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Owner's Manual

GTSL-33, 44, 55

3300, 4400, 5500 lb. Capacity Flipaway Liftgates



GR10039

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Improper installation of this liftgate could result in severe personal injury or death. Read and understand the contents of these instructions before proceeding.

When installed, this liftgate must not alter or prevent vehicle compliance to any existing state or federal standards.

Each chassis manufacturer's recommendations should be consulted for compliance.

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INTRODUCTION

If anyone observes improper installation, improper operation, or damage, they should immediately contact a qualified person for assistance and correction. We strongly urge anyone that has any questions or doubts as to the installation, condition, use, operation, maintenance or repair of the liftgate to contact us at Waltco where we have qualified personnel that will be happy to assist you. Telephone numbers and addresses of these locations are listed in the Owner's Manual and Installation Instructions.

INSTALLATION

Waltco liftgates should only be installed by those with sufficient basic skills to understand the installation and operation of the liftgate, along with the equipment on which the liftgate is being installed. Waltco's installation instructions are not intended to give rationale for all the instructions that are given; however, it is the intent of these instructions to give the installer both the operations and what we believe to be the most desirable sequence of implementing these operations. These instructions can in no way expand into an area where they will replace a qualified person, or clear thinking and a basic knowledge that must be possessed by the installer.

It has been our experience that a knowledgeable journeyman following these instructions and observing the operation of the liftgate will have a sufficient comprehension of the liftgate to enable this person to troubleshoot and correct all normal problems that may be encountered.

Failure to follow the installation instructions, adjustments and mounting dimensions may result in improper and unsafe operation of the liftgate. Unauthorized alterations of the liftgate can cause an undesirable and dangerous condition.

OWNER'S MANUAL

The Waltco Owner's Manual is intended to act as a guide for operation and routine maintenance but is no way intended to encourage usage or repair of the liftgate by those who are not qualified to do so.

The contents of the owner's manual include, but are not limited to general operation instructions, routine lubrication, parts lists, and an outline of things that should be checked but may not be obvious to those not technically qualified. This manual assumes the liftgate is properly installed, undamaged and operates correctly. Improper installation, improper operation, or damage should be immediately corrected by a qualified person.

INSPECTION

As part of the regular inspection of a liftgate and after damage or suspicion of an overload, inspect for wear or structural damage and make necessary repairs or replacements. Check all structural components and their attachment to the liftgate for cracked welds, loose fasteners, wear and part deformation. Check cylinder and hose for leaks. Inspections and repairs should be made by a qualified mechanic.

REPLACEMENT PARTS

Use only Waltco original equipment replacement parts. Components of other liftgate manufacturers may outwardly appear to be the same but are not interchangeable with Waltco products. Waltco components are specifically designed for safety requirements, reliability and compatibility with our products. Refer to your Waltco parts manual when ordering parts. NOTE: When ordering, give model and serial number of liftgate.

DECALS

It is important that every vehicle that has a WALTCO Liftgate have legible 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 DECALS and OWNER'S MANUALS can be obtained from WALTCO TRUCK EQUIPMENT COMPANY 80101388 Rev 02 EO 6156

Chapter 1 **A** Safety Information

WARNING

Read, understand, and follow all of the warning listed below.

Failure to follow these warning could result in severe personal injury or death.

- Read and understand the Owner's Manual, all decals and warning on liftgate before operating liftgate.
- Do not operate liftgate without a thorough knowledge and understanding of the operation of the liftgate.
- Liftgate hazards can result in crushing or falling.
- This liftgate is designed for loading and unloading of cargo. If personnel are required to ride liftgate, observe and familiarize yourself with the liftgate operation, decals and manuals. Ensure stable footing at all times.
- Do not ride liftgate with unstable loads.
- Wheeled loads must be properly retained from rolling.
- Tall, high center of gravity loads must be retained from falling over.
- Never overload liftgate: Load platform as close to the vehicle, and towards the middle of the platform as possible. Refer to owner's manual and capacity decal of liftgate for maximum load and load placement.
- Keep hands and feet clear of all potential pinch points.
- Never use liftgate if it makes any unusual noise, has unusual vibration, raises or lowers unevenly, or fails to
 operate smoothly.
- Never use liftgate if it shows any signs of structural damage such as cracked welds, bent or distorted members.
- Do not attempt any repairs unless you are qualified to do so. Care should be taken when work is performed on a disabled liftgate located near moving traffic. When possible the vehicle should be moved away from traffic areas for repair. Precautionary measures should be taken to ensure personal safety including those recommended in Federal Motor Vehicle Safety Standards 571.125.
- When welding to liftgate, or liftgate components, take all necessary safety precautions, including using respiratory protection and other pertinent personal protective gear when welding harmful materials.
- All protective covers, guards, and safety devices must be in place and access doors closed before operating liftgate.
- Do not allow anyone to stand in, or near area, in which Platform will open and close before opening or closing Platform.
- Do not allow anyone to stand near the Platform where a falling load could land on them.
- Platform is always to be properly stored and secured for transit. See the Owner's Manual for details.
- Take care to retain cargo during transit for liftgate Platforms which function as the tailgate or door of the cargo area. Small objects can fall through the space between the vehicle and the folded Platform.
- A Lock-Out device or Shut-Off Switch should always be used to prevent unauthorized use of liftgate.
- For liftgates with Runners, never use liftgate if Runners do not travel freely and smoothly.
- For liftgates with Roller Lifting Chain, the Chain should be replaced every (5) five years or 15,000 cycles, whichever comes first. Replace only with Waltco approved Roller Chain.
- Never transfer loads which exceed lifting capacity on or over any part of the Platform unless the liftgate is equipped with a special reinforced Platform and Platform Support Bars for use when the Platform is used as loading ramp (dock board). Refer to the "Using Platform as a loading ramp" Chapter in the Operation Instructions of the BZ/RZ series Owner's Manual.
- For liftgates equipped with Trailer Hitches, never exceed the rated capacity of the hitch. Do not exceed the vehicle's weight rating. Refer to the vehicle's Owner's Manual.
- Vehicle must comply with all state and federal standards.
- Follow the "Maintenance Guide" chapter in the Owner's Manual.

Chapter 1 **A** Safety Information

Liftgates with Tilt Function

- Proper use of the Control Switches is of extreme importance.
- Improper use of Tilt Switch could cause load to fall from the Platform or damage the liftgate.
- Platform should be in a generally horizontal position when raising or lowering with a load.
- In any tilt position, the Platform may vary from level while raising or lowering the Platform.

Liftgates equipped with spring operated Cam Closer

• Replace Cam Release Spring every five (5) years or 15,000 cycles, whichever comes first.

RGL-Series Liftgates

- Make certain Platform Brake mechanisms are operating properly.
- The Runners are always to remain powered up against the Upstops Pins when in transit.
- Inspect Cables every three (3) months or 750 cycles, whichever comes first. Cables must be replaced if they show signs of wear, distortion, kinking or if any broken wires are visible
- Replace cables every five (5) years or 10,000 cycles, whichever comes first.



This is the safety alert symbol. This manual uses this symbol to alert you to potential personal injury hazards.

Obey all safety messages that follow this symbol to avoid personal injury or death.

SIGNAL WORDS

WARNING

Indicates a potentially hazardous situation, which if not avoided, could result in death or serious injury.

Black letters on an orange background

CAUTION

Indicates a potentially hazardous situation, which if not avoided, may result in minor or moderate injury. May also be used to alert against unsafe practices.

Black letters on a yellow background.

NOTICE

Indicates a potentially hazardous situation, which if not avoided, may result in property damage.



NOTICE

WALTCO warrants its products free of defects in materials and workmanship.

WALTCO will replace components found defective during the warranty period. Labor will be reimbursed according to our flat rate labor schedule at the prevailing shop rate.

Contact our Sales or Warranty departments for the warranty period of your model or for information regarding our flat rate labor schedule.

WALTCO Warranty Claim Procedure

For consideration, all claims must be received within 30 days of repair and include the following information:

- Liftgate Serial Number
- Description of problem and corrective actions
- Itemization of the labor charge to include the number of hours and labor rate

Replacement warranty parts can be obtained by contacting Waltco's Parts Department. Parts must be returned for inspection when requested.

Exclusions:

Waltco's warranty does not include reimbursement for service calls, vehicle rental, towing, travel time, fabrication of parts available from WALTCO, damage from misuse or abuse, negligence, accidents, alteration, loss of income or overtime expense, oil, or normal wear.

Diagnosis and troubleshooting time are included in the flat rate labor times.

Warranty and technical information is available from WALTCO's toll free customer service lines from 8:00 a.m. to 5:00 p.m. EST.

Waltco Lift Corp

285 Northeast Ave, Box 354, Tallmadge, OH 44278

1-800-211-3074, 330-633-9191

Please visit our websites: http://www.waltco.com or http://www.hiab.com

We're behind you all the way!

Chapter 2 Liftgate Terminology

- 1. Deck
- 2. Deck Extension
- 3. Loading Ramp
- 4. Platform Handle
- 5. Torsion Spring
- 6. Mount Tube
- 7. Lift Cylinder
- 8. Lift Arm
- 9. Parallel Arm
- 10. Battery Box

- 11. Pump Box
- 12. Identification Tag
- 13. Slide Tube
- 14. Mount Plate
- 15. Mount Support Tube
- 16. Up-Stops



Chapter 2 Liftgate Terminology

EXPLANATION OF SPECIFICATION TAG					
MODEL NAME	DESCRIPTION	CAPACITY			
GTSL-33	GTSL-33 SLIDER LIFTGATE	3300 LBS.			
GTSL-44	GTSL-44 SLIDER LIFTGATE	4400 LBS.			
GTSL-55	GTSL-55 SLIDER LIFTGATE	5500 LBS.			





Chapter 3 Operations Instructions

POSITION PLATFORM



Always make certain area in which Platform will open is clear.

Push Lower Switch to lower Platform from storage position.

Do not lower Platform to ground level, lower just enough to clear Storage Stops.



Push Open Switch to move Platform to working position.



Lower Platform to ground. Open Platform Extension and Loading Ramps manually. Note! Use handle to open Platform Extension.

Raise Platform almost to bed level. Note! Liftgate has not yet been aligned. Be careful not to hit Trailer with Platform.

Chapter 3 Operations Instructions

CLOSING PLATFORM

Lower Platform to ground.

Close Loading Ramps manually. Close Platform Extension manually.

Note! Use handle to close platform extension.



GR01233



Push In Switch to move Platform under Trailer.



Push raise switch to raise platform to stored position.



Chapter 3 Operations Instructions

MAKE SURE LIFTGATE IS SECURED

Check to ensure Vertical Shoe Plate is behind Stop.

NOTE: Hole in Stop is for padlock provision. Place padlock in hole to lockout liftgate.



Power liftgate up against up-stops.



Chapter 4 Inspection

 MONTHLY INSPECTION Operate the liftgate throughout it's entire operational cycles and check for the following: Apparent damage to the lifting structure, such as bent or distorted members. Cracked welds, which may have resulted from overloading or abuse. Check that the liftgate operates freely and smoothly, and that there are no unusual noises or vibrations. 	GR01242
Inspect for oil leaks in: Hydraulic cylinders Hydraulic hoses. Replace hoses if they show signs of excessive abrasion. Hydraulic fittings and valves. Tighten or replace all hydraulic components as may be required to stop oil leakage.	Inspect all hydraulic components
Check oil level See chart below for proper platform position for oil check. Oil level should be within ½" to fill line (over or above) marked on the side of Oil tank.	

Fill as may be required

Follow oil recommendations.



LIFTGATE POSITION FOR OIL LEVEL CHECK

	Gravity Down Pump:	POWER DOWN PUMP:
Deck should be in this position:	Lowered to Ground Level	Raised to Bed Level

Pasam	mended Fluids		Fill reservoir	
Temperature Range	Acceptable Fluids	Fill with recommended fluid or equivalent.		
0° to 120° F	Waltco Biodegradable		 Fill the reservoir to within 1/2" from the top. 	
0° 10 120° F	Liftlube [™] part #85803860	0	 Fluids are available from the Waltco parts 	
	Shell Tellus S2 V 32	0	Dept. 1-800-411-5685 www.waltco.com	
	Chevron Rando HDZ 32			
-20° to 90° F	Waltco Biodegradable			
-20° 10 90° F	LiftLube Arctic part		NOTE:	
	#85803866		Do not use the following fluids:	
	Waltco All Season Hyd C)il	Brake Fluid	
	Part 85803867	/11	Power steering fluid	
	Shell Tellus S2 V 15		Automatic Transmission Fluid (ATF)	
	Mobil DTE 10 Excell 15			
A good quality SAF 10W	motor oil may also be used in	1		
temperatures above 32°		•	Rev 06	
	•			
BLEEDING CYLINDERS				
Lift cylinders:				
,				
Fully lower platform	a few times. You may have			
	fully extend lift cylinders.			
		1		
			▼ - \lambda	
			GR10046	
SEMI ANNUAL INSPECTIC	N			
Inspect power motor:				
Disconnect battery of	ablo			
	able.	-		
Remove end cover.				
Examine armature b	orushes for wear.		╡ ◎ \	
	e replaced if brushes are	l La	' O O	
less than 1/8" lo	ng).			
	e from inside of motor			
housing.				
	of light weight machine oil			
	of light weight machine oil aring in motor end cover.		Remove cover to	
			check brushes and	
to armature shaft be				

Chapter 4 Preventive Maintenance

Waltco recommends that the GT/GTSL liftgate be inspected at 3 month or 1500 cycle intervals to help assure proper function and operation of the liftgate.

Note: Photocopy the following PM Checklist to help keep track of periodic maintenance on the liftgate. Keep completed form with maintenance records.

For more detailed instructions on the following checklist items, refer to the appropriate sections in this Owner's Manual.

Date:

Inspection/PM performed by:

Trailer/Truck #:

Liftgate Serial #:

Liftgate Model #:

Check appropriate boxes below

	Routine Inspection/PM Procedure						
Inspec	t Liftgate rails	and rollers	s				
ОК	Repair Needed	Corrected	1	Remove rail end caps to check rollers and bearings for wear. Rollers should not be loose. This would indicate worn bearings. A floor jack can be used to lift the weight off the rollers for this inspection			
ОК	Repair Needed	Corrected	2	Inspect the drive axle sprockets for worn or broken teeth that would cause tracking issues and binding			
OK	Repair Needed	Corrected	3	Observe that the liftgate tracks smoothly in and out			
Inspec	t drive motor						
OK	Repair Needed	Corrected	4	Inspect the drive motor to ensure the mounting bolts are tight			
OK	Repair Needed	Corrected	5	Check the hydraulic lines at the drive motor for leaks			
Inspec	t Liftgate platfo	orm:					
ОК	Repair Needed	Corrected	6	Inspect for loose nuts, bolts and pins (Main hinge pin bolt, folding hinge bolt, roll stop and flip ramp bolts.)			
ОК	Repair Needed	Corrected	7	ALUMINUM PLATFORM ONLY: Inspect that aluminum platform side plate bolts are tightened to 30 ftlbs.			
ОК	Repair Needed	Corrected	8	Inspect for any signs of overload damage, cracked or broken welds			
ОК	Repair Needed	Corrected	9	Inspect the torsion springs, pins and bolts to ensure nothing is broken or loose			
ОК	Repair Needed	Corrected	10	Inspect that platform is level with the vehicle floor in the fully raised position			
ОК	Repair Needed	Corrected	11	Inspect folding hinges on platform and ramp for wear.			
ОК	Repair Needed	Corrected	12	On liftgates with split hinged ramps inspect that both ramps open easily. Lubricate hinges with light oil			
Inspec	t Liftgate pum	o/battery e	nclo	osures			
ОК	Repair Needed	Corrected	13	Inspect covers are in place and latches work properly			
ОК	Repair Needed	Corrected	14	Check to ensure the enclosures have no broken welds or damage			
ОК	Repair Needed	Corrected	15	Inspect all wiring for chaffing, damage, or corrosion especially where it passes through or near sharp edges			
ОК	Repair Needed	Corrected	16	Ensure wires and cables passing through the enclosure walls are protected from damage by grommets or other protective material			

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Chapter 4 Preventive Maintenance

Inspect Hydraulic and Electrical Components						
ОК	Repair Needed	Corrected	17	Inspect for hydraulic leaks on cylinders, hoses and fittings		
ОК	Repair Needed	Corrected	18	Inspect cylinder hoses for fraying or cracking and ensure that they are secured		
ОК	Repair Needed	Corrected	19	Ensure the cylinder lock valve wiring is tight and insulation is intact		
ОК	Repair Needed	Corrected	20	Remove power unit enclosure cover and inspect that electrical connections are clean and secure – spray connections with dielectric coating.		
ок	Repair Needed	Corrected	21	 Inspect that fluid level in tank is 1" from the top based upon the following: Power down units - check with platform at bed level Gravity down units - check with the platform on the ground 		
ОК	Repair Needed	Corrected	22	Inspect for any visible oil leaks inside the power unit enclosure. (Valves, hoses, and fittings.)		
ОК	Repair Needed	Corrected	23	Inspect power unit to make sure mounting bolts are secure		
ОК	Repair Needed	Corrected	24	Inspect that battery connections are secure. Spray terminals with dielectric coating		
ОК	Repair Needed	Corrected	25	Inspect circuit breaker for visual damage and ensure both motor and charge line circuit breakers are engaged		
ок	Repair Needed	Corrected	26	Inspect all electrical connections are tight and wiring for chaffing or damage. Clean all connections and apply di-electric grease or red insulating varnish		
ОК	Repair Needed	Corrected	27	Inspect entire length of battery cable (positive and ground) and exposed switch wires for chaffing		
ОК	Repair Needed	Corrected	28	Load test battery and perform battery maintenance as needed		
ОК	Repair Needed	Corrected	29	Inspect that battery hold downs are in place and properly tightened		
ОК	Repair Needed	Corrected	30	Inspect all toggle switches for damage		
ок	Repair Needed	Corrected	31	If equipped with back-up system, Toggle to backup pump-motor and run liftgate through 3 complete up/down and in/out cycles to verify proper operation of backup system		
Final I	nspection	-	-			
ОК	Repair Needed	Corrected	32	Run gate through two entire cycles on primary pump with platform open to make sure there is no unusual noise and the liftgate is tracking evenly		
ОК	Repair Needed	Corrected	33	Check Raise/Lower speeds, 15-30 seconds is common (see note below)		
ОК	Repair Needed	Corrected	34	Check In/Out speeds, 5-15 seconds is common (see note below)		
ОК	Repair Needed	Corrected	35	Inspect that all hoses and wiring move freely as the gates travels in and out		
ОК	Repair Needed	Corrected	36	Inspect that all decals are in legible and in the correct location		

Annual Inspection/PM Procedure		re	(Includes items 1-36 in Routine Inspection/PM procedure)		
	ОК	Repair Needed	Corrected	37	Inspect all bushing and pins on arms and platform for wear or damage
	ОК	Repair Needed	Corrected	38	Change hydraulic fluid

Notes:

Note Operating speeds		<u>speeds</u>	Temperature, viscosity of hydraulic oils, length of tracks (long or short),
			bed height, gravity versus power down, and quality of voltage and ground
			will all impact raise/lower and in/out speeds.

Chapter 5 Placement of Decals

To order complete set of GTSL-Series liftgate decals, order kits below:

GTSL-33 = Kit part number 80002238

GTSL-44 = Kit part number 80002239

GTSL-55 = Kit part number 80002240

	All decals must be in place and legible or all warranties are void.								
	DECAL CHART								
AREA	DECAL	QTY	PART NUMBER	LOCATION					
	3300 lb Capacity or		80100585	Locate in a conspicuous place near controls.					
	4400 lb Capacity or	1	80100587						
	5500 lb Capacity		80101308	If your liftgate is equipped with dual controls, an additional Safety Instruction					
1	Operation Decal	1	80101445	decal (80100850) is to be placed in a					
	Safety Decal	1	80100850	conspicuous place near the second set of the controls.					
	Stand Clear	1	75089296	Refer to the following diagram showing decal					
	Hazard	1	80101370	locations.					
2	3300 lb Capacity or		80100585	Locate on parallel arms					
	4400 lb Capacity or	2	80100587						
	5500 lb Capacity		80101308						
	Stand Clear	2	75089296						
3	Use Handle Decal	1	75089295	Locate next to handle on platform extension					

Chapter 5 Placement of Decals



Chapter 5 Placement of Decals

CONSPICUITY TAPE

Conspicuity tape is attached to Main Deck Tube as shown.



Chapter 6 Lubrication

LUBRICATION INSTRUCTIONS

The points indicated should be lubricated approximately once every three (3) months, or as outlined in the lubrication schedule for heavier usage. If not sure of duty or cycles, always lubricate more frequently.

1) Grease all grease fittings in liftarm and cylinders with grease gun.

2) Lubricate ramp hinges, deck extension hinges, and springs with a light weight machine oil.

Suggested Minimum Lubrication Schedule (In Days)								
Monthly Cycles	Light Duty	Med. Duty	Heavy Duty					
250 Or Less	45	30	21					
250-350	30	21	14					
350-450	21	14	7					
More Than 450	Contact Factory for Instructions							



















How To Order Parts

Repairs should be made only by authorized mechanics using WALTCO Replacement parts.

When ordering repair or replacement 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 WALTCO identify and deliver the needed part to you.

THE FOLLOWING INFORMATION MUST BE INCLUDED:

- 1. SERIAL NUMBER [WALTCO liftgate serial numbers can be found on the Specification Tag attached to the mount frame. (On older units the Specification Tag is located on the side or bottom of the platform.)]
- 2. MODEL NUMBER [Or capacity]
- 3. PLATFORM SIZE

THEN INCLUDE THE FOLLOWING INFORMATION:

- 4. PART NUMBERS
- 5. DESCRIPTION
- 6. QUANTITY REQUIRED

MAIL, E-MAIL OR PHONE YOUR REQUEST TO:

Waltco Truck Equipment Co. 285 Northeast Avenue Tallmadge, OH 44278 1-800-411-5685 FAX: 1-800-411-5684 E-MAIL: parts@waltco.com

ALL PARTS ARE F.O.B. FROM THE SHIPPING FACTORY

PLEASE NOTE:

To assure you of continuing and effective quality control, our warranty policy permits replacement of hydraulic cylinders, valves and motor pump units when their factory seals are intact. Parts under warranty will be exchanged promptly after careful inspection of the returned assemblies.



Every vehicle that has a WALTCO Liftgate must 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 WALTCO TRUCK EQUIPMENT COMPANY.

NOTE:

When ordering, give model and serial number of the liftgate.

IMPORTANT

KEEP THIS OWNER'S MANUAL IN THE VEHICLE

Improper operation and maintenance of this liftgate could result in severe personal injury or death.

Read and understand the contents of this manual and all warning and operation decals before operating and/or performing maintenance on this liftgate.

For SAFETY information on this liftgate see Chapter 1 of this manual