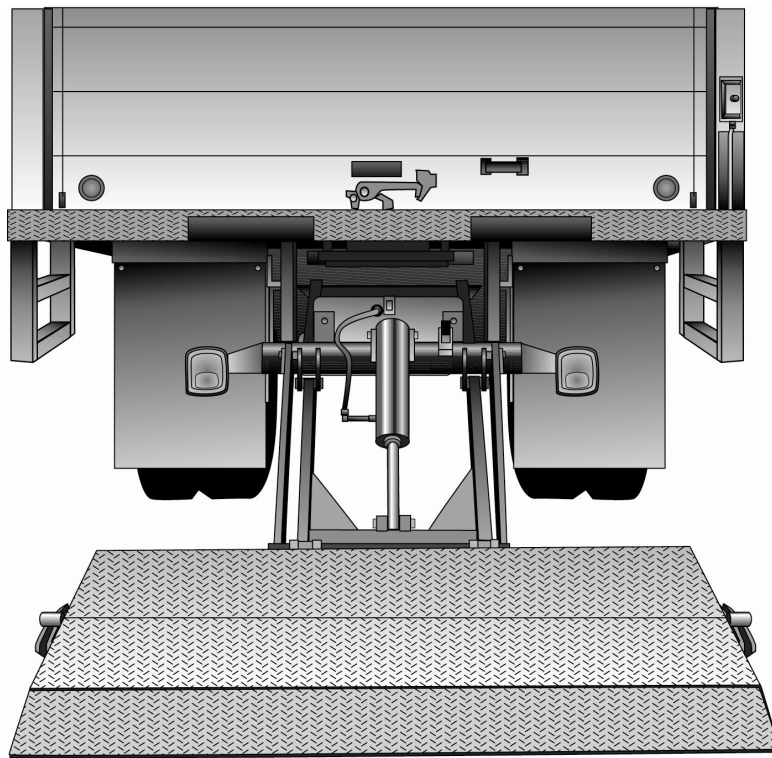


# Owners & Parts Manual

## LHS & LLBS Hide-A-Way™ Tuckunder Style



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## **INTRODUCTION**

This manual contains the operating procedures on the equipment your company is using that was manufactured by Leyman Manufacturing Corporation.

Past experience has indicated that it is most unwise to operate these units without proper instructions, which should be instituted by the purchaser.

While these products have certain safety features engineered into their design, they are all operated by human beings. Therein lies the problem of safety and one should always have caution in mind when operating this or any other machine that has parts that weigh several hundred pounds.

Again, let us remind you there are moving parts on this product that weigh several hundred pounds. These parts, when not under proper control can cause physical damage to the operator. Because of the weights that are involved: carelessness and neglect of training can make these units dangerous.

Do not overload this product. Maintain it properly. Stand clear of moving parts. Operate as instructed.

This lift gate has a long life expectancy and will take some abuse. Use good judgment when operating this equipment.

### **PLEASE FILL IN FOR YOUR RECORDS**

<b>Customer:</b> _____
<b>Model:</b> _____
<b>Capacity:</b> _____
<b>Type:</b> _____
<b>Power:</b> 12 volt
<b>Platform:</b> _____
<b>Serial No.:</b> _____
<b>Options:</b> _____
_____
_____
_____
<b>Maximum Height:</b> 54 inches
<b>Hydraulic Pressure:</b> 2200 psi at the pump, loaded
<b>AMP Draw:</b> 270 amp loaded, 100 amp unloaded

When placing parts order, you will need the serial number and model of the lift gate.

## **WORDS OF CAUTION**

1. Before any maintenance is performed on this unit, read and understand this manual completely.
2. Do not stand on or behind the platform when operating gate in the folded position.
3. Make sure the ground is clear under the platform when lowering.
4. Do not stand in front of platform when lowering from vertical position or operating in any manner.
5. Never exceed the rated load capacity of this gate.
6. Do not allow persons to operate the unit unless they have been properly trained to do so.
7. Use only factory authorized parts for replacement.
8. Check the area around the unit for persons before operating the lift gate.
9. This lift gate should operate smoothly and the only noise that should be heard is the power unit. Any audible sounds other than the normal power unit operation sound should be thoroughly inspected and the cause of the noise should be pinpointed and corrected.
10. Do not over load – the maximum rated capacity is based on an evenly distributed load all over the platforms flat surface.
11. Always load as close to the center of the platform and as close to the center of the truck sill as possible.
12. 150 Amp circuit breaker (not supplied) must be installed between the starter solenoid and the battery source.  
Order from factory as option #111-Circuit Breaker.

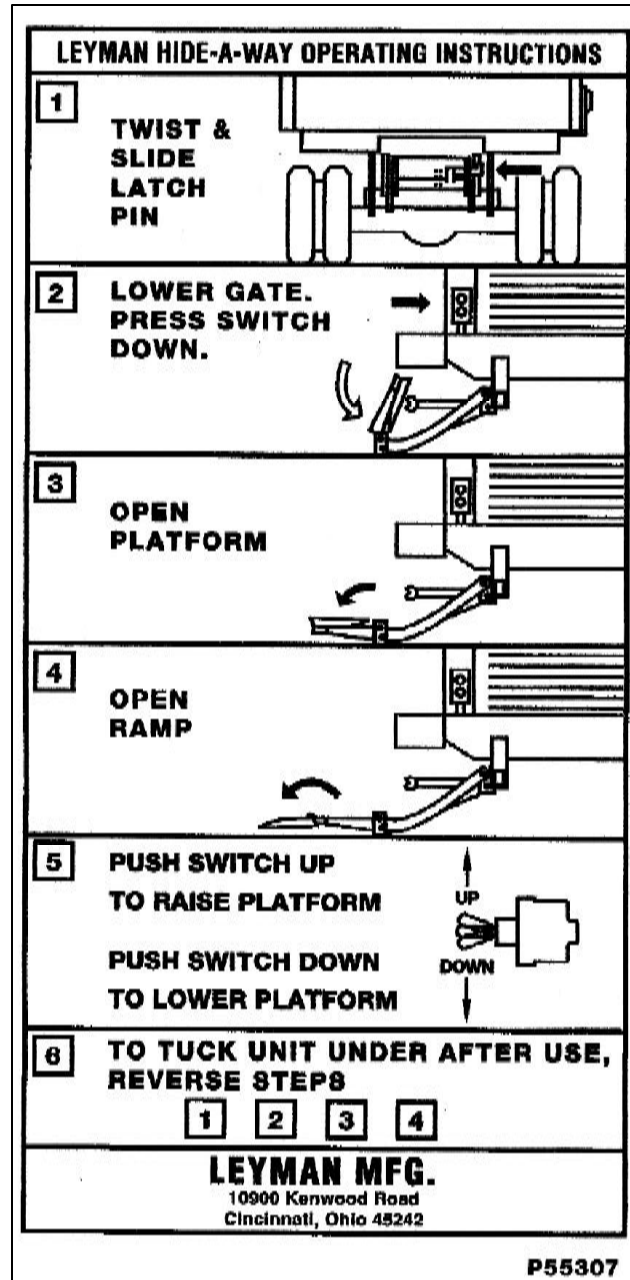
We urge the installation of a safety cut-off switch for all truck mounted lift gates. These are installed in the cab of the vehicle, so the power to the lift gate can be turned on/off.

This manual reflects most changes and updates of materials that are common to this type of lift gate. Some may differ due to individual customer requirements. This manual has been established to reflect the common items.

<p><b>WARNING:</b> Since this gate has greaseless bearings in the main pivot points, (tension and compression arms or platform parts) any welding on these parts must be grounded or you will damage the cylinder.</p>
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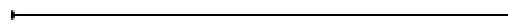
## OPERATION OF THE LIFT GATE

- Before operating the lift, read and understand this decal, urgent warning decal, and the Owner's Manual.
- Do not stand behind the lift gate while unfolding or using the platform.



# PREVENTATIVE MAINTENANCE SCHEDULE

MAINTENANCE by MONTHS



MODELS LHS, LLBS

DATE: \_\_\_\_\_

<b>CUSTOMER</b>		<b>GATE MODEL #</b>	
<b>LOCATION</b>		<b>GATE SERIAL #</b>	
<b>VEHICLE #</b>		<b>SERVICED BY</b>	

v = OK                                      A = ADJUSTED                                      N = NOT APPLICABLE                                      X = REPAIR

3	<b>MOTOR / PUMP COMPONENTS</b>	3	<b>MOTOR / PUMP COMPONENTS</b>
	Check batteries for corroded, loose, or broken connections		Check charge line / power line for corroded, loose or broken connections at both ends spray with Bowman # 21948 connection protection or equivalent
	Check batteries for proper voltage level and charging		Check amp draw of motor with batteries fully charged batteries and tight clean connections spray with Bowman # 21948 connection protection or equivalent
	Check toggle switch for corroded, loose, or broken connections		Check all ground wires for corroded, loose, or broken connections spray with Bowman # 21948 connection protection or equivalent
	Check pop-it solenoids for proper operation		Check pressure setting of relief valve
	Check reservoir for proper oil level (Gate open and down on the ground and tilted 1" from top of tank)		Clean all wiring connections in pump and battery box and spray with Bowman # 21948 connection protection or equivalent
	Inspect circuit breakers and fuses for proper operation		Check pressure setting See Owners Manual for settings
			Check bolts for holding power unit to box for loose, missing, or broken bolts and nuts.

3	<b>STRUCTURE COMPONETS</b>	3	<b>STRUCTURE COMPONETS</b>
	Check for proper operation of gate up/down, fold/unfold		Check all cylinder pins for loose, broken, or missing roll pins
	Check platform and lifting gear for any impact damage		Check all pivot pins for loose, broken, or missing roll pins and snap rings
	Check cylinder and hydraulics line for leaks, abrasions, cuts, or broken lines and fittings		Check primary and secondary platform for damage

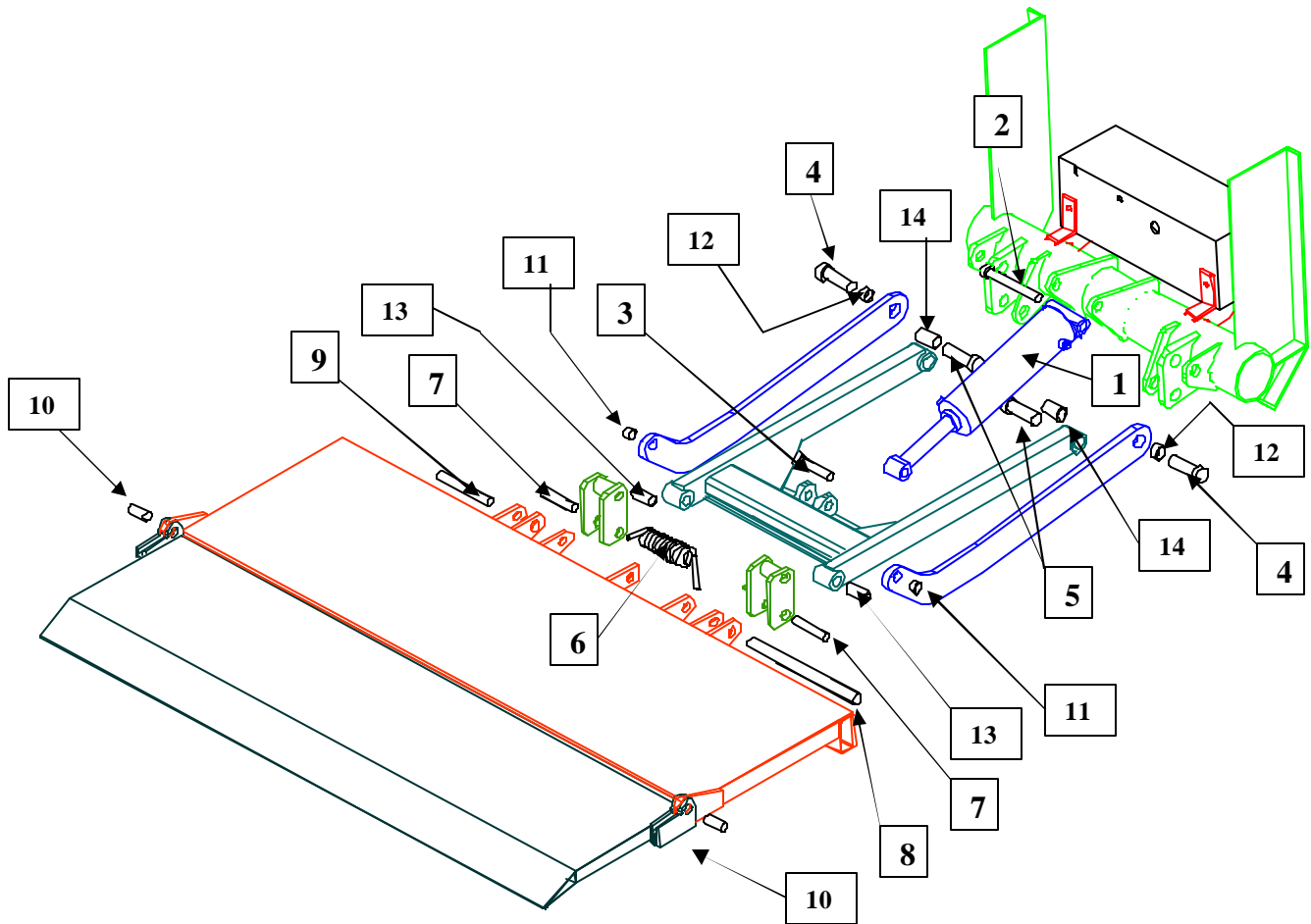
3	<b>LUBRICATION</b>		<b>PERIOICAL CHECK LIST</b>
	Grease power unit and battery box door hinges with # 1 lithium grease	18	Check all pivot point bushings for wear or damage
		24	Flush hydraulic system and change hydraulic oil
			Clean and repaint as necessary

Check owner's manual for proper hydraulic oil, motor amp draw, and pressure setting of power unit

## TROUBLE SHOOTING CHART LHS & LLBS

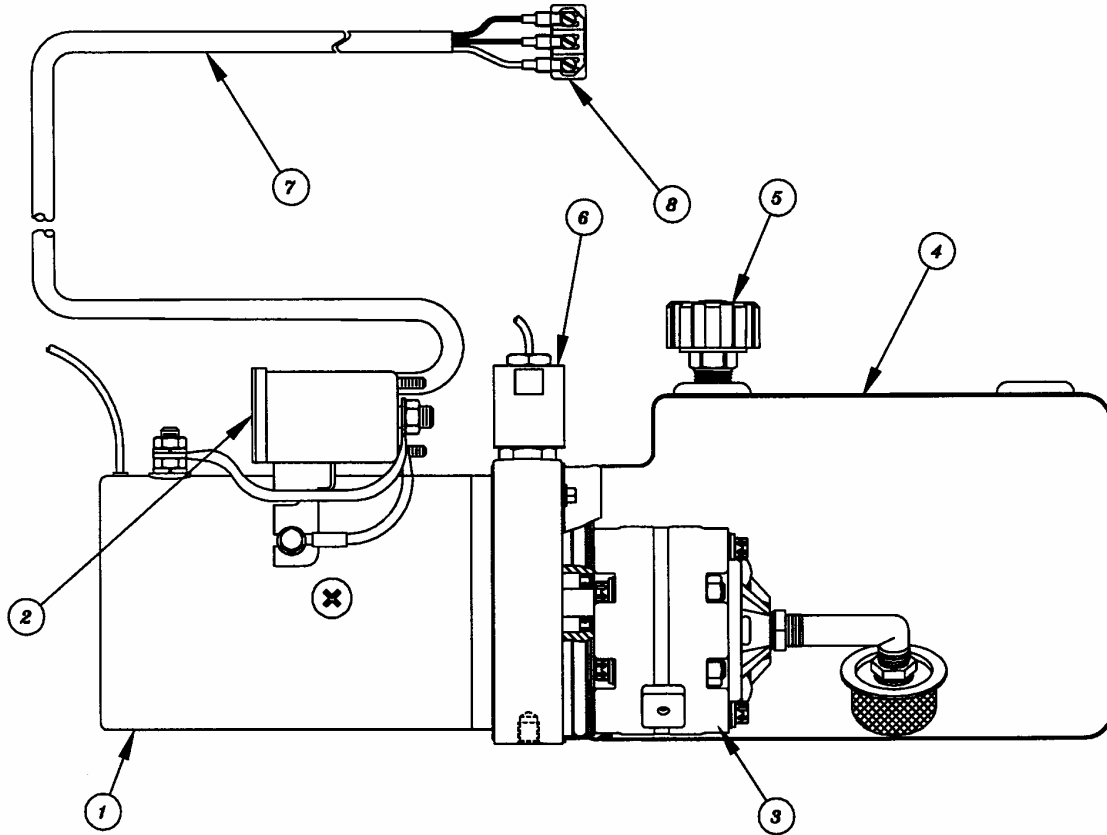
<b>PROBLEM</b>	<b>POSSIBLE CAUSE</b>	<b>SOLUTION</b>
The motor is running but the platform will no go up, or reach floor of vehicle or gate will not lift rated load.	<ol style="list-style-type: none"> <li>1. Insufficient oil in power unit tank</li> <li>2. Lowering valve is stuck partially or fully open.</li> <li>3. Power unit relief valve is set too low.</li> </ol>	<ol style="list-style-type: none"> <li>1. Fill tank</li> <li>2. Clean or replace</li> <li>3. Turn screw in all the way, then back off one turn.</li> </ol>
The platform will not go up or reach floor level and the motor does not run.	<ol style="list-style-type: none"> <li>1. Battery is low</li> <li>2. Power line is loose</li> <li>3. Poor switch connections</li> <li>4. Cab switch is turned off</li> <li>5. Defective starter solenoid</li> <li>6. Tripped circuit breaker</li> </ol>	<ol style="list-style-type: none"> <li>1. Recharge battery</li> <li>2. Check the connections, if loose tighten. Also check for corrosion and clean if necessary</li> <li>3. See #2</li> <li>4. Turn switch on</li> <li>5. Replace part</li> <li>6. Reset the circuit breaker</li> </ol>
Platform will not lower	<ol style="list-style-type: none"> <li>1. Battery is low</li> <li>2. Bad ground or electrical connection</li> <li>3. Lowering valve is bad</li> </ol>	<ol style="list-style-type: none"> <li>1. Recharge battery</li> <li>2. Check for corrosion and tighten</li> <li>3. Check the coil</li> </ol>
Platform creeps downward	<ol style="list-style-type: none"> <li>1. Defective cylinder or piston seal</li> <li>2. Lowering valve is not seating or partially open</li> </ol>	<ol style="list-style-type: none"> <li>1. Remove vent line activate to see if there is a continuous flow of oil</li> <li>2. Clean and inspect</li> </ol>
Platform goes down slowly	<ol style="list-style-type: none"> <li>1. Lowering valve not fully open or clogged</li> <li>2. Lines are restricted or flow control is clogged</li> </ol>	<ol style="list-style-type: none"> <li>1. Clean or replace the lowering valve</li> <li>2. Check for bent or pinched lines. Clean or replace the flow control.</li> </ol>
Bent latch pin	<ol style="list-style-type: none"> <li>1. Latch block welded too far from the latch pin – allowing mechanism to bounce</li> <li>2. Cylinder leaking</li> </ol>	<ol style="list-style-type: none"> <li>1. Weld block 1/16 away from pin</li> <li>2. Remove vent line, activate to see if there is a continuous flow of oil</li> </ol>
Hydraulic oil leak from cylinder rod end.	<ol style="list-style-type: none"> <li>1. Worn seal</li> <li>2. Cylinder rod pitted</li> </ol>	<ol style="list-style-type: none"> <li>1. Replace seals in cylinder</li> <li>2. Replace cylinder</li> </ol>

## STRUCTURE REPLACEMENT PARTS



Item #	Part #	Qty	Description
1	P33989	1	Cylinder LHS-2500 Gate
	P43578	3	Cylinder bushings LHS-2500
	P33875	1	Cylinder seal kit
2	AA-800-228	1	Shaft assembly for cylinder base end
3	AA-800-234	1	Shaft assembly for cylinder rod end
4	AA-802-063	2	Shaft assembly for tension arms
5	AA-802-064	2	Shaft assembly for compression arms
6	P25179	1	Right hand spring
7	AP-802-040	2	Cam pin
8	AP-802-067	1	Left platform pin
9	AP-802-068	1	Right platform pin
10	AP-800-236	2	Ramp pin
11	P43587	2	POLYLUBE Bearing (1 in diameter x ¾ lg.)
12	P43588	2	POLYLUBE Bearing (1-1/4 in diameter ¾ lg.)
13	P43589	2	POLYLUBE Bearing (1 in diameter x 2-1/4 lg.)
14	P43590	2	POLYLUBE Bearing (1-1/4 in diameter x 2-1/4 lg.)

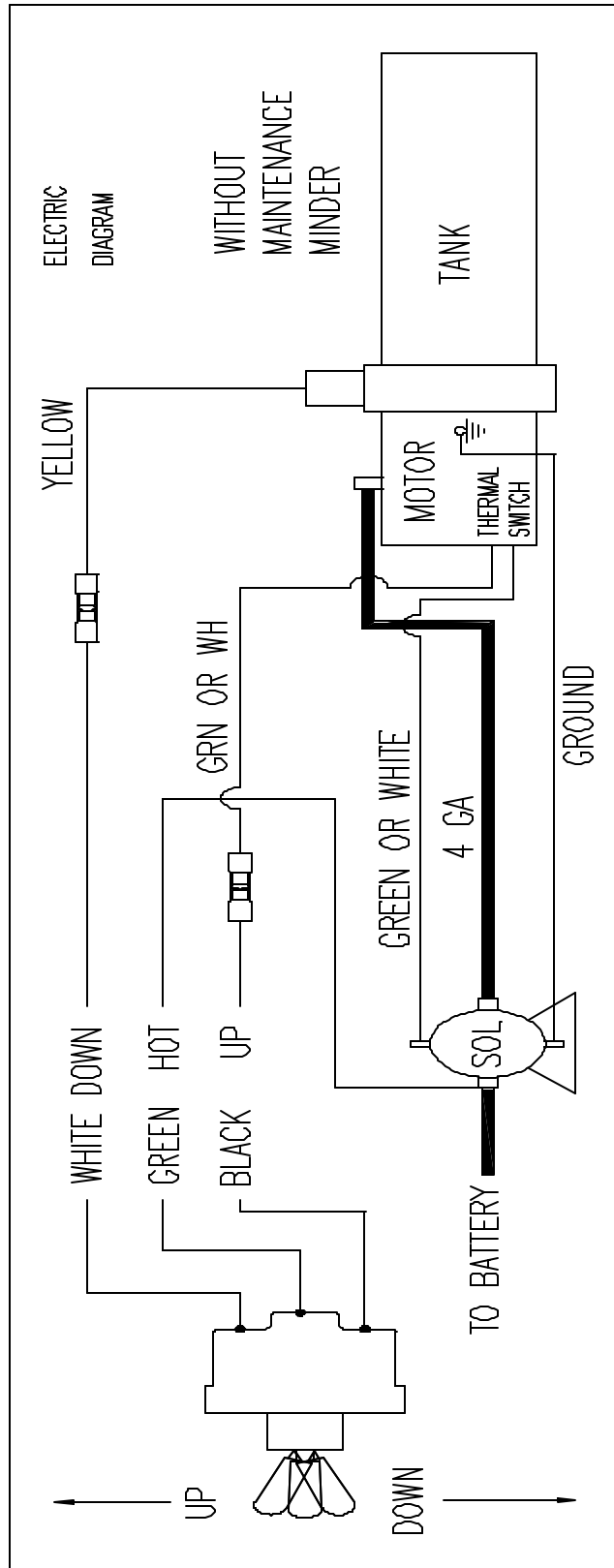
## POWER UNIT REPLACEMENT PARTS



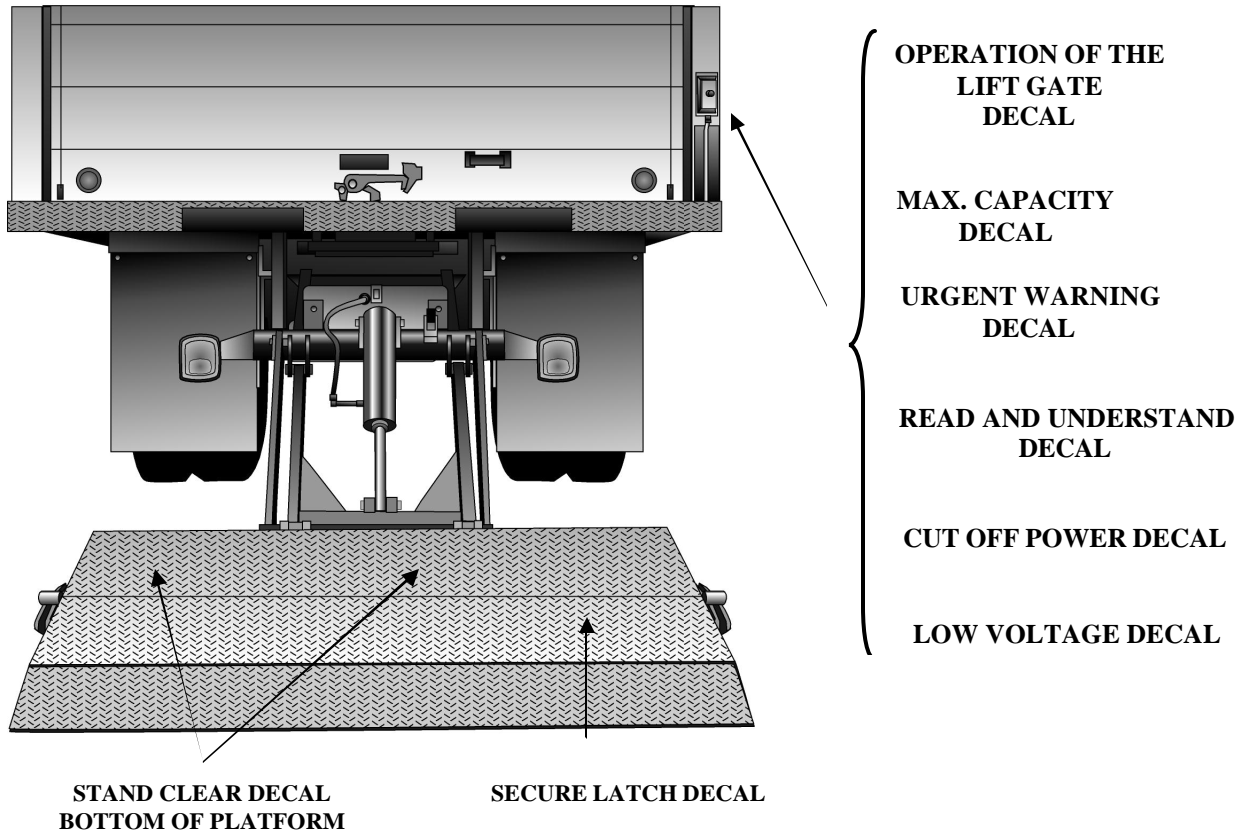
Item #	Part #	Qty	Description
	P33991	1	Complete power unit
1	P33992	1	Motor
2	P34016	1	Solenoid
3	LH150003	1	Pump
4	P34018	1	Tank or Reservoir
5	LH150015	1	Breather
6	LH121	1	Drain valve
7	P46600	1	Wire harness w/ witch
8	AA-551-326	1	Switch

# ELECTRIC DIAGRAM

## Monarch Power Unit – Thermal Switch in Motor – P33991



# INSTALLING SAFETY DECALS



<b>Part #</b>	<b>Qty</b>	<b>Description</b>
P55199	1	Urgent warning decal
P55198	2	Stand clear decal
P55201	1	Power shut off decal
P55202	1	Secure latch decal
P55203	1	Read and understand decal
P55242	1	Low voltage decal
P55307	1	Operation of lift gate
P55200	1	LHS 2500 max. capacity decal
P55200	1	LLBS 2500 max. capacity decal

