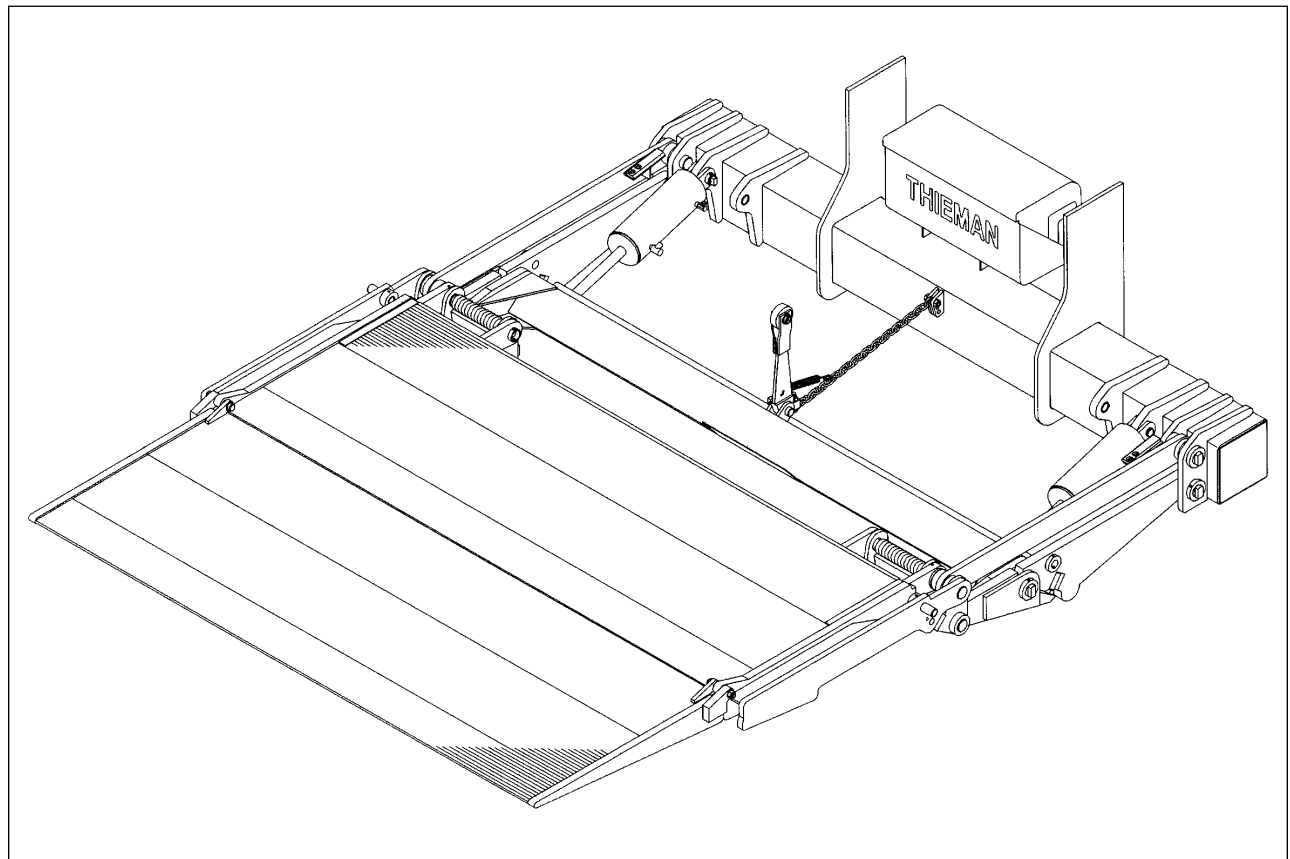


# STOWAWAY

Tailgates By THIEMAN

## LRST-40

# 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.

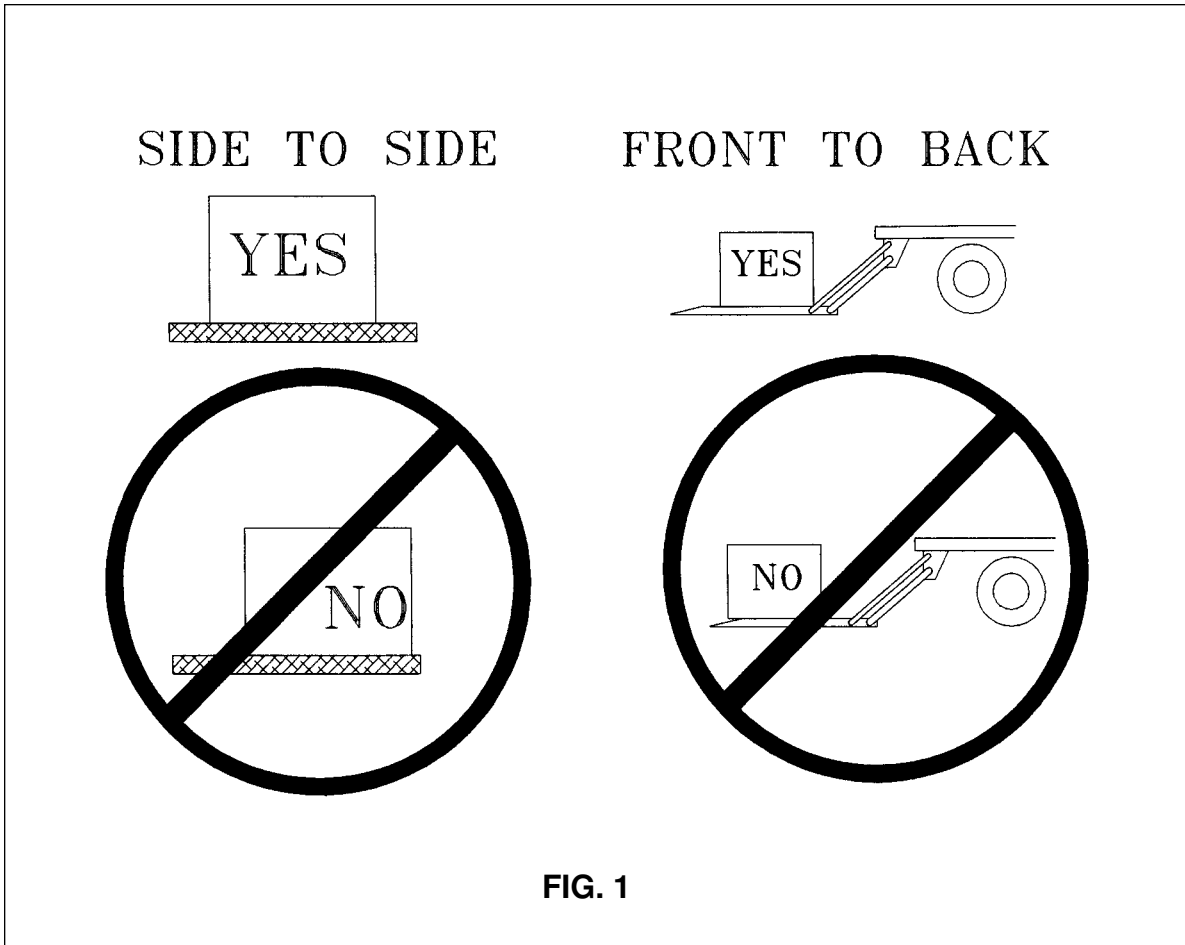
## **WARNING!**

The following list of warnings are to be read before operating the LRST40 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 LRST40 series liftgates is 4000 lbs.
- +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 the operation of the liftgate.
- +Keep hands and feet clear of all pinch points.
- +The platform must be in the closed position and the latches properly engaged before transit.
- +Always load as close to the center of the platform and as close to the vehicle 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.
- +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 qualified to do so.
- +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 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.



## 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.

### UNFOLDING OF PLATFORM

1. Raise platform by pushing toggle switch up until stow pins on platform are off the spacer latches.
2. Move spacer handle to position 1 to disengage spacer latches.
3. While spacer handle is in position 1 lower the platform by pushing toggle switch down until lift arms hit the ground.
4. Grasp curb side platform handle and rotate platform out to horizontal position. Unfold the extension.

### RAISING OF PLATFORM

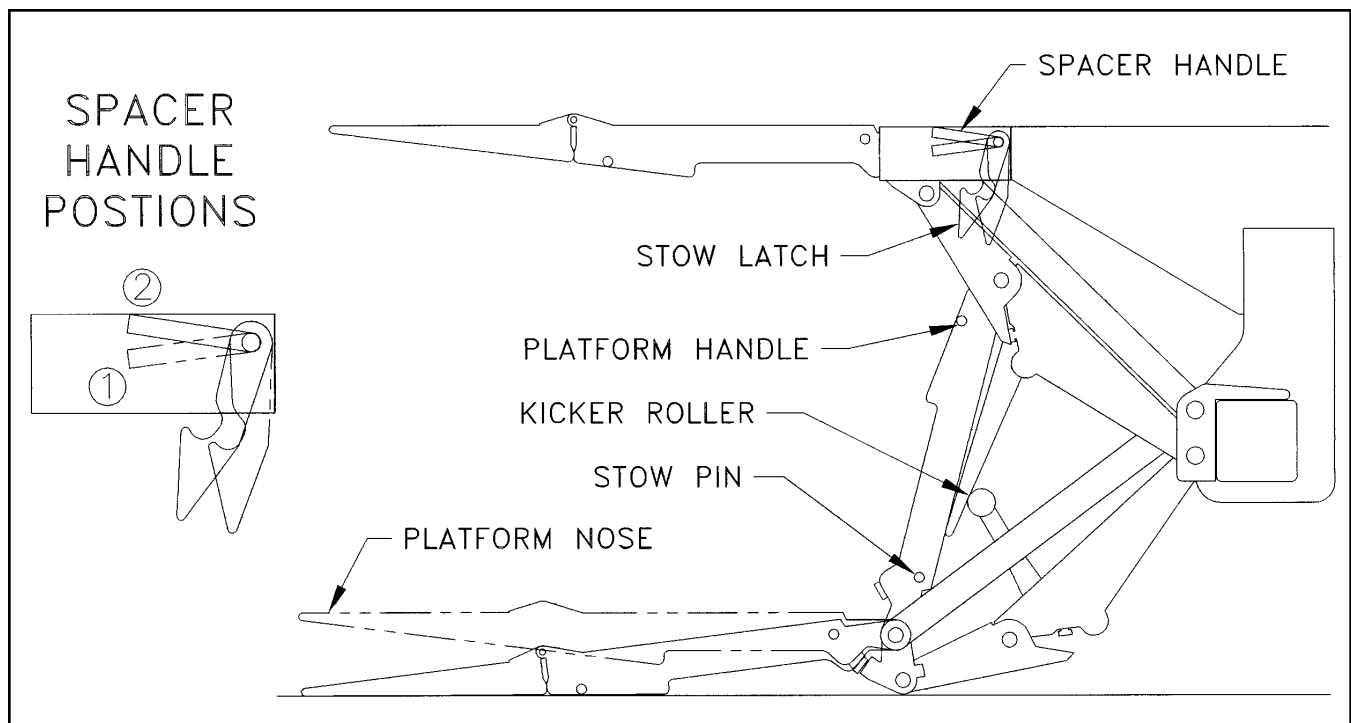
5. Push switch up to raise platform to bed height. Platform will level first then raise.

### LOWERING OF PLATFORM

6. Push switch down to lower platform until platform nose tilts to ground. Arms hit first then platform tilts.

### CLOSING OF PLATFORM

7. Lower the platform until the arms hit the ground.
8. Fold over extension and grasp platform handle to raise manually past the vertical position, until the platform contacts the kicker.
9. Push switch up to raise completely until stow pins and spacer latches have engaged for stowing.



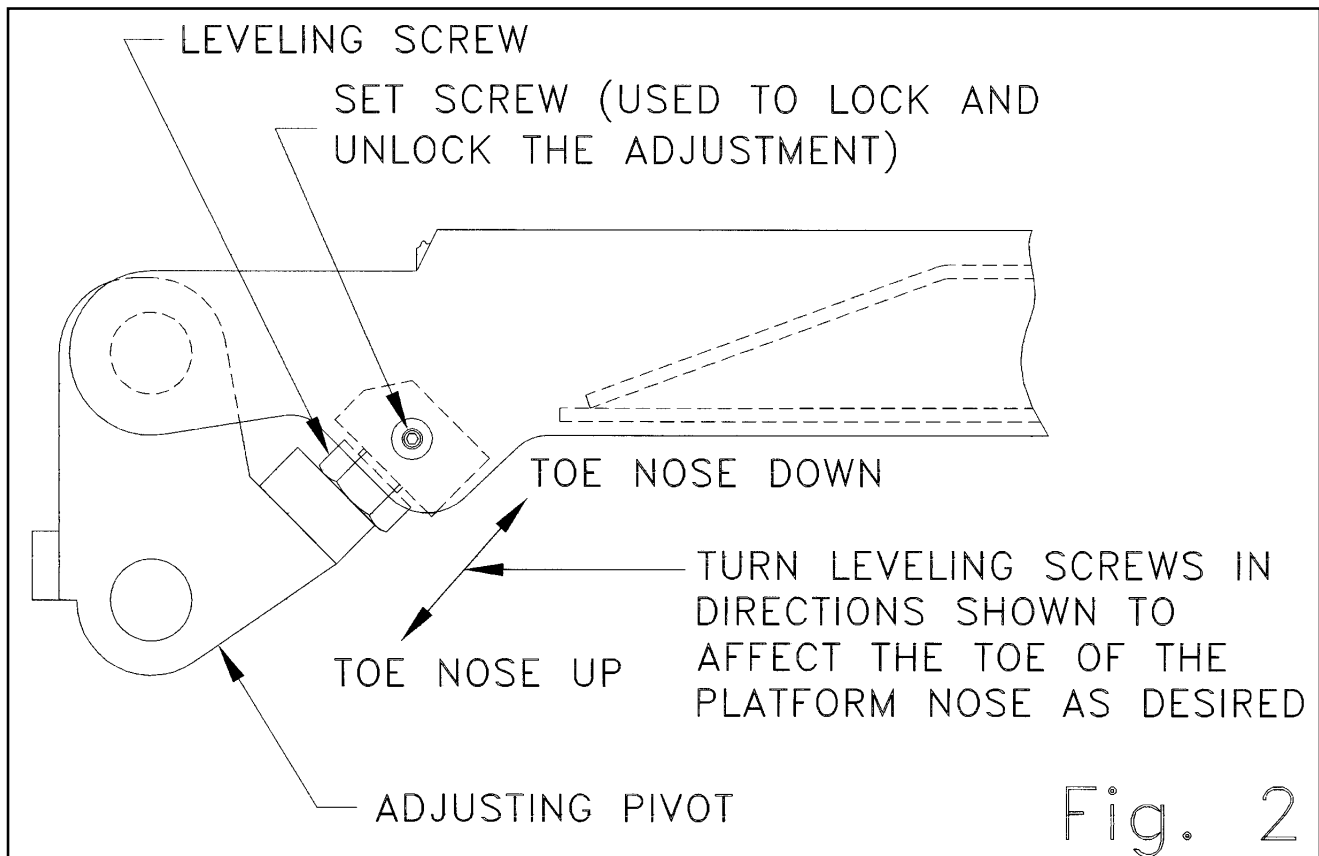
## MAINTENANCE GUIDE

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 when the truck is on level ground and the platform is in its "leveled" and unloaded position that the entire load surface is leveled or toed up at the ramp tip so that when the usual load is placed on it, it becomes leveled under load. For instructions on adjusting leveling screw and platform toe see figure 2.
3. Check platform height relative to the spacer. If platform is lower, adjust cylinder with a 13/16 wrench to obtain necessary height.
4. Check for apparent damage to the liftgate such as bent or distorted members, any cracked welds, which may have resulted from overloading or abuse.
5. Check for any excessive wear in the following areas:
  - A. Platform hinge pins and bushings
  - B. All cylinder pins and bolts and bushings
6. Check that all platform pivot pins are in place and retained by their proper retainers.
7. Check that all protective covers and guards are properly in place and secured.
8. 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.



9. Check the oil level in the hydraulic reservoir. With the liftgate in the stowed position, the oil should be within 1/2 inch from the top of the reservoir. See chart below for oil applications.
10. Check that all wiring and battery cable connections are tight and free of corrosion.
11. Lubrication of the LRST 40 series liftgate should be as follows for all user conditions:

<u>Area of Tailgate</u>	<u>Type of Lubrication</u>	<u>Frequency</u>
Spacer Latches	SAE 10 to SAE 20 oil	50 cycles
Pump Oil Change	See Chart Below	Yearly

\*The pivot points of the LRST 40 have special bushings which do not require lubrication.

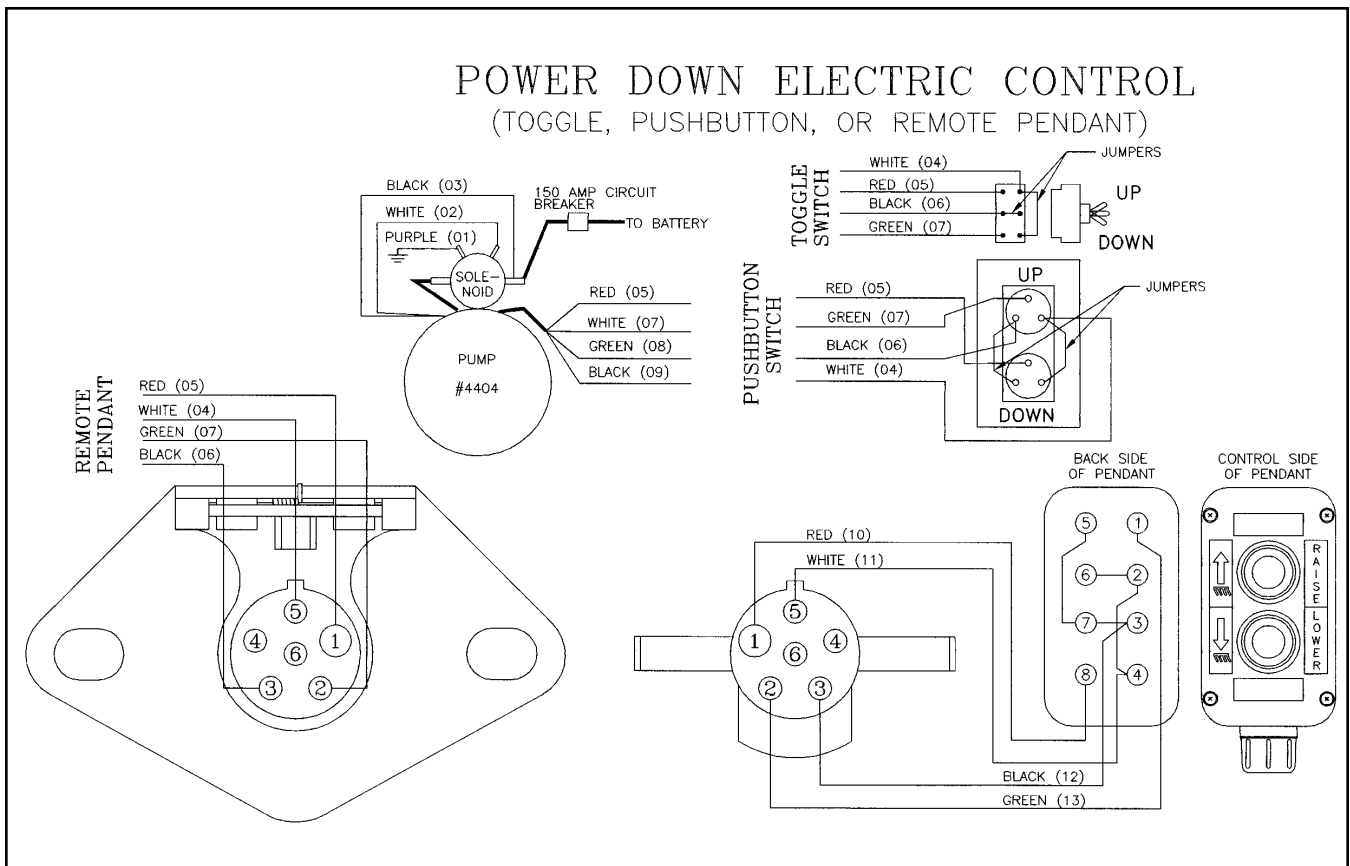
<b>HYDRAULIC FLUID CHART</b>	
Temperature Range	Acceptable Fluids
-75 to 165° F	Exxon Univis J-26
-20 to 130° F	Dexron III Exxon Superflo ATF Shell Donax TG
-50 to 80° F	Shell Aero Fluid 4 Mobil Aero HFA Exxon Univis J-13 MIL H-5606

12. 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)
LRST 40	260	2650

## SEMI-ANNUAL INSPECTION

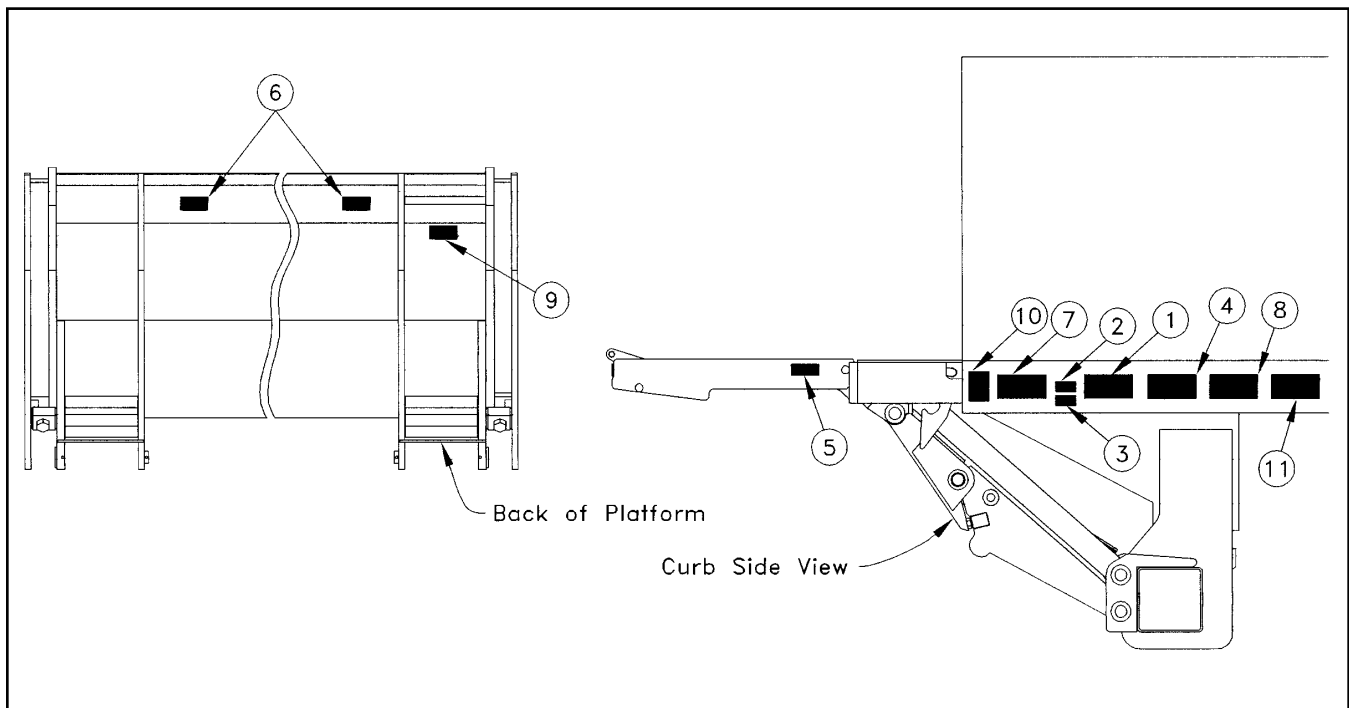
1. Perform the procedures outlined in the "Monthly Inspection and Maintenance."
2. Inspect pump motor by:
  - A. Disconnecting battery cable
  - B. Remove motor end cover
  - C. Examine the armature brushes for wear. (Brushes should be replaced if they are less than 1/8" long).
  - D. Clean all residue 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 the hydraulic oil in the reservoir is dirty:
  - A. Unfold platform and lower platform to the ground. Raise platform to bed height so cylinders are fully retracted. Support platform in this position with a lift truck or crane.
  - B. Drain the oil from the hydraulic system and flush the entire system.
  - C. Remove reservoir from pump and clean suction line filter. Also, clean out any contaminants inside reservoir. Remount reservoir when completed.
  - D. Replace the oil as outlined in Section 9 under Monthly Maintenance and Inspection.





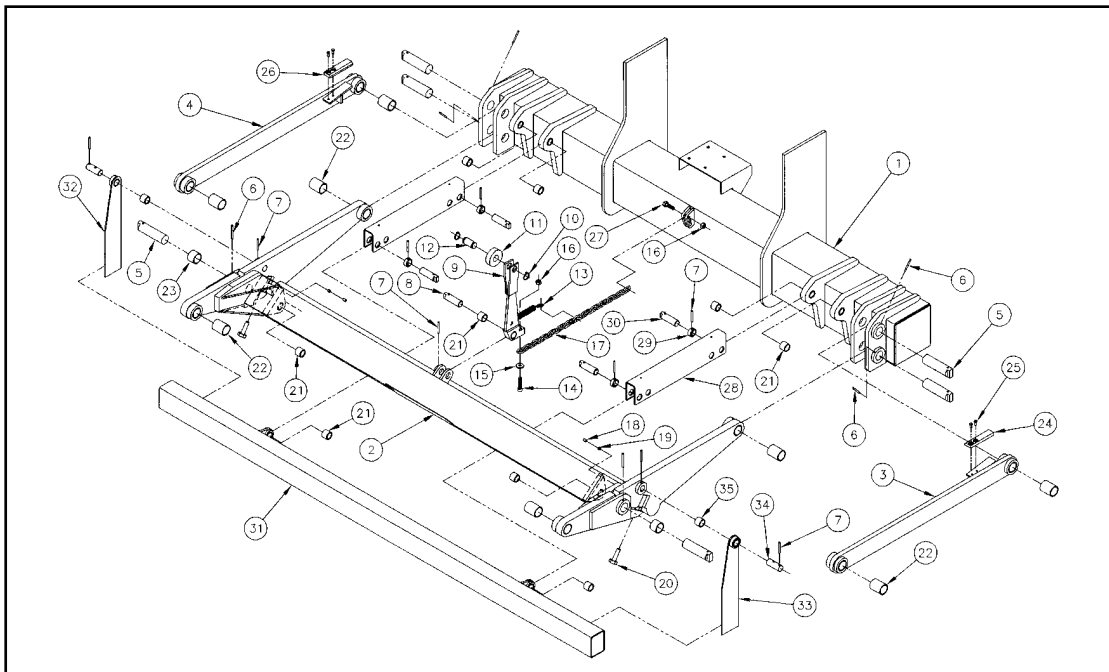
## INSPECTION AND LOCATION OF DECALS

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	4669
5	Capacity Decal 4000#	4650130
6	Warning Decal	4604
7	Warning Decal	4650530
8	Caution Decal	4650770
9	Handle Decal	4605
10	Warning Decal-High Pressure	4620
11	Wiring Decal	4614



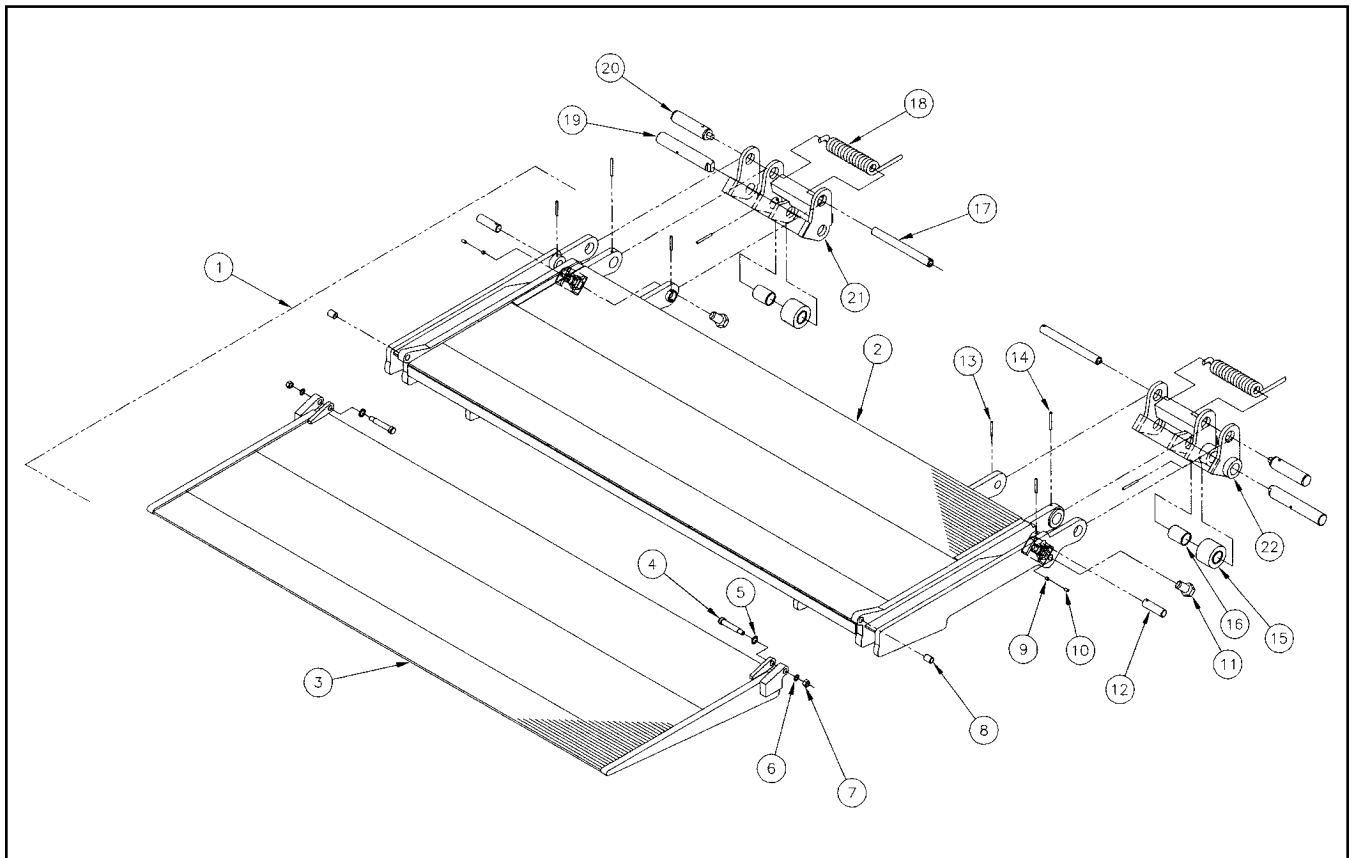
# TRUNNION, LIFT ARM, IDLER ARM, AND \*OPTIONAL REAR END PROTECTION ASSEMBLY

Item	Part Number	Description	Qty.
1	31411	Trunnion asm - Includes item 21	1
2	31410	Lift arm asm - Includes items 5,6,18,19,20,21,22,23	1
3	31388-002	Idler arm asm RH - Includes item 22	1
4	31388-001	Idler arm asm LH - Includes item 22	1
5	5071	Pin	6
6	5708-009	Spring pin	6
7	5708-001	Spring pin	1 or *7
8	5024	Pin	1
9	31398	Kicker asm - Includes items 10,11,12,21	1
10	5781008	Retaining ring	2
11	5701370	Roller	1
12	5031	Pin	1
13	5100180	Spring	1
14	8427570	Screw .44-14 x 2.50	1
15	8120396	Flatwasher .44	1
16	9414073	Locknut .44	2
17	4101-017	Chain	1
18	8108-005	Set screw .38	2
19	4220240	Nylon insert	2
20	8271771	Screw .75-10 x 2.00	2
21	5504-001	Bushing	7 or *9
22	5504-014	Bushing	8
23	5504-015	Bushing	2
24	5702202	Wear pad RH	1
25	8449646	Self tapping screw	4
26	5702201	Wear pad LH	1
27	5701910	Bolt .44-14 x 1.50	1
*28	27123	Support arm	2
*29	3016	Collar	4
*30	5024	Pin	4
*31	31400	Guard weld - Includes item 21	1
*32	31399-001	Fold arm weld-LH - Includes item 22	1
*33	31399-002	Fold arm weld-RH - Includes item 22	1
*34	5073	Fold pin	2
*35	5504-005	Bushing	2



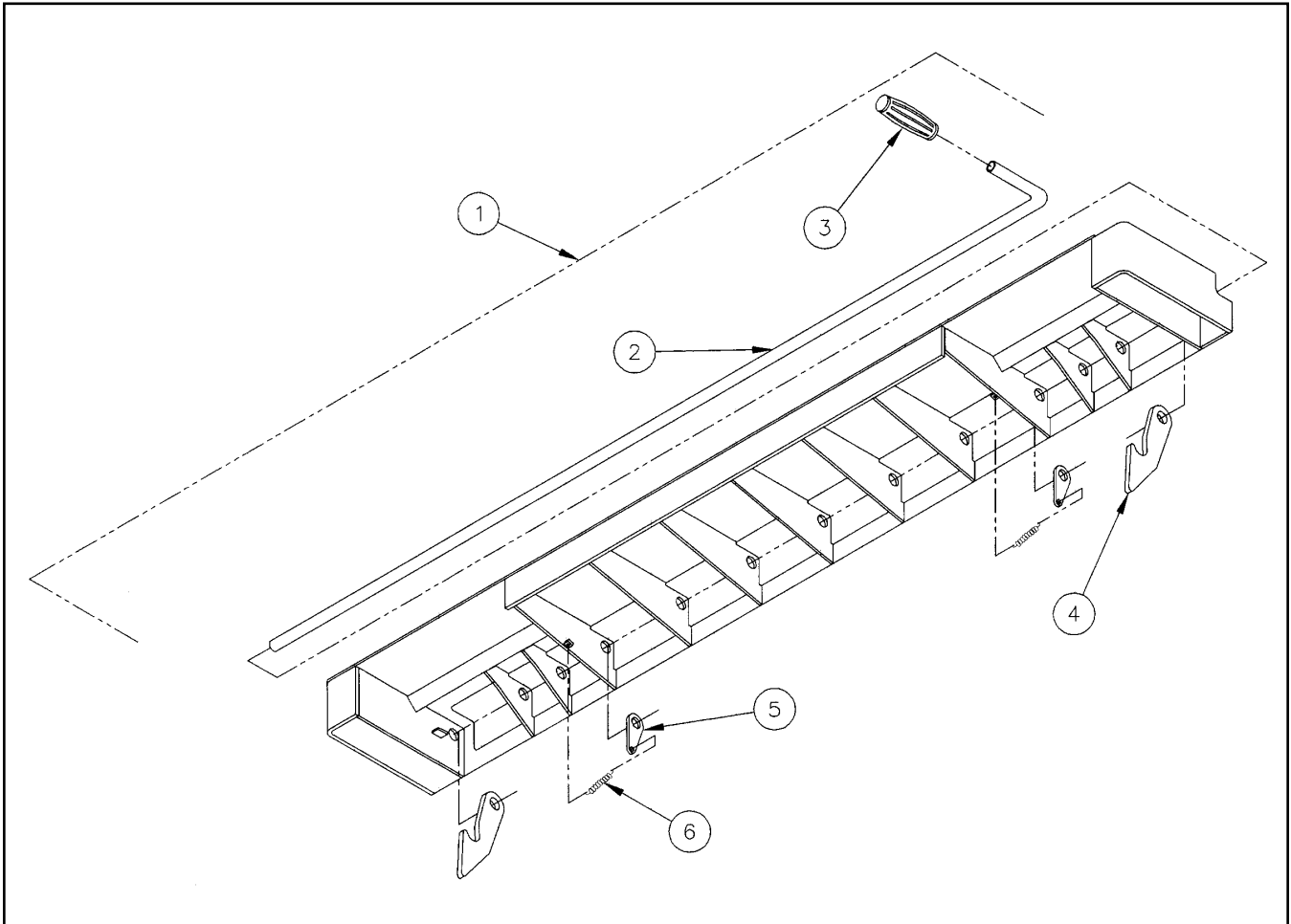
## PLATFORM-TORSION SPRING ASSIST ASSEMBLY

Item	Part Number	Description	Qty.
1	3442	Platform asm - Items 2 thru 7	1
2	31401	Platform main section	1
3	31407	Platform extension	1
4	8119	Shoulder bolt .62	2
5	8106-009	Lockwasher .62	2
6	8106-008	Lockwasher .50	2
7	9414074	Locknut	2
8	5504-013	Bushing	2
9	4220240	Nylon insert	2
10	8108-005	Set screw .38	2
11	8114-002	Screw 1.00-8 x 2.00	2
12	5072	Stow pin	2
13	5708-001	Spring pin .25 x 2.00	4
14	5708-009	Spring pin .25 x 2.50	4
15	31379	Roller asm	2
16	5504-014	Bushing	2
17	3057	Spring tube	2
18	5101260	Spring	2
19	5074	Pin	2
20	5070	Pin	2
21	31405	Pivot hinge weld-LH	1
22	31406	Pivot hinge weld-RH	1



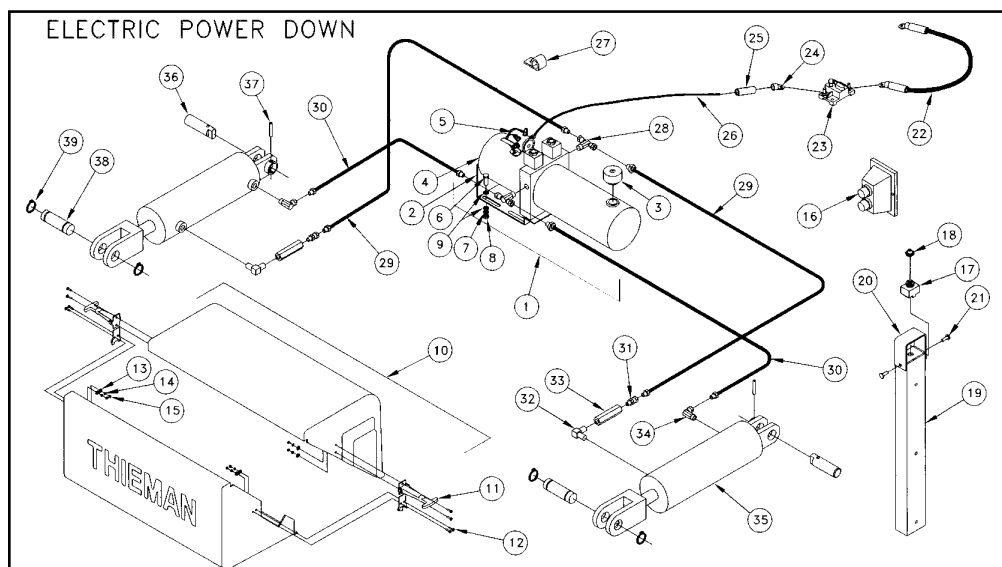
## SPACER ASSEMBLY

Item	Part Number	Description	Qty.
1	3502	Spacer asm - Includes items 2 thru 6	1
2	2404-001	Control shaft	1
3	5701043	Handle grip	1
4	27117	Latch	2
5	2901170	Lever	2
6	5101100	Spring	2



## PUMP ASSEMBLY-TOGGLE AND PUSHBUTTON CONTROL

Item	Part Number	Description	Qty.
1	4404	Pump asm - Includes items 2 thru 5	1
2	4421420	Pump bracket	1
3	4420409	Breather	1
4	4423521	Motor heavy duty 8112	1
5	4421620	Solenoid	1
6	8180122	Bolt .38-16 x 1.00	4
7	8120382	Lockwasher	4
8	8120377	Nut .38	4
9	8120388	Flatwasher	8
10	3717	Pump enclosure asm - Includes items 11 thru 15	1
11	5758	Rubber T-handle asm	2
12	8110-006	Screw #6-32 x .50	8
13	8107-006	Flatwasher #6	8
14	8106-006	Lockwasher #6	8
15	8103-017	Nut #6	8
16	4422860	Pushbutton	1
17	4301740	Toggle switch	1
18	4301750	Toggle seal	1
19	3039	Tube	1
20	31225	Cap	1
21	5793010	Self tap screw	2
22	4318-001	Cable asm - 2 Ga. x 2 ft	1
23	4301770	Circuit breaker - 150A	1
24	4350	Cable lug	1
25	4319-002	Heat shrink	1
26	4300030	Battery cable -2 Ga. x 25 ft	1
27	5701260	Cable retainer	12
28	4900080	Swivel tee	2
29	4960001	Hose 60.00	2
30	4965020	Hose 51.00	2
31	4905	Straight swivel M-F	2
32	4900450	.25 male elbow	2
33	4906-006	Flow Control 1.0 GPM	2
34	4900000	.25 swivel elbow	2
35	31394	Cylinder 3.5 Bore x 8 Stroke	2
36	5024	Pin	2
37	5708-001	Spring pin	2
38	5009	Pin	2
39	5781008	Retaining ring	2



## **PARTS ORDERING PROCEDURE**

When ordering parts, please include all the information asked for 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 liftgate serial numbers can be found on the tag located on the outside of the curb side post near the bottom.
2. Model Number and Capacity.
3. Platform size and Material - Steel or Aluminum.
4. Part number.
5. Description.
6. Quantity required.

**MAIL OR PHONE YOUR REQUEST TO:  
THIEMAN TAILGATES, INC.  
600 E. WAYNE ST.  
CELINA, OH 45822  
PHONE: (419) 586-7727  
FAX: (419) 586-9724**

### **IMPORTANT**

**IT IS IMPORTANT THAT EVERY VEHICLE THAT HAS A THIEMAN LIFTGATE HAVE LEGIBLE WARNING AND OPERATION DECALS CLEARLY POSTED ON THE VEHICLE AND AN OWNER'S MANUAL IN THE VEHICLE AT ALL TIMES AS A GUIDE FOR PROPER OPERATION AND MAINTENANCE.**

**ADDITIONAL WARNING DECALS, OPERATION DECALS AND OWNER'S MANUALS CAN BE OBTAINED FROM THIEMAN TAILGATES, INC.**

