

#### **KEEP THIS MANUAL INSIDE OF VEHICLE**

Register your liftgate online at http://www.maxonlift.com/support/product-registration. For a free copy of other manuals that pertain to these liftgate models, please visit our website at www.maxonlift.com or call Customer Service at (800) 227-4116.

To find maintenance & parts information for your DMD Liftgate, go to www.maxonlift.com. Click the PRODUCTS, RAILIFT & DMD buttons. Open the Maintenance Manual in the PRODUCT DOCUMENTATION window. For parts, click on the PARTS PORTAL, RAILIFT & DMD buttons.

## **TABLE OF CONTENTS**

SUMMARY OF CHANGES: M-16-39 REVISION D	4
WARNINGS	6
LIFTGATE TERMINOLOGY	7
RECOMMENDED DAILY OPERATION CHECKS	8
DECALS	10
DECALS & PLATES	12
FORKLIFT ADVISORY	13
OPERATION	14
UNFOLDING THE PLATFORM	14
LOADING VEHICLE	18
LOWERING THE PLATFORM	18
POSITIONING LOAD	18
RAISING & UNLOADING PLATFORM	19
UNLOADING VEHICLE	20
LOWERING THE PLATFORM	20
RAISING THE PLATFORM	20
POSITIONING LOAD	21
LOWERING & UNLOADING PLATFORM	22
STOWING PLATFORM	23
USING STANDARD CART STOPS (IF EQUIPPED)	26
USING RETENTION RAMP (IF EQUIPPED)	29

### **SUMMARY OF CHANGES: M-16-39 REVISION D**

PAGE	DESCRIPTION OF CHANGE	
COVER	Updated REV. and date of release.	
	Transit hook with handle tab on the bottom is shown throughout manual.	
7	Updated <b>TERMINOLOGY</b> details with main frame housing and platform stop.	
8	Added a RECOMMENDED DAILY OPERATION CHECKS instruction to check if platform surface is even with liftgate main housing.	
11	Decal sheet changed to <b>P/N 298155-03</b> because of changes on the operation instructions for decal "A".	
14	Added Note to do RECOMMENDED DAILY OPERATION CHECKS.	

THIS PAGE INTENTIONALLY LEFT BLANK.

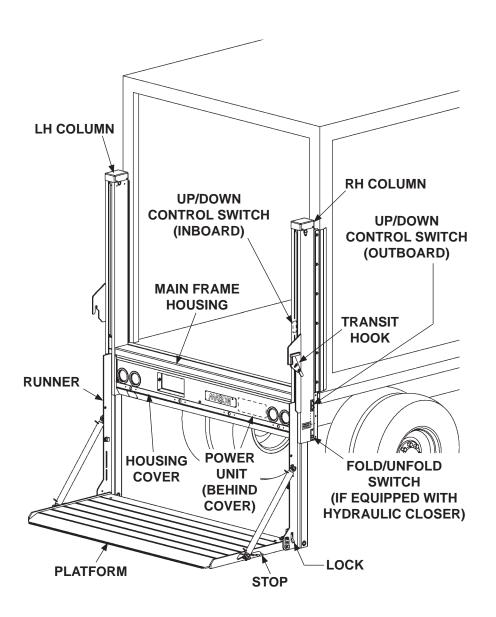
#### **A** WARNING

 Incorrect operation of this Liftgate can result in serious personal injury. Comply with WARNINGS and Liftgate operating instructions in this manual. Do not allow untrained persons or children to operate the Liftgate. If you need to replace an Operation Manual, additional copies are available from:

> MAXON Lift Corp. Customer Service 11921 Slauson Ave Santa Fe Springs, CA 90670 (800) 227-4116

- Do not exceed rated load capacity of 1800 lb for DMD-18 Liftgate,
   2200 lb for DMD-22 Liftgate, and 3300 lb for DMD-33 Liftgate.
- Do not allow any part of your body to be placed under, within, or around any portion of the moving Liftgate or its mechanisms, or in a position that would trap them between the platform and the floor of truck body (or between platform and the ground) when Liftgate is operated.
- 4. Consider the safety and location of bystanders and location of nearby objects when operating the Liftgate. Stand to one side of platform while operating the Liftgate. Be certain that the area the Liftgate will move through during operation is clear of all obstacles.
- 5. Comply with all attached instruction decals and warning decals.
- 6. Keep decals clean and legible. If decals are illegible or missing, have them replaced. **Get free replacement decals from Maxon.**
- 7. Never drive a forklift on the Liftgate platform.
- 8. Do not move vehicle unless Liftgate is correctly stowed.
- 9. Correctly stow platform when not in use. Extended platforms could create a hazard for people and vehicles passing by.
- 10. A correctly installed Liftgate will operate smoothly and reasonably quiet. The only noticeable noise during Liftgate operation is from the power unit while the platform is being lowered and raised. Listen for scraping, grating and binding noises and have the problem corrected before continuing to operate the Liftgate.
- 11. Above all, **USE GOOD COMMON SENSE** when operating this Liftgate.
- 12. Never use a cell phone while operating the Liftgate.

#### LIFTGATE TERMINOLOGY



#### RECOMMENDED DAILY OPERATION CHECKS

**NOTE:** Before you check the Liftgate, park vehicle on flat ground and set the parking brake.

**NOTE:** If any of the following operation checks reveal a need to service or repair Liftgate, do not operate the Liftgate until a qualified mechanic services or repairs the Liftgate.

	Make sure batteries are fully charged, battery terminal connections are clean and tight, and battery box is undamaged.
_	

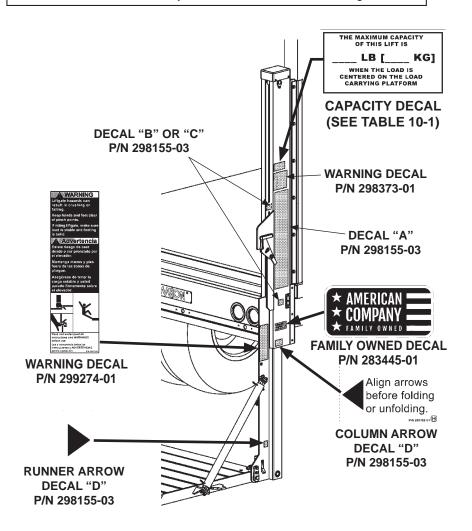
Before operating the Liftgate, the operator should do the following:

	clean and light, and battery box is undamaged.
	Make sure cab cutoff switch is <b>ON</b> , if equipped.
	Visually check that main frame housing cover is bolted on securely and undamaged. Look for hydraulic fluid leaks from main frame and columns.
	Follow the visible routing of hydraulic hoses from cylinders to main frame housing. Make sure all hoses are connected at both ends and there are no cracks, chafing, and fluid leaks.
	Visually check that standard and optional controls are in place and undamaged.
	Visually check that all decals are in place (see <b>DECALS</b> page). Make sure decals are legible, clean, and undamaged.
Us	e the operation instructions in this manual to unfold the platform.
	Position top surface of platform at vehicle bed level. Check if platform surface is even with liftgate main housing across the width of the platform. If platform is uneven, press <b>UP</b> button on control switch until platform stops. Hold for 10 seconds more to get platform even.
	Check for smooth operation as platform unfolds and as runners lower the platform to the ground.
	Check main frame housing, columns, runners and platform openers for cracks and bends. Make sure platform chains are undamaged and connected securely at both ends. Also, make sure all bolts and pins are in place and undamaged.
	Check platform and flipover for cracks, holes, and bends on the load carrying surfaces and side plates. Also, make sure retention ramps and

	Make sure load-carrying surfaces on main frame housing, platform, flipover, and retention ramp (if equipped) are clean (no oil, debris, or corrosion).
	Check for fluid leaks from hydraulic cylinders.
thr	e the operation instructions in this manual to operate the Liftgate ough one cycle without a load on the platform. Raise the platform vehicle bed height. Next, lower the platform to ground level.
	When raising and lowering platform, listen for unusual noises and look for a "jerking" motion or uneven movement at LH and RH sides of the platform. Uneven movement should not exceed 1".
	With platform at bed height, make sure the LH and RH platform chains feel even in tightness.
	Retention ramps (if equipped) release, unfold and fold smoothly, and remains in ramp, retention, and stowed positions until intentionally moved.
	Carts stops (if equipped) release, open, and close smoothly and remain so until intentionally opened or stowed.
	ervice or repairs are not required (or if completed), stow platform transport.

#### **DECALS**

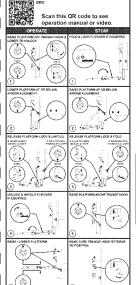
**NOTE:** Ensure there is no residue, dirt, or corrosion where decals are attached. If necessary, clean surface before attaching decals.



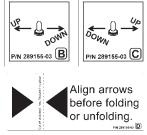
MODEL	ORDER P/N	CAPACITY DECAL	
DMD-18	220387-04	1800 LB [817 KG]	
DMD-22	220388-03	2200 LB [1000 KG]	
DMD-33	220388-02	3300 LB [1500 KG]	

CAPACITY DECAL PART NUMBERS
TABLE 10-1





OPERATING INSTRUCTIONS



**DECAL SHEET** P/N 298155-03



#### WARNING DECAL P/N 298373-01



WARNING DECAL P/N 299274-01

#### **DECALS & PLATES**

**NOTE:** Preferred decal layout is shown. Decals on the Liftgate are attached at the factory, except for the 24/7 SUPPORT decal. The 24/7 SUPPORT decal is placed at customer's or installer's preference.

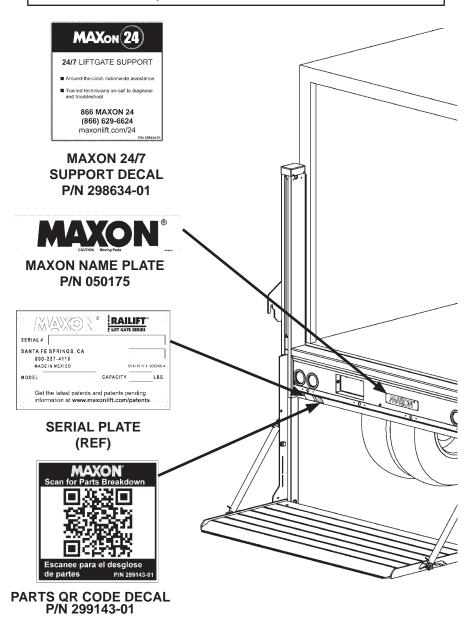
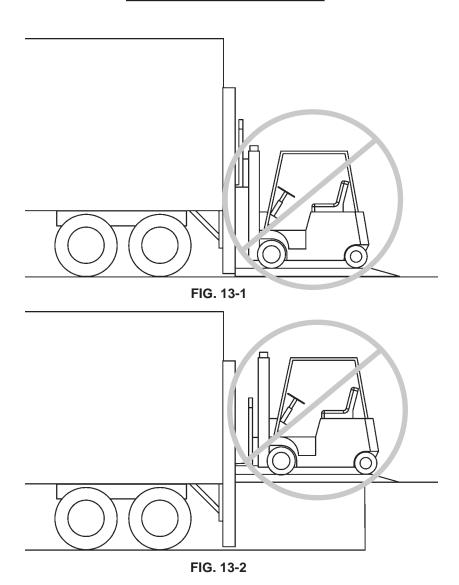


FIG. 12-1

### **FORKLIFT ADVISORY**

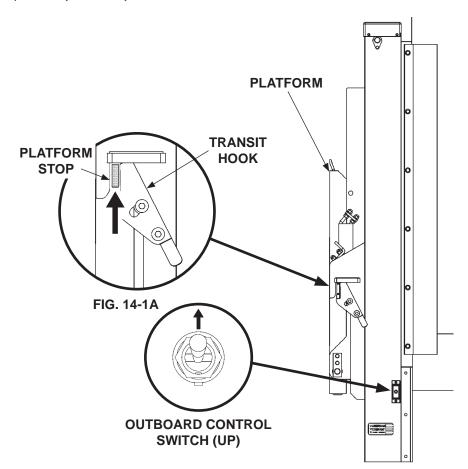
# **⚠ WARNING**Keep forklift OFF of platform.



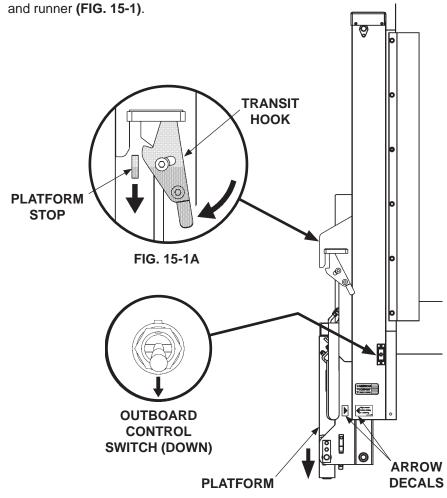
## OPERATION UNFOLDING THE PLATFORM

**NOTE:** Do **RECOMMENDED DAILY OPERATION CHECKS** at the beginning of this manual.

 Raise platform stop off transit hook (FIGS. 14-1 and 14-1A) by pushing the outboard control switch to UP position (FIG. 14-1).



RAISING PLATFORM STOP OFF HOOK FIG. 14-1 2. Rotate transit hook away from platform stop (FIG. 15-1A). Push outboard control switch DOWN (FIG. 15-1) to lower the platform until platform stop clears transit hook and arrow decals align on column and rupper (FIG. 15-1)

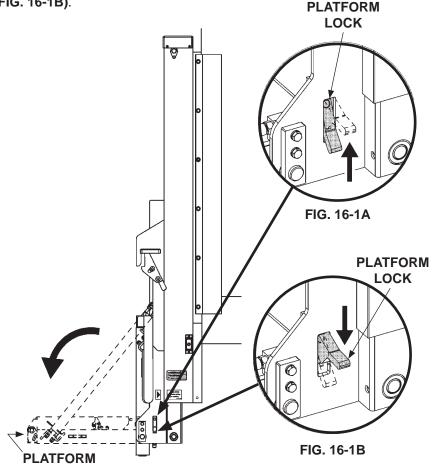


LOWERING PLATFORM TO ALIGN ARROWS FIG. 15-1

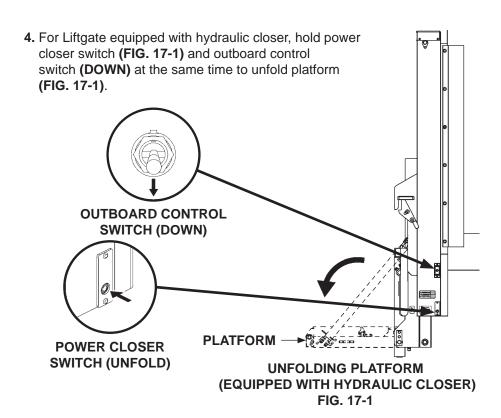
#### **UNFOLDING THE PLATFORM - Continued**

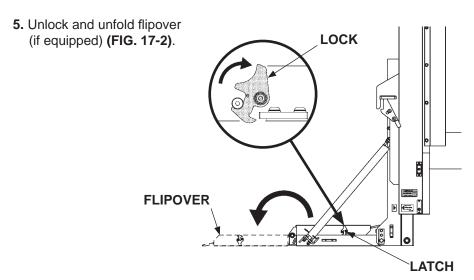
NOTE: If platform is equipped with hydraulic closer, do step 4.

 For manual close Liftgate, push platform lock up to unlock the platform (FIG. 16-1A). Manually unfold platform (FIG. 16-1). Next, push platform lock down to lock platform (FIG. 16-1B).



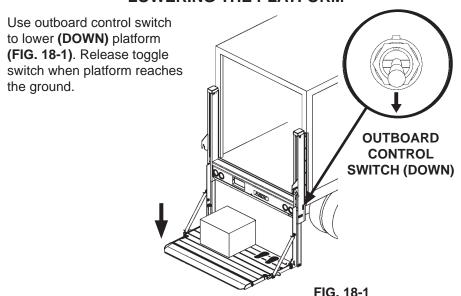
UNFOLDING PLATFORM (MANUAL CLOSE) FIG. 16-1





UNFOLDING FLIPOVER FIG. 17-2

## LOADING VEHICLE LOWERING THE PLATFORM

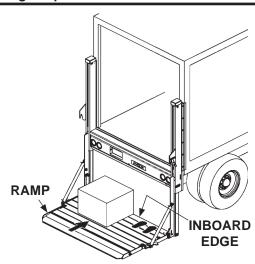


### **POSITIONING LOAD**

#### **A** WARNING

A load should never extend past the edges of the platform. Do not place unstable loads on platform and do not allow load to exceed lifting capacity of Liftgate. If standing on platform, do not allow your feet to extend beyond inboard edge of platform.

Place all loads as close as possible to the inboard edge of the platform with heaviest part toward the truck body as shown in **FIG. 18-2**. Move loads across the ramp (**FIG. 18-2**) to the platform, but never rest or raise loads on the ramp. If standing on platform with the load, stand in the footprint area shown and comply with the preceding **WARNING**.



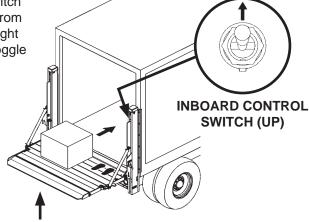
LOADING PLATFORM AT GROUND LEVEL FIG. 18-2

#### **RAISING & UNLOADING PLATFORM**

#### **A** CAUTION

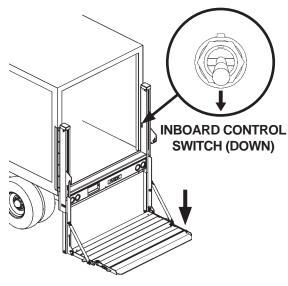
A ramp in retention position can trip you when stepping over it. To prevent possible injury, get on the platform before putting the ramp in retention position.

 Use inboard control switch to raise (UP) platform from ground level to bed height (FIG. 19-1). Release toggle switch when platform reaches bed height.



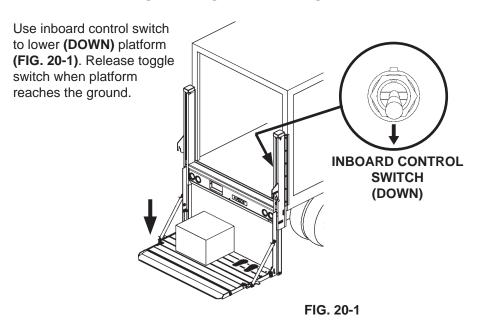
MOVING LOAD INTO VEHICLE FIG. 19-1

- 2. Carefully move the load into vehicle (FIG. 19-1).
- 3. Use inboard control switch to lower (DOWN) the platform to ground level (FIG. 19-2).
- 4. If there are more loads to put in vehicle, repeat the previous LOADING VEHICLE steps for each load. When loading is finished, use STOWING PLATFORM procedure in this manual.



LOWERING PLATFORM FIG. 19-2

## UNLOADING VEHICLE LOWERING THE PLATFORM



#### RAISING THE PLATFORM

Use inboard control switch to raise (UP) platform (FIG. 20-2) from ground level to bed height. Release toggle switch when platform reaches bed height.

INBOARD CONTROL SWITCH (UP)

#### **POSITIONING LOAD**

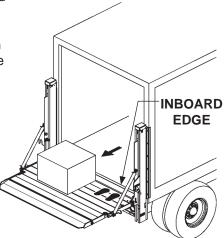
### **A WARNING**

A load should never extend past the edges of the platform. Do not place unstable loads on platform and do not allow load to exceed lifting capacity of Liftgate. If standing on platform, do not allow your feet to extend beyond inboard edge of platform.

### **WARNING**

Pulling the load from vehicle to platform can result in a fall from platform and serious injury. When unloading vehicle, always push the load out on the platform.

Load the platform at bed level (FIG. 21-1) as follows. Push load out of the vehicle to correct position on the platform. Place all loads as close as possible to the inboard edge of the platform with heaviest part toward the vehicle body as shown in FIG. 21-1. If standing on platform with the load, stand in the footprint area shown and comply with the WARNING at the top of this page.



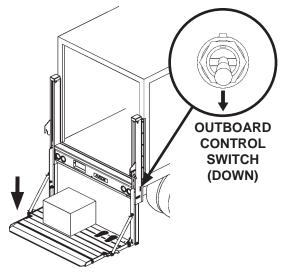
PUSHING LOAD ON PLATFORM FIG. 21-1

## UNLOADING VEHICLE - Continued LOWERING & UNLOADING PLATFORM

#### **A** WARNING

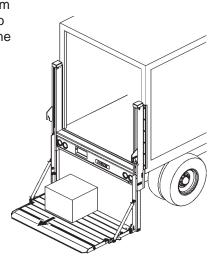
Before lowering platform, make sure area surrounding platform is clear of people and objects. If standing on platform, do not allow your feet to extend beyond inboard edge of platform.

 Use outboard control switch to lower (DOWN) platform to the ground (FIG. 22-1). Release toggle switch when platform reaches ground level.



LOWERING PLATFORM TO GROUND LEVEL FIG. 22-1

2. Carefully move load off platform (FIG. 22-2) and then move it to a place where it will not become a hazard for people and other vehicles. If there is more to unload from vehicle, repeat the previous UNLOADING VEHICLE steps for each load. When unloading is finished, use STOWING PLATFORM procedure in this manual.



MOVING LOAD OFF PLATFORM FIG. 22-2

#### STOWING PLATFORM

**NOTE:** Ensure platform is stowed under hydraulic pressure.

1. Use outboard control switch to raise (UP) platform until arrow decals are aligned on runner and column (FIGS. 23-1 and 23-2).

OUTBOARD CONTROL SWITCH (UP)

ARROW DECALS

FIG. 23-1

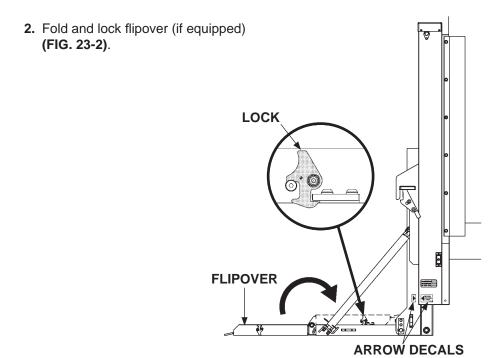
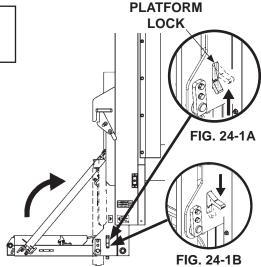


FIG. 23-2

#### **STOWING PLATFORM - Continued**

**NOTE:** If liftgate is equipped with hydraulic closer, do step 4.

 Pull UP on platform lock (FIG. 24-1A) to unlock platform. Fold platform to stowed position (FIG. 24-1). Push platform lock DOWN to lock platform (FIG. 24-1B).

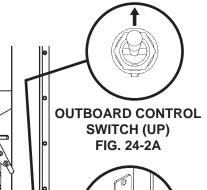


FOLDING PLATFORM FIG. 24-1

### **A** CAUTION

Folding the platform with hydraulic closer requires 2 hands on the controls. This helps prevent injuries.

 If equipped with hydraulic closer, (FIG. 24-2) use one hand for outboard control switch (UP) (FIG. 24-2A) and one hand for FOLD/UNFOLD switch (FIG. 24-2B). Activate FOLD and UP together until platform is folded.



FOLD/UNFOLD SWITCH FIG. 24-2B

FOLDING PLATFORM WITH HYDRAULIC CLOSER FIG. 24-2

5. Use outboard control switch to raise (UP) platform (FIG. 25-1) to clear transit hooks (FIG. 25-1A). Final platform resting position is shown in FIG. 25-1B. **TRANSIT** ноок **PLATFORM** FIG. 25-1A (O) **OUTBOARD** CONTROL SWITCH (UP) FIG. 25-1B

RAISE PLATFORM FIG. 25-1

### **USING STANDARD CART STOPS (IF EQUIPPED)**

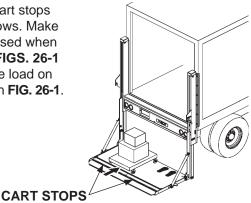
### **A** CAUTION

To prevent injuries caused by tripping and falling, make sure cart stops are closed before walking on and off outboard end of platform.

NOTE: Some Liftgates are equipped with single or dual cart stops.

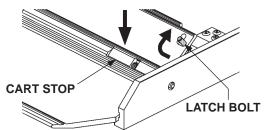
Cart stops prevent loaded carts from rolling off outboard end of platform. Single cart stops are 1 section, about the same as overall width of platform, and operate with one set of controls. Dual cart stops are 2 identical sections, with a combined width about the same as overall width of platform, and each is independently operated with separate controls (1 set of controls per cart stop). The following procedure shows how to operate dual cart stops; however, a single cart stop operates the same way.

 Load a platform with cart stops at ground level as follows. Make sure cart stops are closed when loading the platform (FIGS. 26-1 and 26-2). Then, move load on the platform as shown in FIG. 26-1.

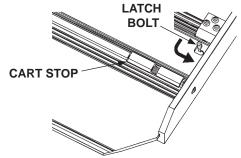


LOADING PLATFORM AT GROUND LEVEL (CART STOPS CLOSED) FIG. 26-1

To close cart stops, push latch bolt to position shown in FIG. 26-2. Step on cart stops and push down into locked position.

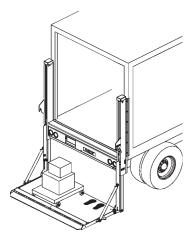


CLOSING CART STOPS (RH VIEW OF FLIPOVER) FIG. 26-2 To open cart stops, push latch bolt in direction shown in FIG. 27-1.



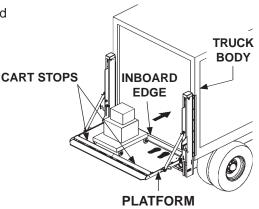
OPENING CART STOPS (RH VIEW OF FLIP OVER) FIG. 27-1

**4.** Open cart stops (**FIGS. 27-1** and 27-2). Next, position cart and stand in the footprint area as shown in **FIG. 27-2**.



CART STOPS OPEN FIG. 27-2

 Raise the platform to bed level (FIG. 27-3). Move the load off the platform into the vehicle body (FIG. 27-3).



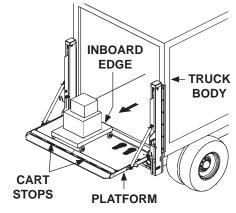
UNLOADING PLATFORM AT BED LEVEL FIG. 27-3

## USING STANDARD CART STOPS (IF EQUIPPED) - Continued

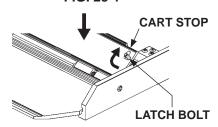
#### **A** WARNING

Pulling the load from vehicle to platform can result in a fall from platform and serious injury. When unloading vehicle, always push the load out on the platform.

6. When loading the platform at bed level, make sure cart stops are open (FIG. 28-1). Push load out of the vehicle to correct position on the platform. Place all loads as close as possible to the inboard edge of the platform with heaviest part toward the truck body as shown in FIG. 28-1. If standing on platform with the load, stand in the footprint area shown and comply with the WARNING on page 18.

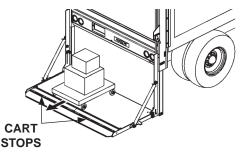


LOADING PLATFORM AT BED LEVEL (DUAL CART STOPS OPEN) FIG. 28-1



CLOSING CART STOPS (RH VIEW OF FLIPOVER) FIG. 28-2

7. Unload the platform with cart stops at ground level as follows. Make sure cart stops are closed when unloading the platform (FIG. 28-2). Move cart enough to close cart stop. Then, move load off the platform as shown in FIG. 28-3.



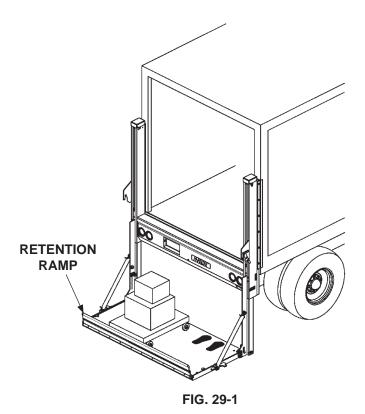
CART STOPS CLOSED FIG. 28-3

### **USING RETENTION RAMP (IF EQUIPPED)**

#### **A** CAUTION

To prevent injuries caused by tripping and falling, make sure retention ramp is in the ramp position before walking on and off outboard end of platform.

NOTE: Some Liftgates are equipped with a retention ramp. A retention ramp, like a cart stop, prevents a load from rolling or sliding off outboard end of platform. Unlike a cart stop, a retention ramp lets you use the entire load surface of platform. The catches on top of the flipover and a cam-like hinge action keep retention ramp stowed when not in use. The cam-like hinge also allows the retention ramp to be rotated and locked in retention position or in ramp position. The following procedure shows how to operate a retention ramp.



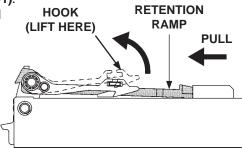
## USING RETENTION RAMP (IF EQUIPPED) - Continued

#### **A** CAUTION

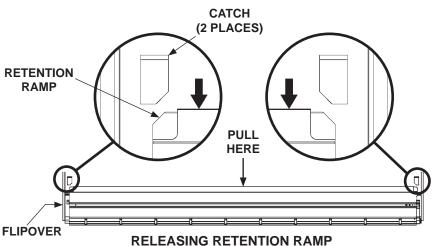
To prevent injuries, stay clear of the retention ramp path as it is moved to ramp position. Go to either side of the ramp and stay out of the way.

**NOTE:** To unhook the retention ramp, stand at the RH side of flipover. After the retention ramp is unhooked, the recommended place for handling the retention ramp is at the center of the free edge **(FIG. 30-2)**.

Unhook retention ramp (FIG. 30-1).
 To release from the catches, pull retention ramp toward outboard end of flipover as shown in FIG. 30-2.



UNHOOKING RETENTION RAMP (RH VIEW OF FLIPOVER) FIG. 30-1

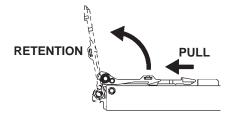


(TOP VIEW OF FLIPOVER)
FIG. 30-2

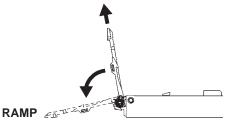
### **A** CAUTION

To prevent injuries, stay clear of the retention ramp path as it is moved to ramp position. Go to either side of the ramp and stay out of the way.

2. Continue to pull retention ramp to the retention position (FIG. 31-1) and then to ramp position (FIG. 31-2).

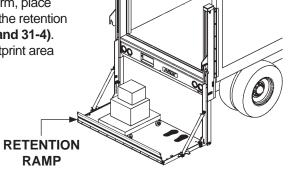


MOVING TO RETENTION POSITION (RH VIEW OF FLIPOVER) FIG. 31-1

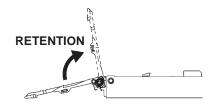


MOVING TO RAMP POSITION (RH VIEW OF FLIPOVER) FIG. 31-2

3. When cart is on platform, place the retention ramp in the retention position (FIGS. 31-3 and 31-4). Next, stand in the footprint area shown in FIG. 31-3.



RAMP IN RETENTION POSITION FIG. 31-3



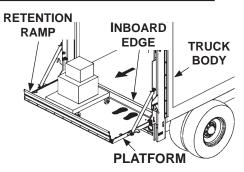
ROTATING TO RETENTION POSITION (RH VIEW OF FLIPOVER) FIG. 31-4

## USING RETENTION RAMP (IF EQUIPPED) - Continued

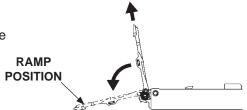
#### **A** WARNING

Pulling the load from vehicle to platform can result in a fall from platform and serious injury. When unloading vehicle, always push the load out on the platform.

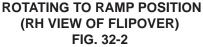
**4.** When loading the platform at bed level, make sure retention ramp is in the retention position (FIG. 32-1). Push load out of the vehicle to correct position on the platform. Place all loads as close as possible to the inboard edge of the platform with heaviest part toward the truck body as shown in FIG. 32-1. If standing on platform with the load, stand in the footprint area shown and comply with the WARNING on page 18.

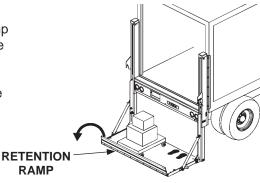


LOADING PLATFORM AT BED LEVEL (RAMP IN RETENTION POSITION) FIG. 32-1



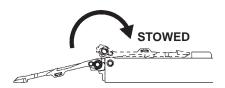
5. Unload the platform with retention ramp at ground level as follows. Make sure retention ramp is in the ramp position when unloading the platform (FIG. 32-2). Move cart enough to reposition retention ramp. Then, move load off the platform as shown in FIG. 32-3.





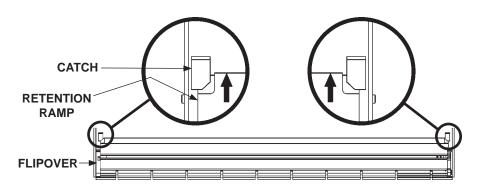
UNLOADING PLATFORM AT GROUND LEVEL (RAMP POSITION) FIG. 32-3

**6.** To stow, rotate retention ramp to retention position and then to the flat position on flipover as shown in **FIG. 33-1**.



ROTATING RAMP TO STOWED POSITION (RH VIEW OF FLIPOVER)
FIG. 33-1

FIG. 33-3



STOWING THE RAMP (TOP VIEW OF FLIPOVER) FIG. 33-2

7. Push the retention ramp fully into the catches (FIG. 33-2). Make sure retention ramp is hooked to the flipover (FIG. 33-3).

HOOK
RETENTION
RAMP

FLIPOVER

RAMP HOOKED TO FLIPOVER
(RH VIEW OF FLIPOVER)