

LEYMAN

LIFT GATES

OPERATIONS MANUAL

Legend™ TLS®

TLS3510RL

TLS4500RL

TLS4510RL

Hide-A-Way® Trailer Side Gates



Rev1.0_07/26

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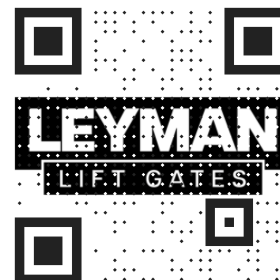
Scan QR Code For Additional Manuals



Installation Manual



Parts Manual



Maintenance &
Troubleshooting
Manual



SPECIFICATIONS



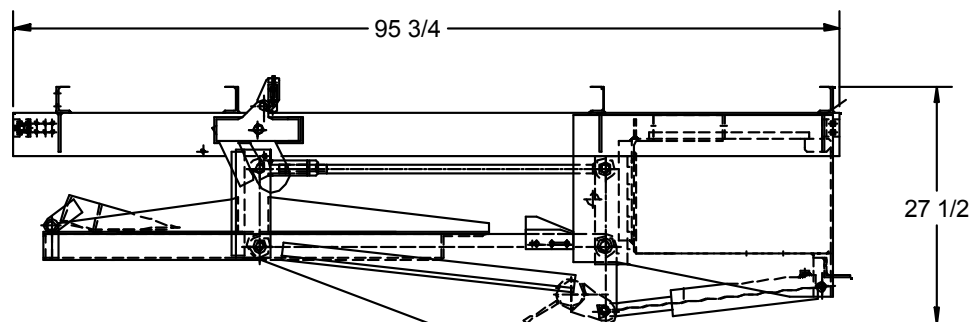
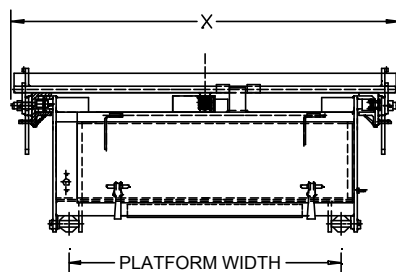
GENERAL SPECIFICATIONS

CUSTOMER: _____
 MODEL: TLS _____
 SERIAL #: _____
 CAPACITY: 4500 lbs.
 TYPE: Trailer Side Door Lift Gate
 OPERATION: Power up/Gravity down
 Power in/out
 HYDRAULIC PRESSURE: 2500PSI – Up Function
 800PSI – In/Out Function

Model Number	Lifting Capacity	Platform Size	Main Platform	Secondary Platform	Rigid Ramp	Approx. Weight
TLS 3510	3,500 lbs.	42" W x 55" D	51" D	4" D	10" Taper	TLS 3510 1,200 lbs.
		48" W x 55" D				TLS 3510 1,300 lbs.
		60" W x 55" D				TLS 3510 1,450 lbs.
		72" W x 55" D				TLS 3510 1,600 lbs.
TLS 3510	3,500 lbs.	80" W x 48" D	48" Flat	No Secondary	5" Taper	TLS 3510 1,800 lbs.
TLS 4510	4,500 lbs.	42" W x 55" D	51" D	4" D	10" Taper	TLS 4510 1,250 lbs.
		48" W x 55" D				TLS 4510 1,350 lbs.
		60" W x 55" D				TLS 4510 1,500 lbs.
		72" W x 55" D				TLS 4510 1,660 lbs.

MINIMUM MOUNTING SPACE REQUIREMENTS

PLATFORM WIDTH	DIMENSION "X"
42"	60"
48"	66"
60"	78"
72"	90"



RECOMMENDED HYDRAULIC OILS / LUBRICATIONS

HYDRAULIC OILS	MANUFACTURER	TYPE	TEMP RANGE
Level 1 Normal Conditions	Mobil	DTE 11	-15° F to + 150° F
	Shell	TELLUS-T15	-15° F to + 150° F
	Exxon	UNIVIS-N15	-15° F to + 150° F
Level 2 Cold Conditions	Mobil	AERO-HFA	-50° F to + 80° F
	Shell	AERO FLUID #4	-50° F to + 80° F
	Exxon	UNIVIS-HVI13	-50° F to + 80° F
	Mil	H-5606	-50° F to + 80° F

HYDRAULIC TANK CAPACITY

2 ½ gallons

LUBRICATION - GREASE

Cam Rollers, Idler Sprockets, Auto-Lock shaft, cylinder pins, if grease fittings provided

Level 1 Normal Conditions NLGI #2 Lithium base grease
Level 2 Cold Conditions NLGI #1 Lithium base grease
DO NOT USE CHASSIS or 5th WHEEL GREASE

BATTERIES

Two (2) 12-Volt DC Group 31 Heavy-Duty Dual Purpose or AGM

ELECTRICAL COMPONENTS CONNECTIONS

Use Fluid Film Rust & Corrosion Protection by Eureka, except on Start Solenoid.
 On Start Solenoid, use Color Guard by Loctite, or Liquid Electrical Tape

AMPERAGE DRAW OF MOTOR

When raising platform (empty) approximately 115 AMPS @ 13.5 volts. At bypass approximately 235 AMPS @ 13.5 volts

LIFTING PRESSURE SETTING

With platform at floor level and pump in bypass 2500PSI

IN-OUT PRESSURE SETTING

When sliding gate in-out and pump in bypass 800PSI

MINIMUM VEHICLE FLOOR HEIGHT LADEN

With any size of platform – vehicle floor height 48"

MAXIMUM VEHICLE FLOOR HEIGHT UNLADEN

With any size of platform – vehicle floor height 58"

APPROXIMATE TIMES EMPTY AT 80° F WITH 2 GROUP 31 BATTERIES

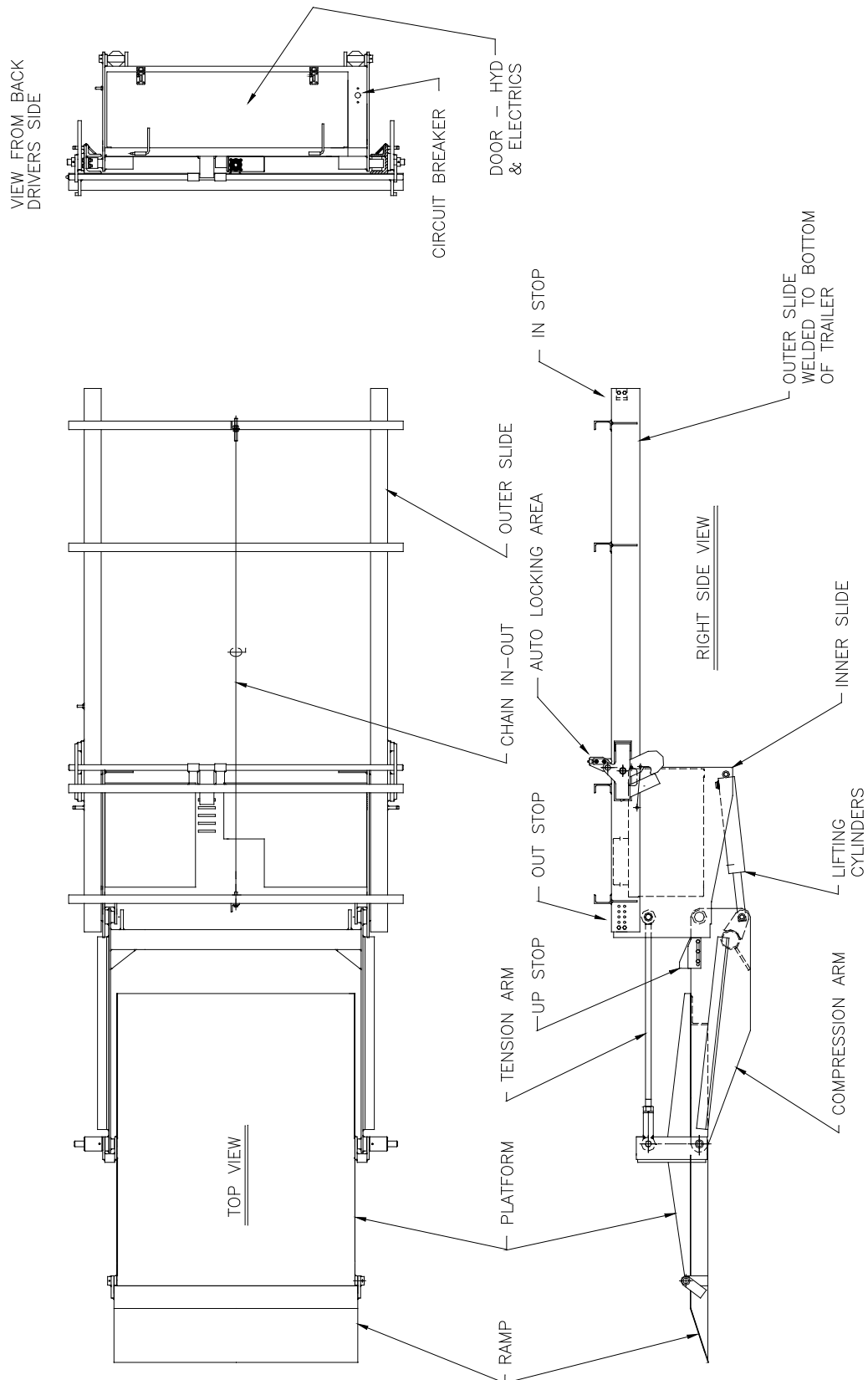
Time up: 14 – 18 seconds, Time down(gravity down): 12 –16 seconds



WARNING

The use of a battery charger as the sole power source to operate the lift gate is unauthorized and will prevent the lift gate from working properly. The lift gate must always be operated in conjunction with at least one (1) 12 volt heavy duty lift gate battery. A minimum of 9.5 volts must be maintained in order for the DOWN valve and 10.5 volts for the IN / OUT valves to operate.

GENERAL TERMINOLOGY

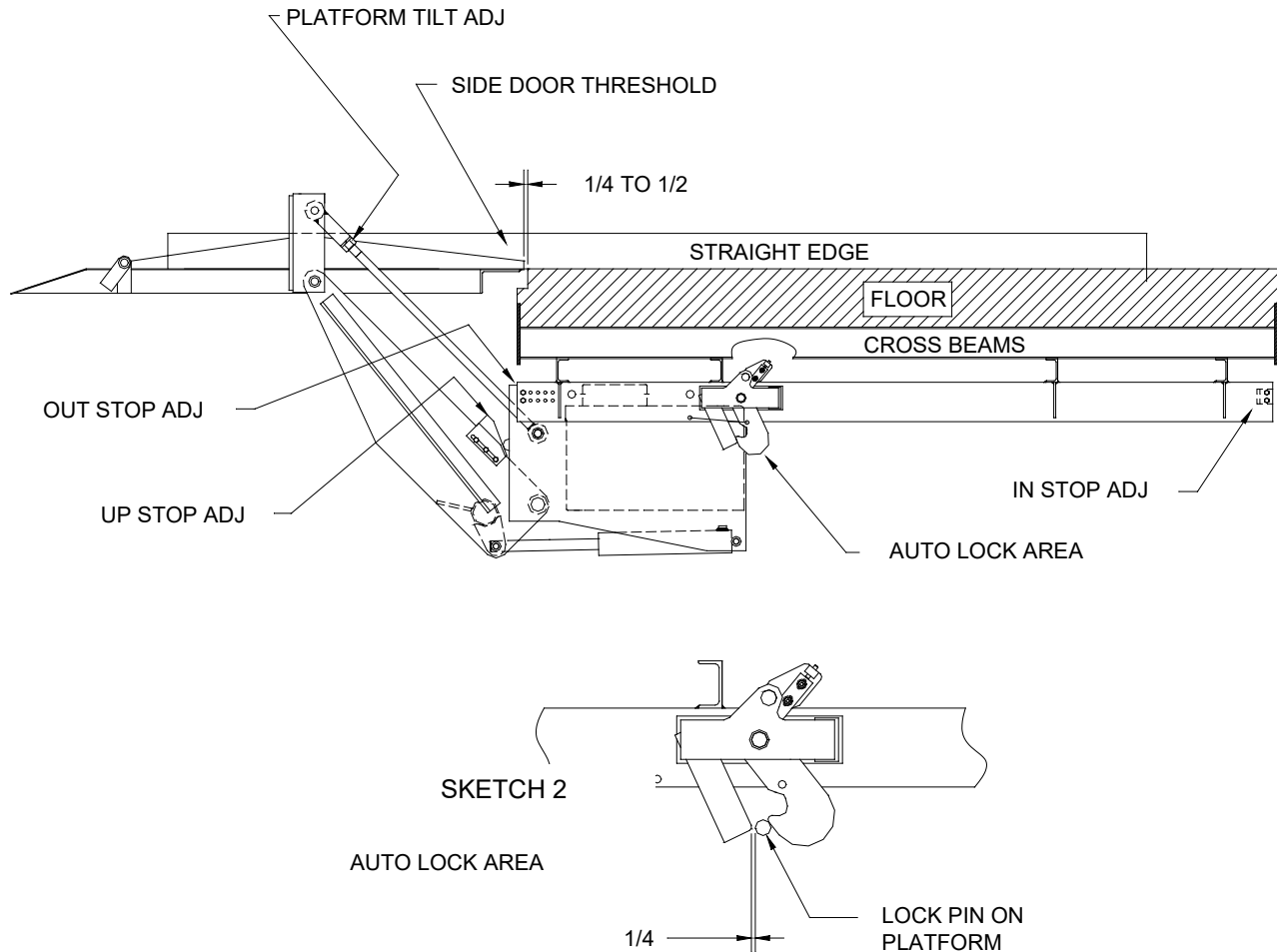




INSTALL ADJUSTMENTS



PLATFORM ADJUSTMENTS



STEP 1: The platform was preset at the factory to be level to the floor of the trailer within $\frac{1}{4}$ ". With a straight edge, check this. If it is okay, proceed to step 2. If not, let the platform down to the ground. Remove the two (2) roll pins and the top Tension Arm pivot pins (one on each side).

NOTE

One full turn moves the tip of the platform $\frac{1}{4}$ " (turn the end in, this moves the tip of the platform up, unscrewing moves the tip of the platform down. Make necessary adjustments. Replace pins, raise the platform up and check. Repeat if necessary. Replace roll pins. **Each side must be adjusted the same amount.**

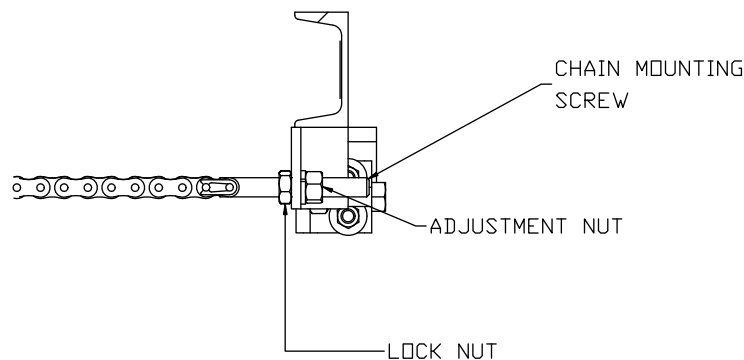
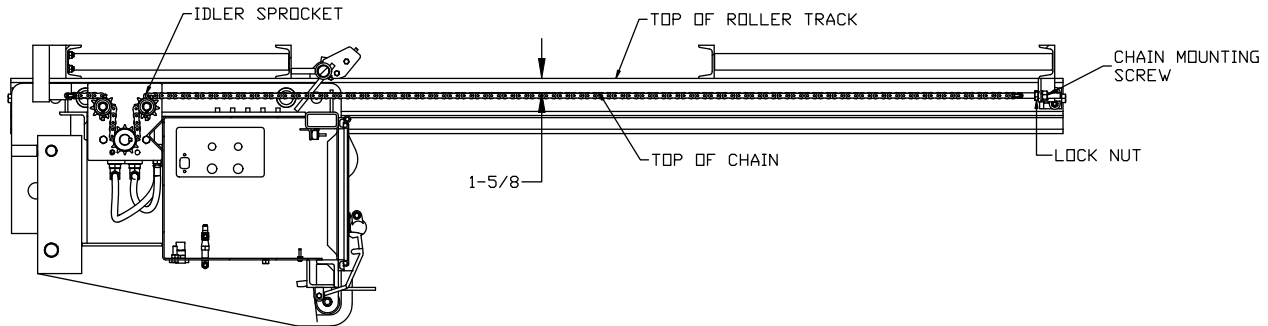
CAUTION

STEP 2: If this adjustment has been made, the IN stops must be adjusted to provide the $\frac{1}{4}$ " clearance with the Auto Lock pin (see Sketch 2).

STEP 3: Adjust the OUT stops. The tip of the platform should be $\frac{1}{4}$ " to $\frac{1}{2}$ " from the edge of the threshold.

STEP 4: Adjust the IN stops. See lower sketch and adjust for the $\frac{1}{4}$ " dimension.

PLATFORM ADJUSTMENTS (CONT)



STEP 5: Ensure the platform is fully out before taking chain measurements or adjusting. Measurements should be taken at the halfway distance from the chain mounting screw to the idler sprocket (approximately where the measurement is in the top picture). The chain should have 1/8" to 1/4" of sag. Another way to measure is from the top of the roller track to the top of the chain, which is between 1-5/8" and 1-3/4".

STEP 6: Adjust the chain tension via the Chain Mounting Screw. Loosen both nuts at the same time. Unscrew the lock nut with a few extra threads for tightening. Use the adjustment nut to make the adjustment. To add tension to the chain, rotate the nut clockwise. To loosen chain tension, rotate the nut counterclockwise. To lock the tension adjustment, tighten the lock nut while maintaining the position of the adjustment nut.

NOTE

Ensure the chain is not twisted to ensure sprocket engagement.

NOTE

Chains will stretch a small amount over time. Chain tension should be adjusted as a part of regular maintenance if necessary.

CAUTION

Overtightening the chains will result in the gate seizing during in and out operations, which will prohibit movement.



LEYMAN
LIFT GATES

OPERATING PREMIER™ LPS®



RELEASING AUTO LOCK/LOWER PLATFORM



WARNING

Do not stand in front of the lift gate while unfolding or using the platform

Before operating the lift gate, read and understand Urgent Warning decal and Owner's Manual.



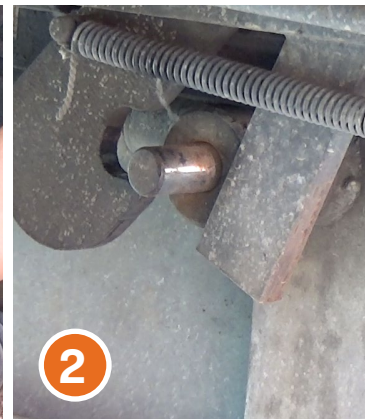
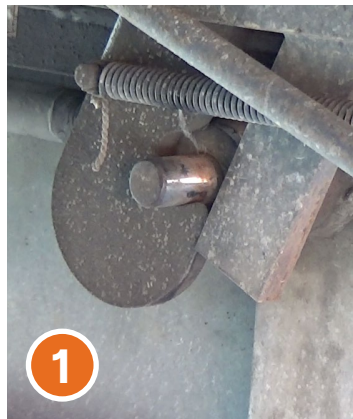
With the gate in the over-the-road / stored position, follow these steps to operate the gate:

URGENT WARNING READ BEFORE OPERATION

Before Operating Lift, Be Sure You Understand

1. Improper operation of this lift can result in serious personal injury. Do not operate unless you have been properly instructed and have read, and are familiar with, the operating 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 braked 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 Mfg. Literature and/or 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 center of the platform.
6. Never stand in or move through or allow anyone else to stand in or move through the area in which the lift may operate or into which an upset load might fall.

P55157



1. Using the **UP** toggle switch, raise the gate **UP** and release the auto safety lock.

2. Lift the handle to release the auto safety lock.



3. Use the down switch to lower lift until arms are 1 to 2 feet off the ground.



UNFOLDING PLATFORM AND LOADING

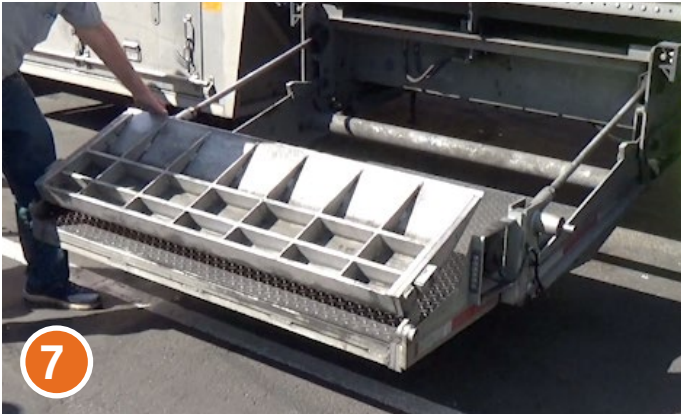
**WARNING**

Do not stand in front of the lift gate while unfolding or using the platform

4. Stand to the side of the lift gate.
5. Press and hold the Power In/Out toggle switch DOWN to extend the gate.



6. Continue extending the gate until it stops and locks into the fully extended position.



7. Raise the gate up about 1 foot (optional) and unfold the platform.
8. Use the Down toggle switch to lower the gate to the ground.
9. To raise the platform, use the UP switch to raise the platform to be level with the floor of trailer.

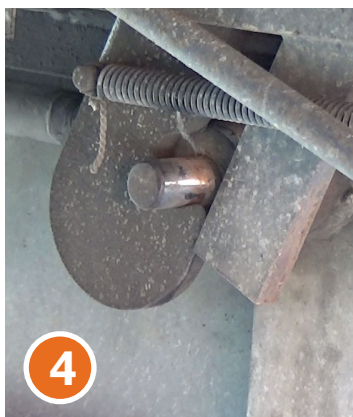
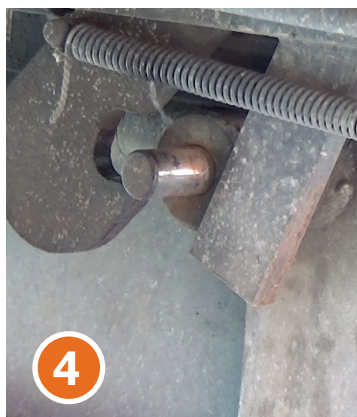


SAFELY STOWING GATE

1. When ready to safely stow gate for travel to next stop, raise and fold the ramp over.



2. Raise locking bar handle and push the IN/OUT switch upward. Run the gate all the way under the trailer until lift stops.
3. Run gate up (use the UP switch), auto lock will latch.



4. Lower the gate until resting on the auto lock. (Use DOWN switch).

EMERGENCY HAND PUMP OPERATION

If an emergency hand pump was supplied with this lift gate, its intended use is to restore the gate to the transit position.



WARNING

Do not try to operate the power unit when using the hand pump.

Steps to secure the gate, so the trailer can be moved:

1. Remove the pump handle from the holder and insert into the hand pump socket.
2. Raise the platform off the ground about 6", pump up/down.
3. To retract the gate, disconnect the **IN/OUT** chain and manually push the gate under the trailer all the way until it stops.
4. Pump the gate until fully up. Gate must latch into the Auto-Lock hooks.
5. With the handle unscrew the valve on the bottom of the hand pump. This will let the gate rest down in the Auto-Lock hooks.





MAINTENANCE



PREVENTIVE MAINTENANCE SCHEDULE

MAINTENANCE by CYCLES for PREMIER™ LPS MODELS
Date: _____

Customer		Gate Model #	
Location		Gate Serial #	
Vehicle #		Serviced By	

√ = OK

X = Repair

A = Adjusted

N = Not Applicable

3000	MOTOR / PUMP COMPONENTS	3000	MOTOR / PUMP COMPONENTS
	Check batteries for corroded, loose or broken connections		Check charge line/power line for corroded, loose or broken connections at both ends
	Check batteries for proper voltage level and charging		Check amp draw of motor with fully charged batteries and tight clean connections
	Check all wiring in pump box for corroded, loose or broken connections		Check all ground wires for corroded, loose or broken connections
	Check solenoid valves for proper operation		Check pressure setting of relief valves
	Check reservoir for proper oil level (Gate down on the ground, fluid level should be 1" from top of tank)		Clean all wiring connections in pump and battery box. Spray with Fluid Film Corrosion Protection by Eureka. Use Color Guard or Liquid Electrical Tape on Start Solenoid.
	Inspect circuit breakers and fuses for proper operation		Check emergency hand pump for proper operation if equipped.
	Check all fittings/hoses in power unit for tightness and leaks		Check hydraulic motor sprockets for worn bushings and proper operation
3000	STRUCTURAL COMPONENTS	3000	STRUCTURAL COMPONENTS
	Check for correct operation of the gate UP, DOWN, IN, and OUT.		Check IN/OUT chain for proper adjustment (no more than 1/2" play)
	Check wiring harness on side of gate for chaffed, frayed, or broken wires.		Check all pivot points for loose, broken, or missing roll pins
	Check wiring harness on side of gate for loose, broken, or missing clamps.		Check UP stops for proper positioning of the platform and adjust as needed.
	Check the ground cable on side of gate for loose or corroded connections.		Check the IN/OUT stops for loose, broken, or missing hardware
	Check hydraulic cylinders for leaks		Check all warning lights for proper operation if equipped
	Check hydraulic cylinder pins for loose, broken, or missing roll pins.		Check rollers for proper operation
	Check Auto Lock mechanism for proper operation. Lubricate and adjust as needed.		Check over-all gate for damage or broken welds and repair as needed.
			Check Compression and Tension Arms for worn bushings
3000	LUBRICATION	12000	PERIODIC CHECK LIST
	Stainless Steel Chain should not require any lubrication. Lubricate Idler Sprockets, Auto-Lock shaft, Cam Rollers, and Cylinder Pins at base end.		Check all pivot point bushings for wear or damage
	Level 1 Normal Conditions NLGI #2 Lithium base grease		Check hydraulic motor sprockets for worn bushings and proper operation.
	Level 2 Cold Conditions NLGI #1 Lithium base grease	15000	PERIODIC CHECK LIST
	DO NOT USE CHASSIS or 5th WHEEL GREASE		Flush hydraulic system and change hydraulic oil
			Clean and repaint as necessary

MAINTENANCE MINDER2® (IF EQUIPPED) READINGS MENU 2

Screen 1 # Lifts	Screen 3 Service Faults	Screen 4 Low Voltage Faults	Screen 6 High Temperature Faults

FULL PREVENTIVE MAINTENANCE MANUAL

For detailed information regarding maintenance and troubleshooting your Premier™ LPS lift gate, please scan QR code below:



Maintenance &
Troubleshooting
Manual

This image shows a full page of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page, typical of notebook or legal stationery. There are no margins, text, or other markings on the page.