such as damaged cables)?

8.1.2 Liftgate does not LOWER DOWN

1. Follow the instructions of 8.1.1 for main power supply check.
2. Check the valves visually for mechanical damage (as bent or broken).
3. Open up the lid at hydraulic power unit and unplug the black cable #2 with the inline fuse.
4. Unplug cable #6 to both 2 wire release valve harnesses.
5. Connect female end #2 and male end #6 to energize release valves.
 - a. If gate lowers down:

Check switch and grey 3 wire harness to switch for damaged spots.
 - b. If gate does not lower down:
 1. Check both release valve wires for damaged spots.
 2. Unscrew plugs of valves and stick a voltmeter or test light into connectors and hit the down function. Check each connection for voltage.
 - Cable is ok, if you see light or read voltage on voltmeter.
 - The wire is damaged, if you can't see the light or voltmeter shows 0 V.
 3. Remove the plastic cap of release valves – keep coil in place – hold a screwdriver close to steel valve stem while hitting the down function – if screwdriver did not get magnetically pulled towards valve your coil is bad.

8.1.3 LIFTGATE does not LIFT UP

1. Follow the instructions of 8.1.1 for main power supply check.
2. Check the valves visually for mechanical damage (as bent or broken).
3. Jump female end #2 to small positive connector (switch cable #5 attached) on motor solenoid.



Do NOT stay between platform and truck body – gate will raise up!



4. Gate is raising up – check switch and grey wire harness to switch for damaged spots.
5. If gate does not raise up:
 1. Check the motor solenoid for proper function – hear clicking?
 - No clicking → motor solenoid or thermo switch at motor is bad.
 - Hear clicking → check for voltage on both big positive studs to ground. If you have voltage, the solenoid is ok. If not, solenoid is not connecting internally and is bad.
 2. Motor solenoid is ok:
 - Check for power on large positive motor stud.
If you have power, either the motor or the brushes are bad. If there is no power at the motor stud you should check the connection to the solenoid.

8.2 Wiring Diagram (Main battery wiring)

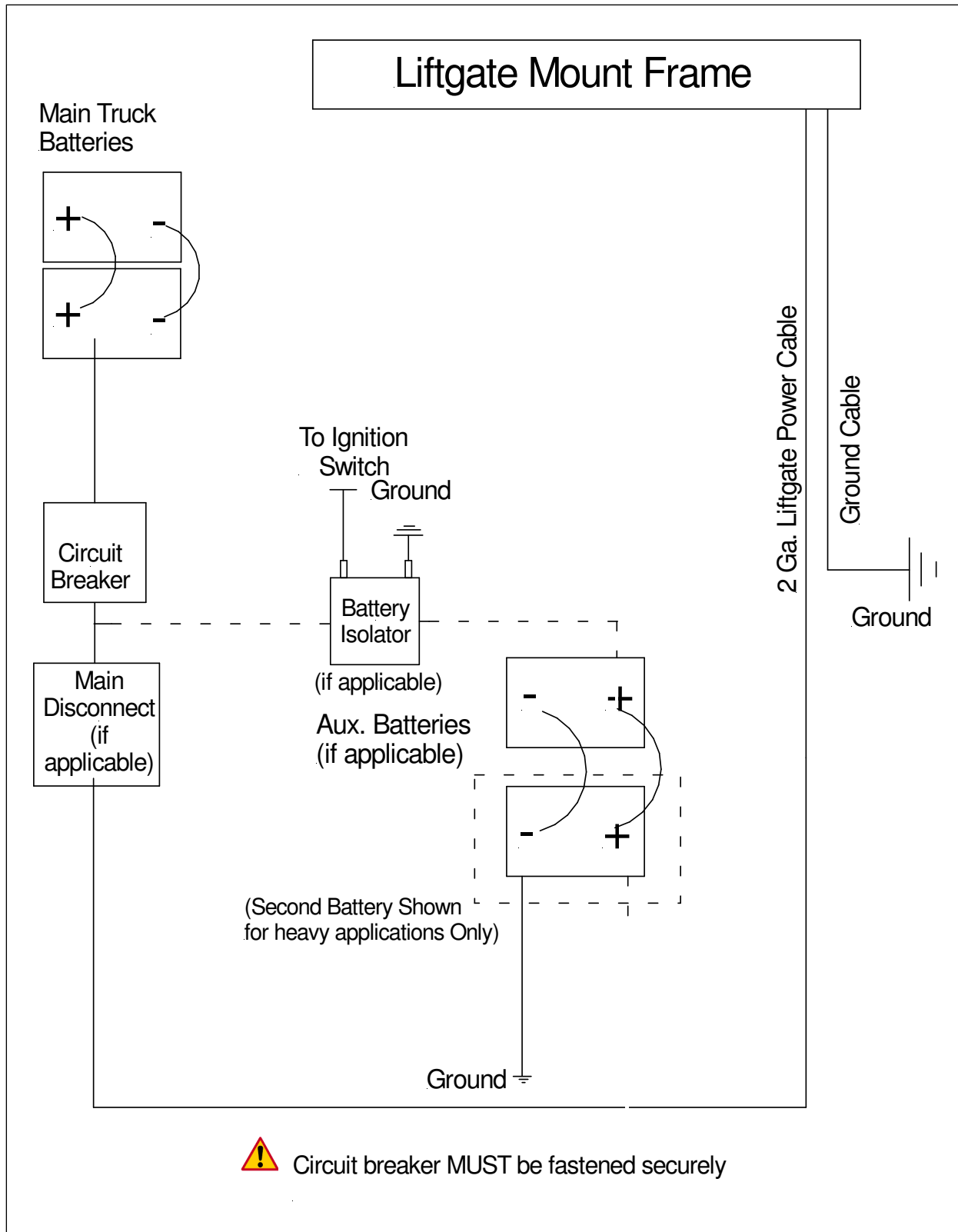


Figure 8-5: Main Wiring



FOLLOW DOTTED LINE IF ISOLATOR OR AUXILLIARY BATTERIES INSTALLED!

8.4 Wiring Diagram (Power down)

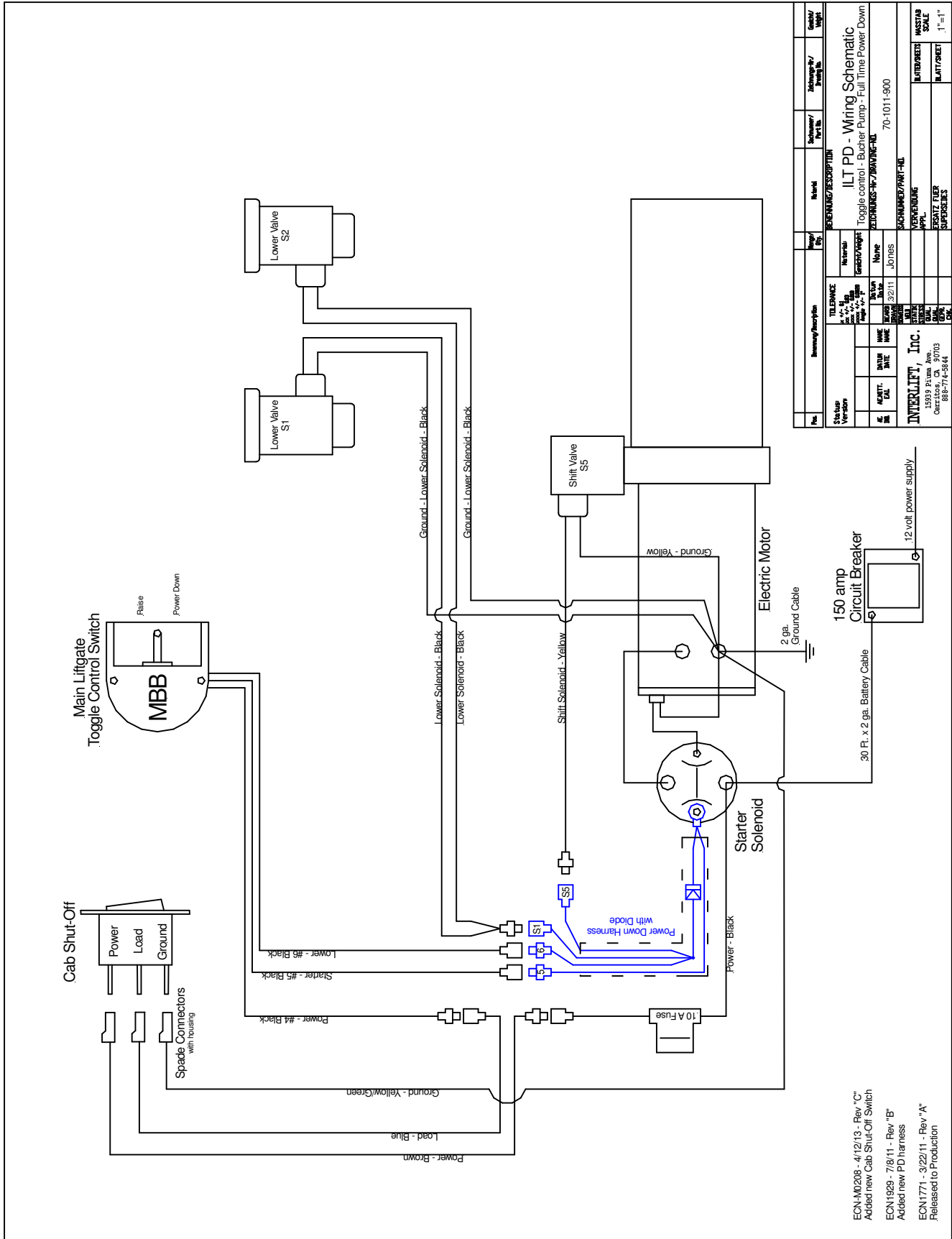


Figure 8-7:Wiring Schematic (Power Down) After liftgate s/n PT-10598

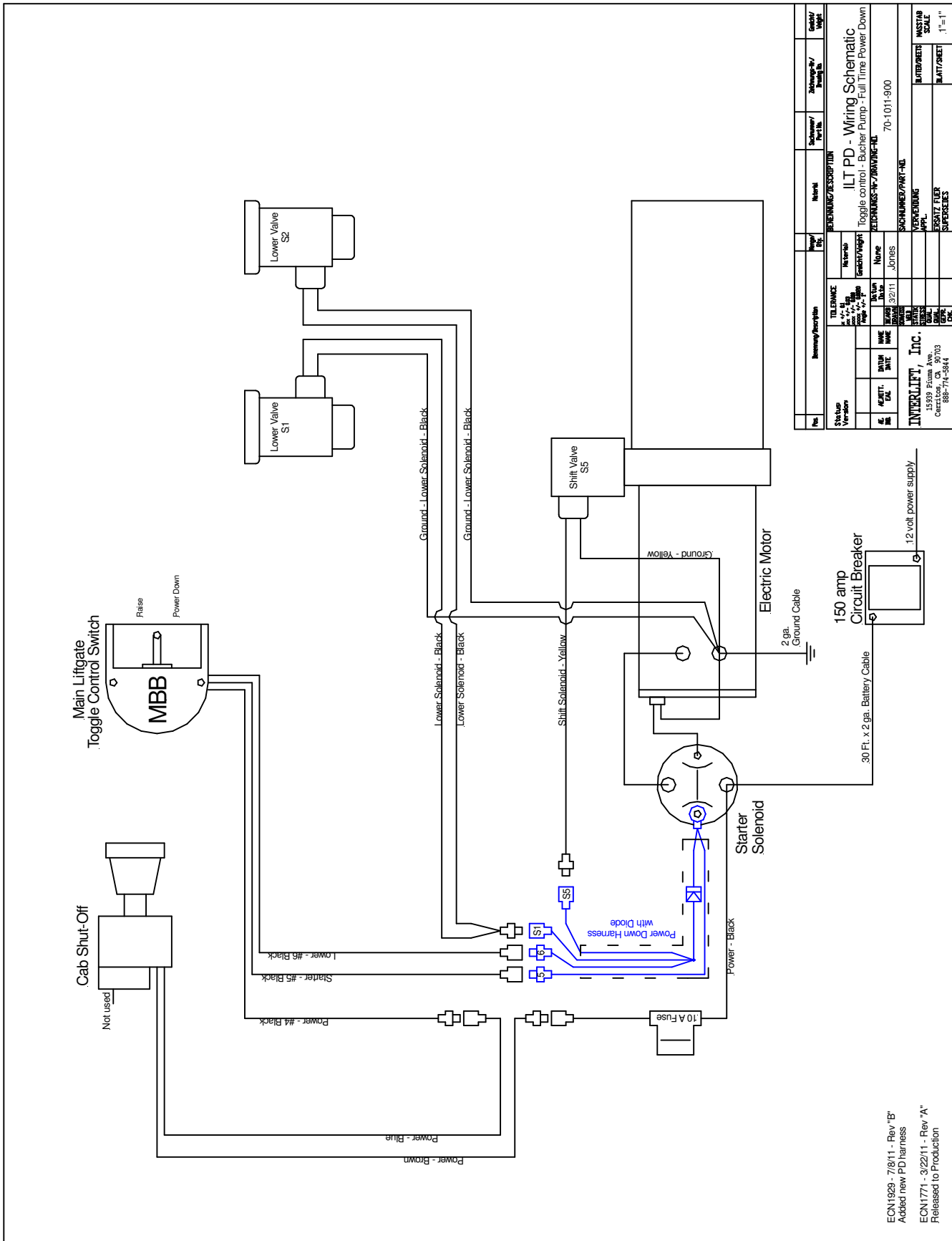
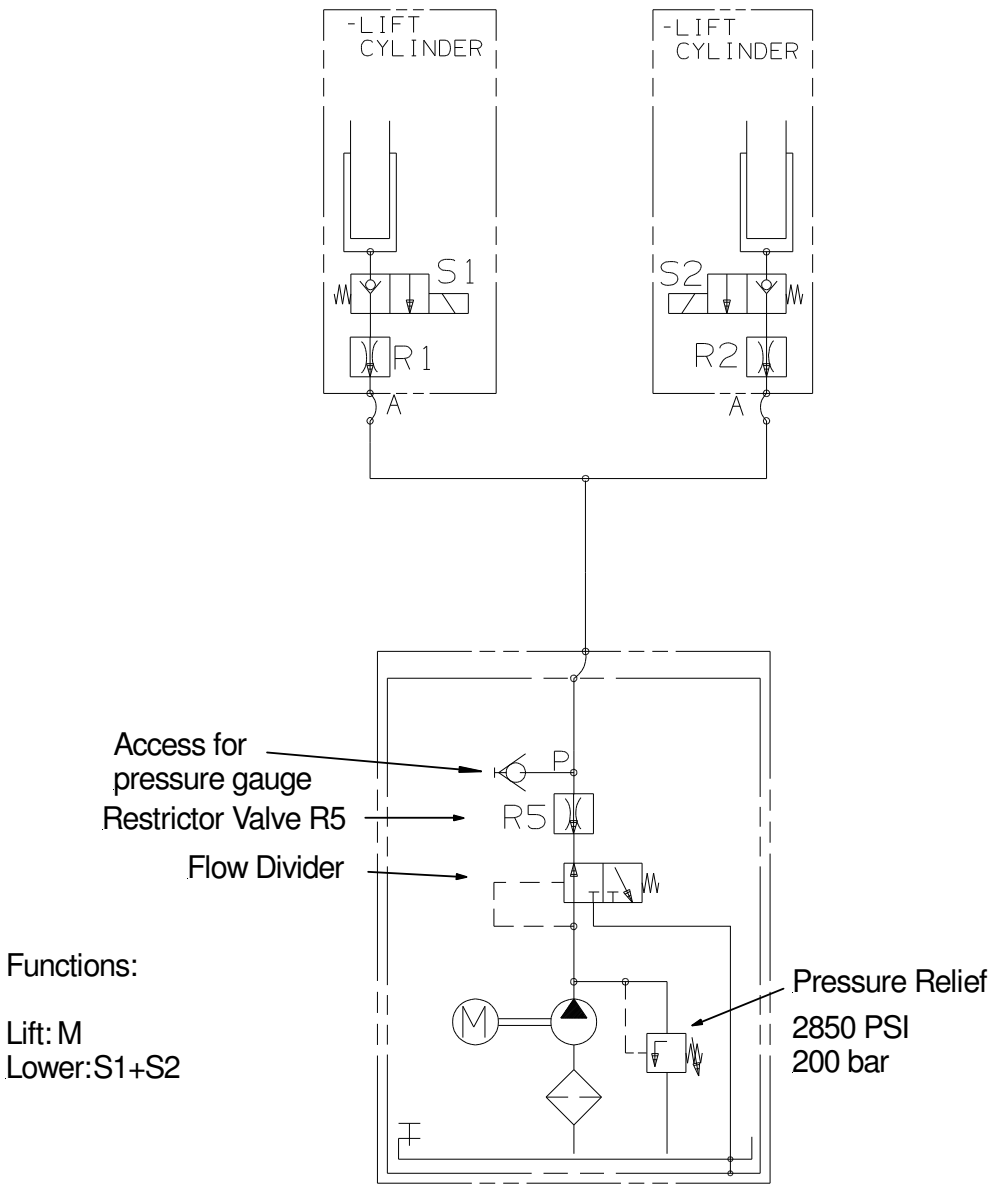


Figure 8-8:Wiring schematic (Power Down) DISCONTINUED on liftgate s/n PT-10598

8.5 Hydraulic Schematic (Gravity Down)

Functions:

- S1 and S2 = Release Valve for lowering function
- R1 and R2 = Flow Restrictor located inside hose adaptor on lift cylinder
- R5 = Restrictor Valve located in power pack
- Flow Divider is activated, when fluid is going back into the power pack
- If Flow Divider is loose or hanging up the fluid is circulated back in to tank



Functions:

- Lift: M
- Lower: S1+S2

Datum	Name	Hydraulic Schematic 2 cylinder lift gate	Urheberschutz nach DIN 34	BLATTZAHL SHEET-QTY. 1	MBB Liftsystems AG Fockesstrasse 53 27777 Ganderkesee
01.08.08	HACKBARTH				

Figure 8-9:Hydraulic schematic, Gravity Down

8.6 Hydraulic Schematic (Power down)

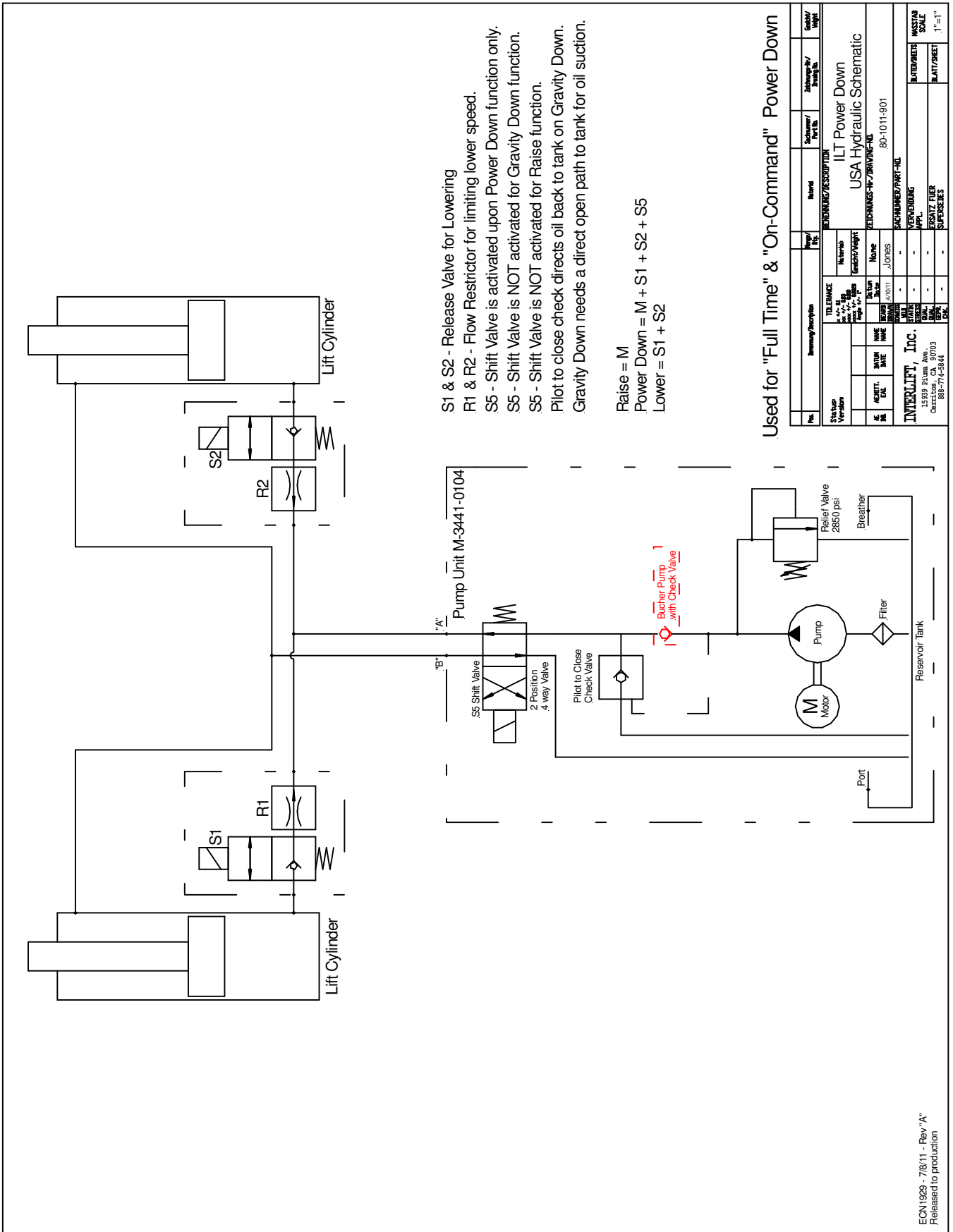


Figure 8-10:Hydraulic Schematic, Power Down version after s/n 10598

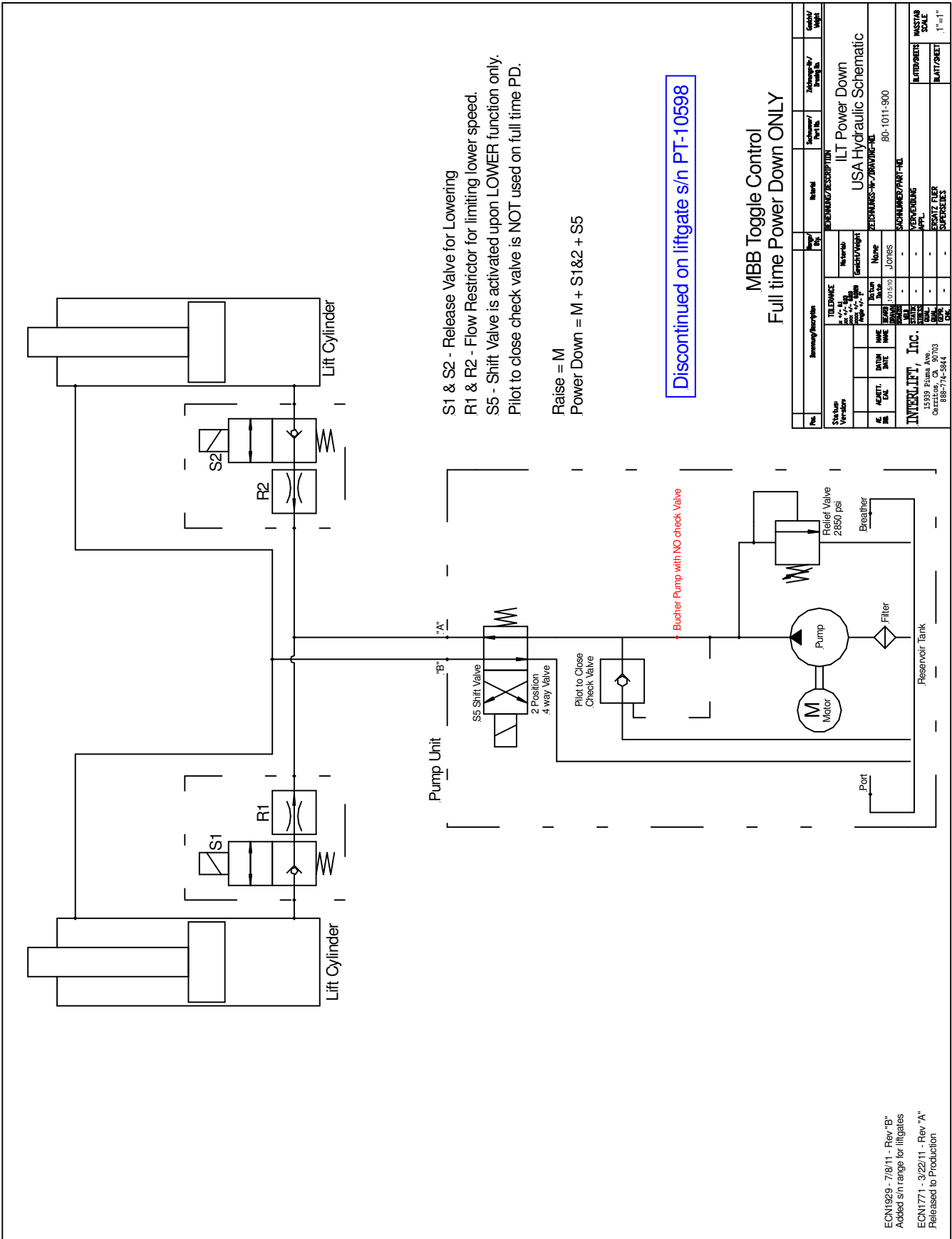


Figure 8-11:Hydraulic Schematic, Power Down version (Discontinued on s/n PT-10598)

9 **Required Information for Ordering Spare Parts and Repairs**

9.1 **Ordering Spare/Replacement Parts**

In order to assure quick delivery of replacement parts, always state the following information when making orders:

1. Liftgate model & serial number.
2. Designation and number of the spare part in accordance with the spare parts list.
3. Designation and number marked on the individual component (if available).

9.2 **Repairs**

Parts sent to PALFINGER Liftgates to repair must be accompanied by a letter (in separate cover) giving details and scope of the repairs required.

10 Warranty

PALFINGER Liftgates provides warranty as part of its conditions of delivery.

All part deliveries will initially be billed. PALFINGER Liftgates then issues credit for all or part of the invoiced sum, when PALFINGER Liftgates has been able to determine that the warranty claim is justified as defined by its warranty conditions. PALFINGER Liftgates does this by inspecting the defective parts, which are sent back to PALFINGER Liftgates freight-prepaid as well as the written description of the problem which must be filled out in full.

The parts that are sent back to PALFINGER Liftgates, marked with serial number and address, become PALFINGER Liftgates' property if the warranty claim is accepted.

All warranty claims must be received **within 30 days** of repair or replacement. Including the following information:

1. Liftgate model.
2. Liftgate serial number.
3. Description of problem.
4. Itemized bill of repair with breakdown of number of hours to perform warranty work and labor charges per repair.
5. Parts used for repair with PALFINGER Liftgates part number.
6. RMA#.
7. Contact at PALFINGER Liftgates, if applicable.

Model	Pump and Motor	Cylinders	Hardware	Control System	Hydraulic
ILT, ILT WR and ILT-PD	2 yr	3 yr	3 yr	3 yr	2 yr

Table 10.1: Warranty Coverage Schedule¹

¹ Effective: Aug 2010

11 Contact address

PALFINGER Liftgates, LLC.

15939 Piuma Ave
Cerritos, CA 90703

Phone: (562)-924-8218

Fax: (562)-924-8318

E-mail (parts order): customerservice@PALFINGER.com

E-mail (technical support): technicalservice@PALFINGER.com

PALFINGER Liftgates, LLC.

572 Whitehead Road
Trenton, NJ 08619

Phone: (609)-587-4200

Fax: (609)-587-4201

E-mail (parts order): customerservice@PALFINGER.com

E-mail (technical support): technicalservice@PALFINGER.com