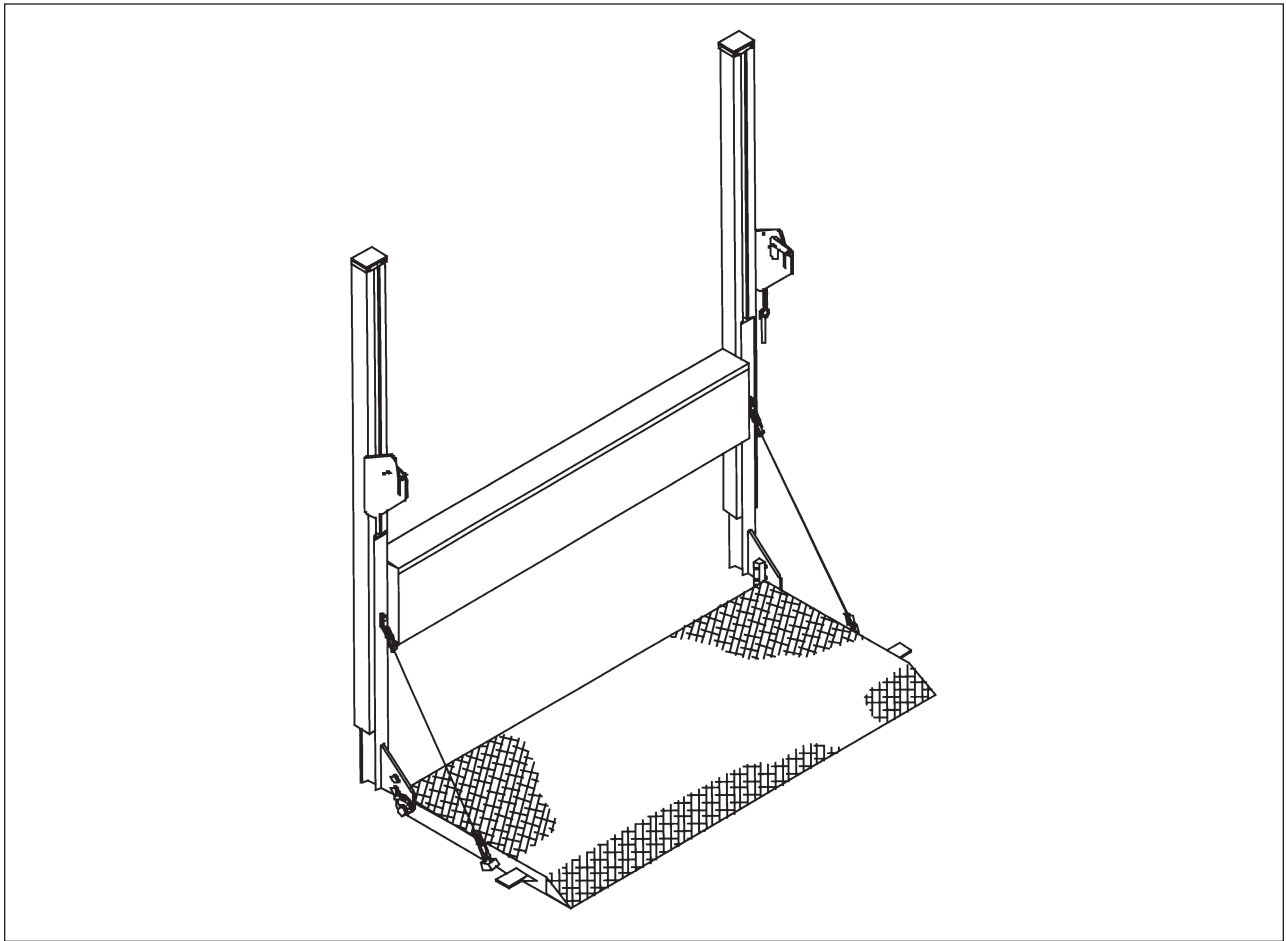


# **TVL** *SERIES*

**Railgates By THIEMAN**

## **TVL 125, TVL 16, TVL 125A, TVL 16A 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: When Ordering Parts Be Sure To Include This Information!**

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 TVL 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 and material – steel or aluminum
4. Part number
5. Description
6. Quantity required

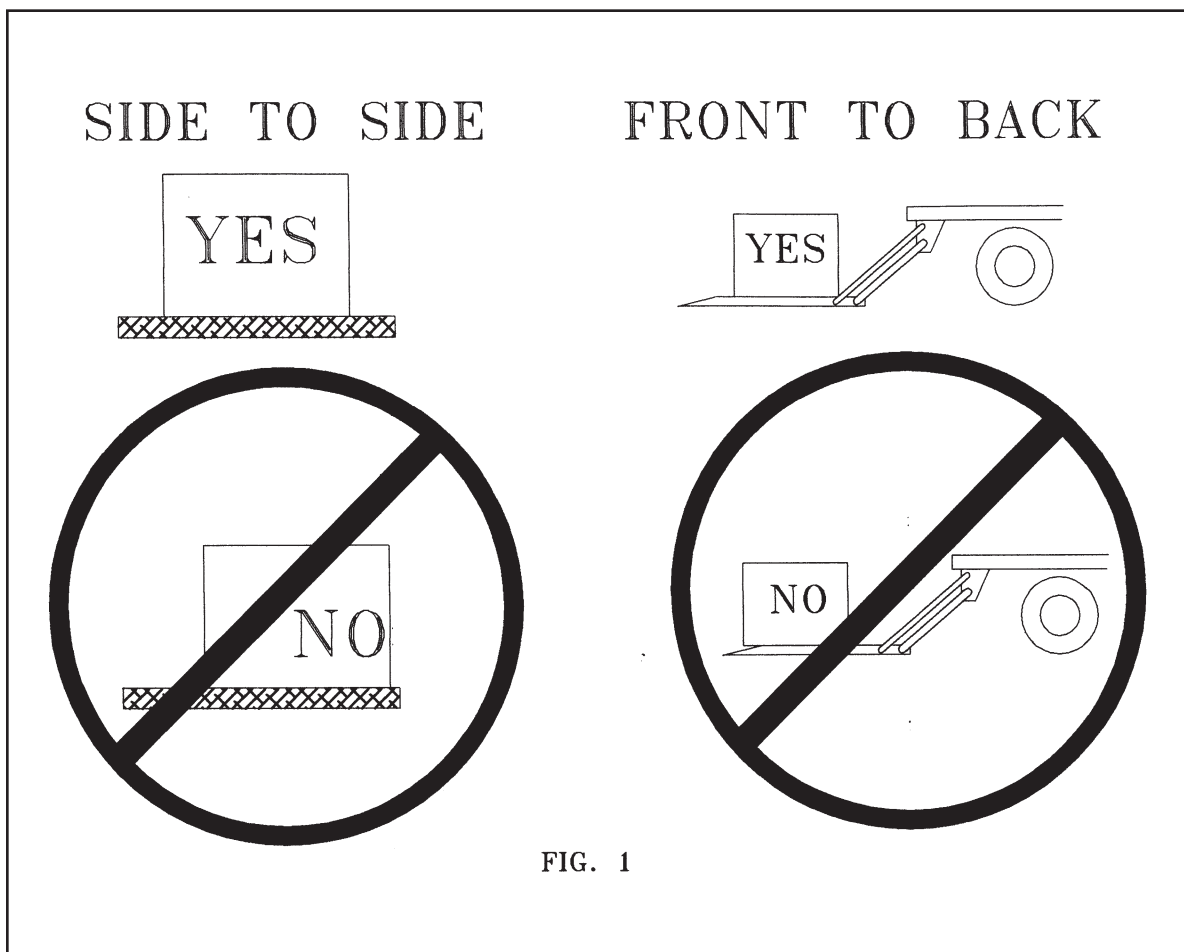
## **WARNING!**

The following list of warnings are to be read before operating the TVL 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 TVL series liftgate differs with each model as follows:
  - TVL 125 - 1250 lbs. Maximum Load
  - TVL 16 - 1600 lbs. Maximum Load
- +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 cam latches properly pinned 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.
- +DO NOT ride the liftgate, it is not intended as personnel lift.
- +This liftgate is intended for the use of loading and unloading cargo only, and it 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.

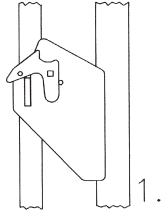


# OPERATING INSTRUCTIONS

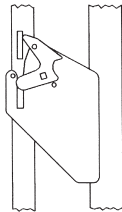
## CAUTION:

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.

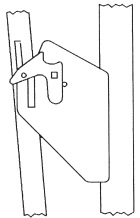
### OPENING OF PLATFORM



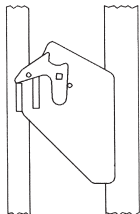
1.



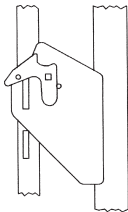
2.



3.



4.



5.

1. Remove latch pin and raise platform until it is completely out of the resting plates. Lower platform so guide plate rides over cam and is below resting plate. See Illustrations.

2. Lower platform to a comfortable height for unfolding. Unfold the platform manually to the horizontal position.

### LOADING AND UNLOADING

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

### CLOSING OF PLATFORM

4. Fold platform up manually and raise until guide plates raise locking cam and are free to drop into resting plates.

### LIFTGATE TRANSIT

5. Lower platform until guide plates are in resting plates completely. Push latch pin in hole through resting plate and cam to secure platform.

## 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 nuts (A) on U-bolt (B) on platform block (C). See Figure 2.

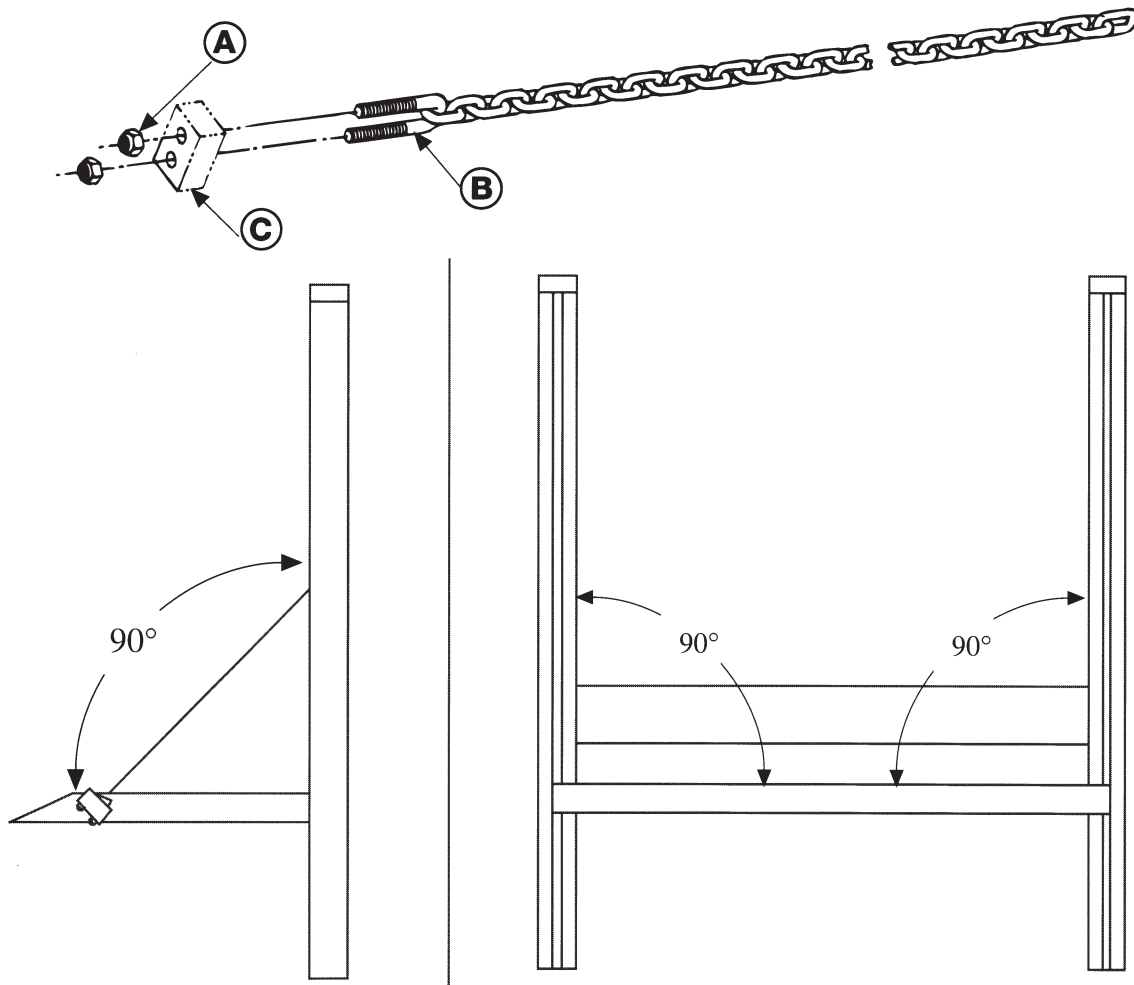


FIG. 2.

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 any excessive wear in the following areas:
  - A. Roller and pin assemblies
  - B. Platform and hinge pins and pivot plates
  - C. Platform support chains and chain anchor points
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 cylinder housing. With the platform open and at ground level, the oil should be within 1/2 inch from the top of the reservoir.  
See chart below.

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

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

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

<u>Area of Tailgate</u>	<u>Type of Lubrication</u>	<u>*Frequency</u>
Slider Rails	SAE 10 to SAE 20 oil	50 cycles
Lift Chain	SAE 10 to SAE 20 oil	100 cycles
Chain Anchor Links	SAE 10 to SAE 20 oil	100 cycles
Locking Cams	SAE 10 to SAE 20 oil	100 cycles

\*NOTE: TVL gates which see less than 50 cycles per week must be lubricated in the areas listed above no less than once a week. Once lubricated, run the gate up and down through one complete cycle to spread lubricant more evenly.

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)
TVL125	160	1950
TVL16	185	2500

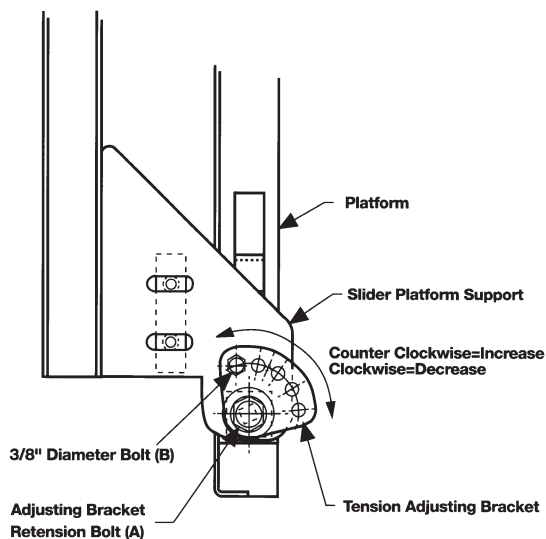


Fig.3

12. Torsion bar adjustment (See figure 3).

- A. Place platform in stowed (vertical) position.
- B. Remove 5/8" diameter bolt (A) from center of tension adjusting bracket.
- C. Place 1/2" square breaker bar in the square hole of the adjusting bracket pin.
- D. Turn breaker bar clockwise to relieve tension on 3/8" diameter bolt (B) and remove it from the bracket.
- E. To increase tension, rotate bracket counterclockwise until desired tension is reached. Line up hole in bracket to hole in slider platform support and replace bolt (B).

## 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 1/8" long).
  - D. Clean all residue out from inside of the motor housing.
  - E. Apply several drops of light weight machine oil to the armature shaft bearing in the motor end cover and reassemble the motor end cover.

3. If hydraulic oil in the reservoir is dirty:

- A. Unfold platform and lower platform to the ground so the cylinder is fully retracted.
- B. Drain the oil from the hydraulic 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.

## INSPECTION AND LOCATION OF DECALS

Inspect all decals listed below to be certain that 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	4671050
2	PTO Decal	4650140
2	Fast Idle Decal	4650150
3	Danger Decal	4609
4	Operating Decal	4650780
5	Capacity Decal 1250#	4650060
5	Capacity Decal 1600#	4650750
6	Warning Decal	4650790
7	Warning Decal	4650760
8	Caution Decal	4650770
9	Reflector(3)	5705
10	Thieman Nameplate	4650801
11	Toggle Switch Decal	4650820
12	Wiring Decal	4617
13	Warning Decal-High Pressure	4620
14	Lubrication Decal	4662
15	Lube Location Decal (4)	4663

