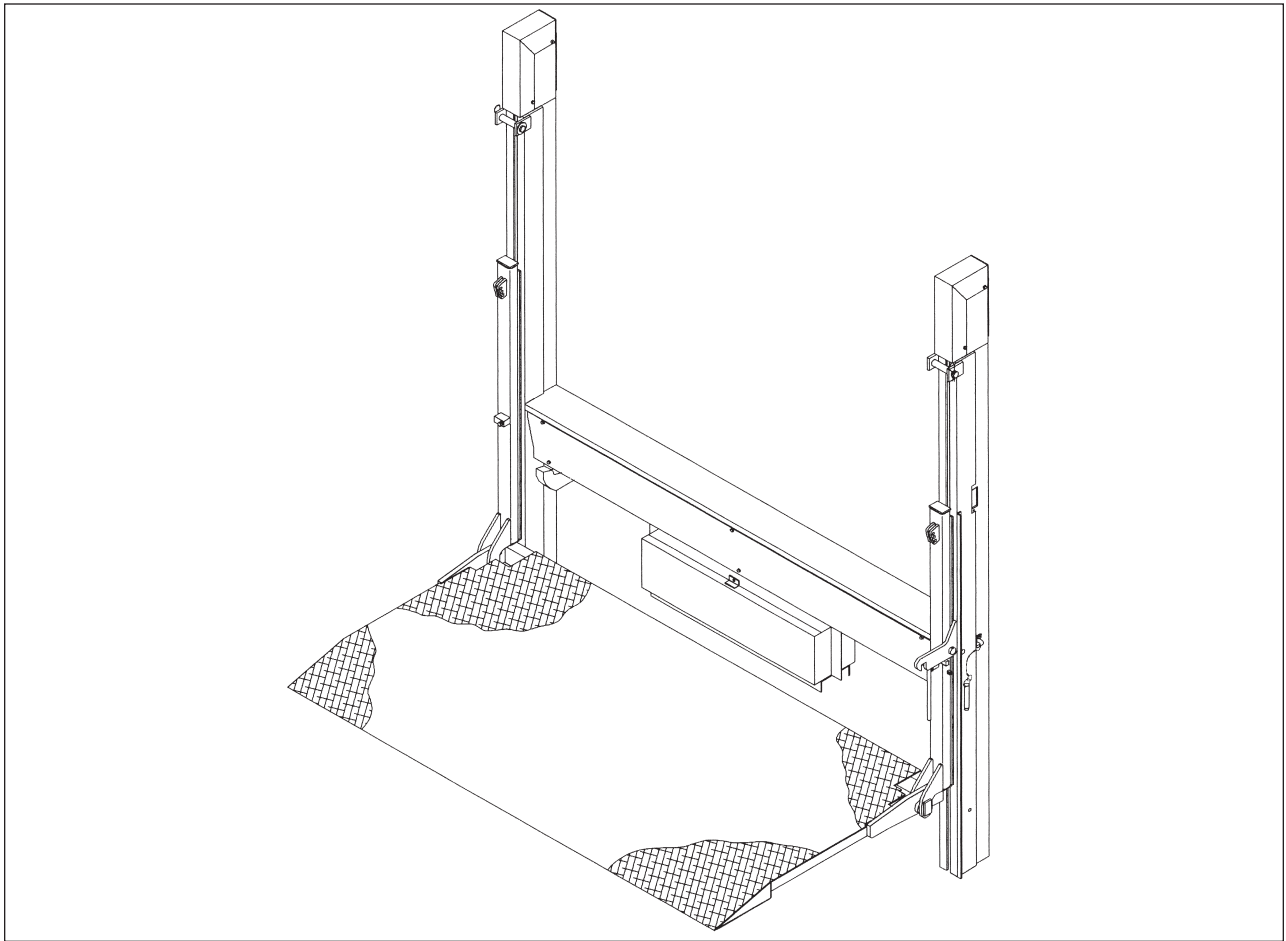


# **VL** SERIES

**Railgates By THIEMAN**

## **VL-30, 40, 50 OWNERS MANUAL/PARTS LIST**



**IMPORTANT! KEEP IN VEHICLE!**

**PLEASE READ AND UNDERSTAND THE CONTENTS OF THIS  
MANUAL BEFORE OPERATING THE EQUIPMENT.**



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### FOR YOUR RECORDS

Model No. \_\_\_\_\_ Date Purchased \_\_\_\_\_

Serial No. \_\_\_\_\_

**Note: Include This Information When Ordering Parts!**

Your Thieman Tailgate is constructed of top quality material and is warranted to be free from defects in material and workmanship under normal use. With routine maintenance and proper operation this liftgate will provide long lasting service and dependability.

### PARTS ORDERING PROCEDURE

When ordering parts, please include all the information asked below. If this information is not available, a complete written description or sketch of the required part will help Thieman identify and deliver the needed part to you.

#### THE FOLLOWING INFORMATION MUST BE INCLUDED:

1. Serial Number - Thieman VL liftgate serial numbers can be found on the tag located on the inner side of the curb side frame rail.
2. Model number and capacity.
3. Platform size
4. Part number
5. Description
6. Quantity required

## WARNING!

The following list of warnings are to be read before operating the VL series liftgate:

- +Read this Owner's Manual and all of the decals on the liftgate BEFORE operating the liftgate.
- +All protective covers and guards must be in place before operating the liftgate.
- +DO NOT operate the liftgate if you do not have a thorough knowledge and understanding of the operation of the liftgate.
- +NEVER OVERLOAD THE LIFTGATE! The maximum rated capacity of the VL series differs with each model as follows:

VL30 – 3000lbs

VL40 – 4000lbs

VL50 – 5000lbs

- +Never use the liftgate if it makes any unusual noises, has vibrations, or fails to operate freely.
- +Make certain that the area below the platform is clear before and at all times during operation of the liftgate.
- +Keep hands and feet clear of all pinch points.
- +The platform must be in the closed position and the slider stop pins engaged properly before transit.
- +Always load as close to the center of the platform and as close to the cylinder housing as possible. See figure 1.
- +Never operate lift trucks on or over any part of the platform.
- +Load and unload the platform from the rear and not from the side of the platform. Never remove the platform support chains to load or unload.
- +Only operate liftgate when vehicle is on level ground and parking brake is set.
- +Follow the maintenance guide as outlined in this manual.
- +DO NOT attempt any repairs unless you are a qualified and authorized THIEMAN distributor.
- +If any repairs, adjustments, or maintenance not covered in this manual are required, contact your nearest Thieman distributor or the factory.
- +This liftgate is equipped with a cable brake. If a break in the cable should occur and the cable brake engages, these items **MUST BE REPLACED!**
- +DO NOT ride the liftgate, it is not intended as a personnel lift.
- +This liftgate is intended for the use of loading and unloading cargo only, and is not to be used for anything other than this.
- +DO NOT modify this liftgate. Altering this liftgate may cause serious personal injury or damage the liftgate and will void all warranties.

# WATER LEVEL LOADING

When a maximum load is to be raised or lowered, this load must be centered on the load bearing platform, both front to back and side to side.

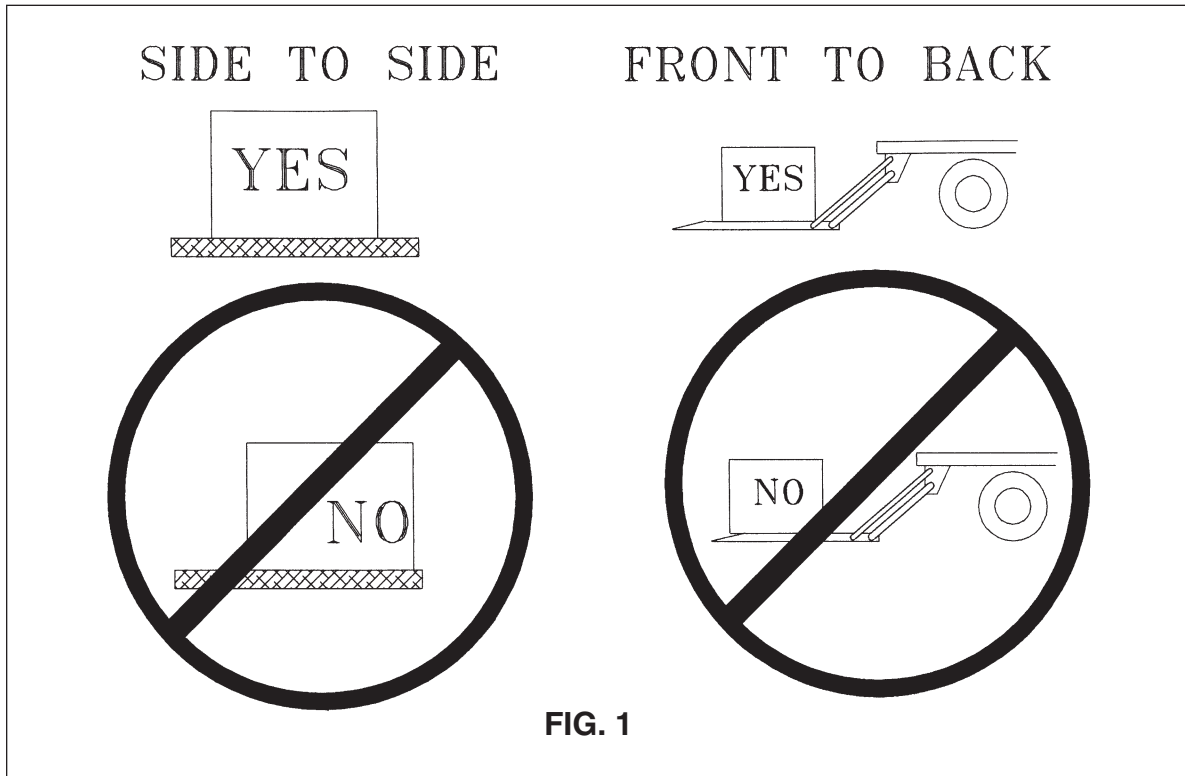


FIG. 1

## **OPERATING INSTRUCTIONS**

### **CAUTION:**

Be sure to operate liftgate at a safe distance and never improperly load platform as this may cause personal injury or damage to the liftgate.

### OPENING OF PLATFORM

1. Push raise switch up slightly to remove pressure from slider stop pins.
2. Remove both street side and curb side pins.
3. Lower platform and at the same time raise platform latch. Platform will unfold automatically as it passes by the cams.

### LOADING AND UNLOADING

4. Raise or lower platform to the desired level for loading or unloading.

### DOCK LOADING

5. Push raise switch up slightly to remove pressure from slider stop pins.
6. Remove both street side and curb side pins.
7. Lower platform with latch engaged until the desired height is reached.

### CLOSING OF PLATFORM

8. Grasp cam follower handle on curb side and rotate clockwise until it stops.
9. While holding handle in place, raise platform until it starts to fold and release handle. Continue to raise until sliders contact upper stop pins.
10. Replace slider stop pins on both curb and street sides before transit.

## MAINTENANCE GUIDE

The following inspection and maintenance operations should be performed at the recommended intervals or anytime the liftgate shows signs of abuse, and improper or abnormal operation.

### MONTHLY INSPECTION AND MAINTENANCE

Operate the liftgate throughout its entire operational cycle and check the following:

1. Check that there are no unusual noises or vibrations.
2. Check that the platform is level when raised to bed height. If adjustments are necessary, this can be done by adjusting the locknuts on the U-bolt thru the platform block.
3. Check for apparent damage to the liftgate such as bent or distorted members, any cracked welds, which may have resulted from overloading or abuse.
4. Check for excessive wear in the following areas:
  - A. Roller assemblies on slider
  - B. Platform and hinge pins and pivot plates
  - C. Platform support chains and chain support plates
  - D. Lifting cable which is frayed or worn
  - E. Cable sheaves and bearings
5. Check that all platform pivot pins are in place and retained by their proper retainers.
6. Check that all protective covers and guards are properly in place and secured.
7. Check for oil leaks in these areas:
  - A. Lift cylinder
  - B. Hydraulic hose – replace if it shows signs of wear or cracking.
  - C. Hydraulic fittings – tighten or replace as may be required to stop leakage.
8. Check the oil level in the hydraulic reservoir located in the pump enclosure. With the platform open and at ground level, the oil should be within .50” from the top of the reservoir. See chart below.

HYDRAULIC FLUID CHART	
Temperature Range	Acceptable Fluids
-75 to 165° F	Exxon Univis J-26
-20 to 130° F	Dexron III Exxon Superflo ATF
-50 to 80° F	Shell Donax TG Shell Aero Fluid 4 Mobil Aero HFA Exxon Univis J-13 MIL H-5606

9. Check that all wiring and battery cable connections are tight and free of corrosion.

10. Lubrication of the VL series gate should as follows for all user conditions:

<u>Area of Tailgate</u>	<u>Type of Lubrication</u>	<u>Frequency</u>
Platform Pivots	Grease*	100 cycles
Slider rails	SAE 10 to 20 oil	100 cycles
Lifting Cable	SAE 10 to 20 oil	100 cycles
Chain Anchor Links	SAE 10 to 20 oil	100 cycles
Pump Oil Change	See chart	Yearly
Lift Cable & Sheave Change		5000 cycles
Cam Follower Rollers	Grease*	100 cycles
Platform Hinges	Grease	100 cycles

\* See the parts list for the location of the grease zerks.

For -40 to 120° F use #0 Grade grease.

For -20 to 200° F use #1 Grade grease.

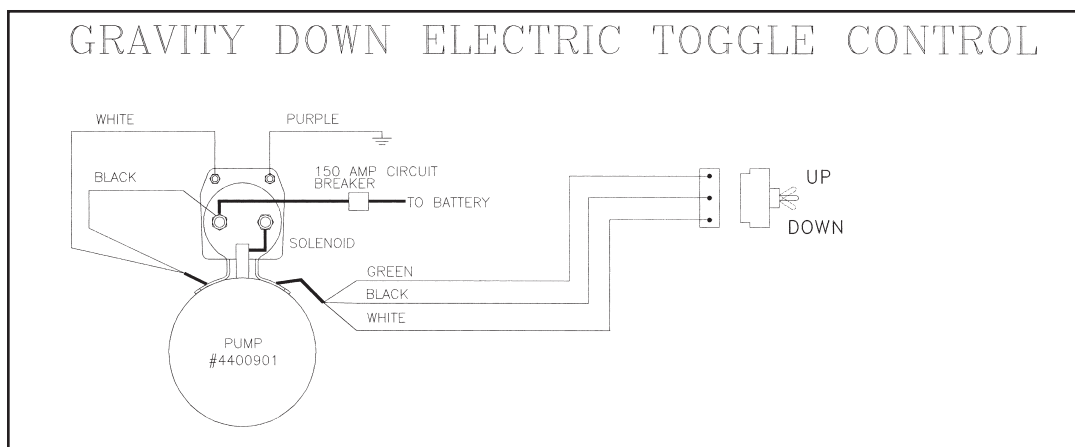
11. Check the pump relief pressure and also the motor amperage at this pressure. These values should be as follows:

Model	Max Amp Draw	Relief Pressure (psi)
VL30	165	1300
VL40	195	1750
VL50	200	2050

### SEMI-ANNUAL INSPECTION

1. Perform the procedures outlined in the “Monthly Inspection and Maintenance.”
2. Inspect pump motor by:
  - A. Disconnecting battery cable
  - B. Remove motor end cover
  - C. Examine the armature brushes for wear. (Brushes should be replaced if they are less than .12” long).
  - D. Clean out all residue from inside of the motor housing.
  - E. Apply several drops of light weight machine oil to the armature shaft bearing in the motor end.
3. If the hydraulic oil in the reservoir is contaminated:
  - A. Unfold platform and lower platform to the ground until the cylinder is fully extended.
  - B. Drain the oil from the system and flush the entire system.
  - C. Remove the reservoir from the pump and clean the suction line filter. Also clean out any contaminants from the reservoir. Remount the reservoir when completed.
  - D. Replace the oil as outlined in Section 8 under Monthly Maintenance and Inspection.

### ELECTRICAL PICTORIAL



## INSPECTION AND LOCATION OF DECALS

Inspect all decals listed below to be certain they are in the proper location and they are legible.

**ALL DECALS MUST BE IN PLACE AND LEGIBLE OR ALL WARRANTIES ARE VOID!**

Item	Part Name	Part Number
1	Warning Decal-off center	4671050
2	PTO Decal	4650140
2	Fast Idle Decal	4650150
3	No Riding Decal	4609
4	Operating Decal	4650720
5	Capacity Decal 3000#	4650120
5	Capacity Decal 4000#	4650130
5	Capacity Decal 5000#	4607-031
6	Danger Decal-pinch point	4650790
7	Warning Decal-cover	4650760
8	Caution Decal-working area	4650770
9	Toggle Switch Decal	4650820
10	Reflector (3)	5705
11	Thieman Nameplate	4650801
12	Wiring Decal	4616
13	Warning Decal	4620

