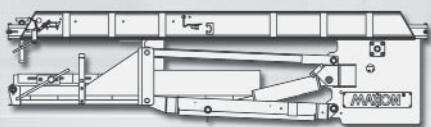


M-13-02

REV. A

NOVEMBER 2015

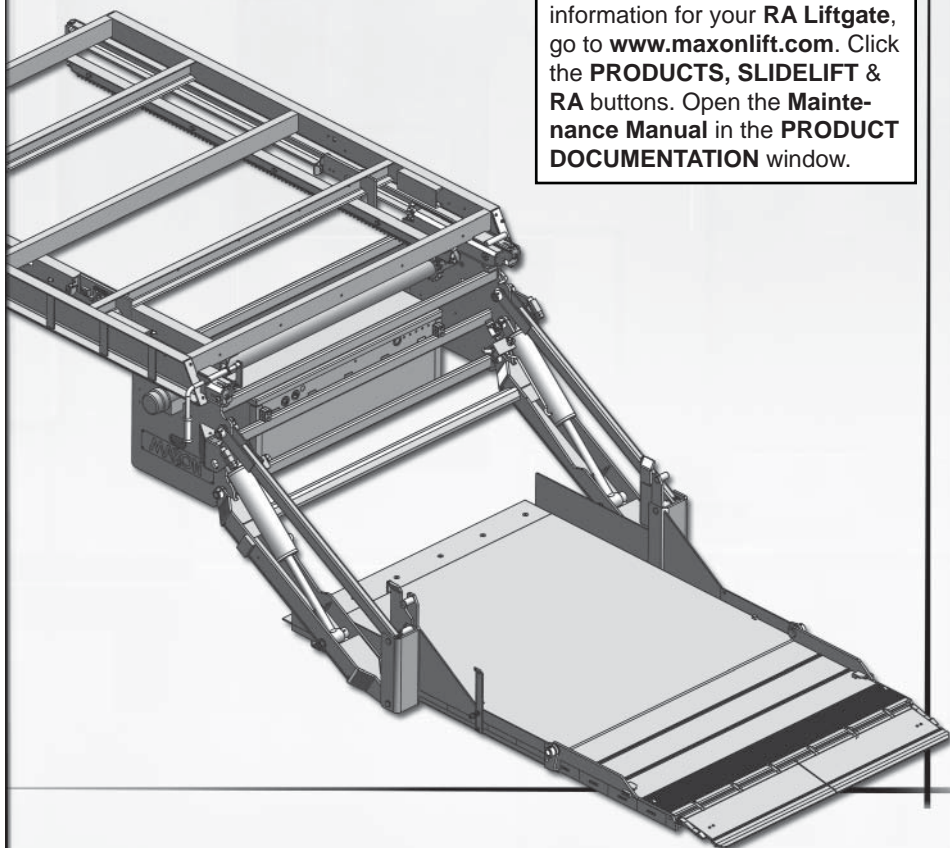


MAXON®

RA Series

OPERATION MANUAL RA-35 & RA-45

To find **maintenance & parts** information for your **RA Liftgate**, go to **www.maxonlift.com**. Click the **PRODUCTS**, **SLIDELIFT** & **RA** buttons. Open the **Maintenance Manual** in the **PRODUCT DOCUMENTATION** window.



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KEEP THIS MANUAL IN CAB OF VEHICLE

Register your liftgate on line at www.maxonlift.com/htm/services/reg.htm.

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.

TABLE OF CONTENTS

SUMMARY OF CHANGES: M-13-02, REVISION A.....	4
WARNINGS.....	6
LIFTGATE TERMINOLOGY	7
RECOMMENDED DAILY OPERATION CHECKS.....	8
DECALS	10
FORKLIFT ADVISORY	14
OPERATION	16

SUMMARY OF CHANGES: M-13-02, REVISION A

PAGE	DESCRIPTION OF CHANGE
COVER	Updated REV and date of release. Added statement to get RA maintenance and parts manuals from www.maxonlift.com .
10,12	Added Family Owned decal and changed to latest Up-Down decal.
16	Updated illustrations to show redesigned latch mechanism.
19	Removed flip ramp operation instructions. Illustration shows new handles that replaced pull strap on flipover assembly.
25	Removed flip ramp instructions.
27	Updated illustration to show redesigned inboard stop block.

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WARNING

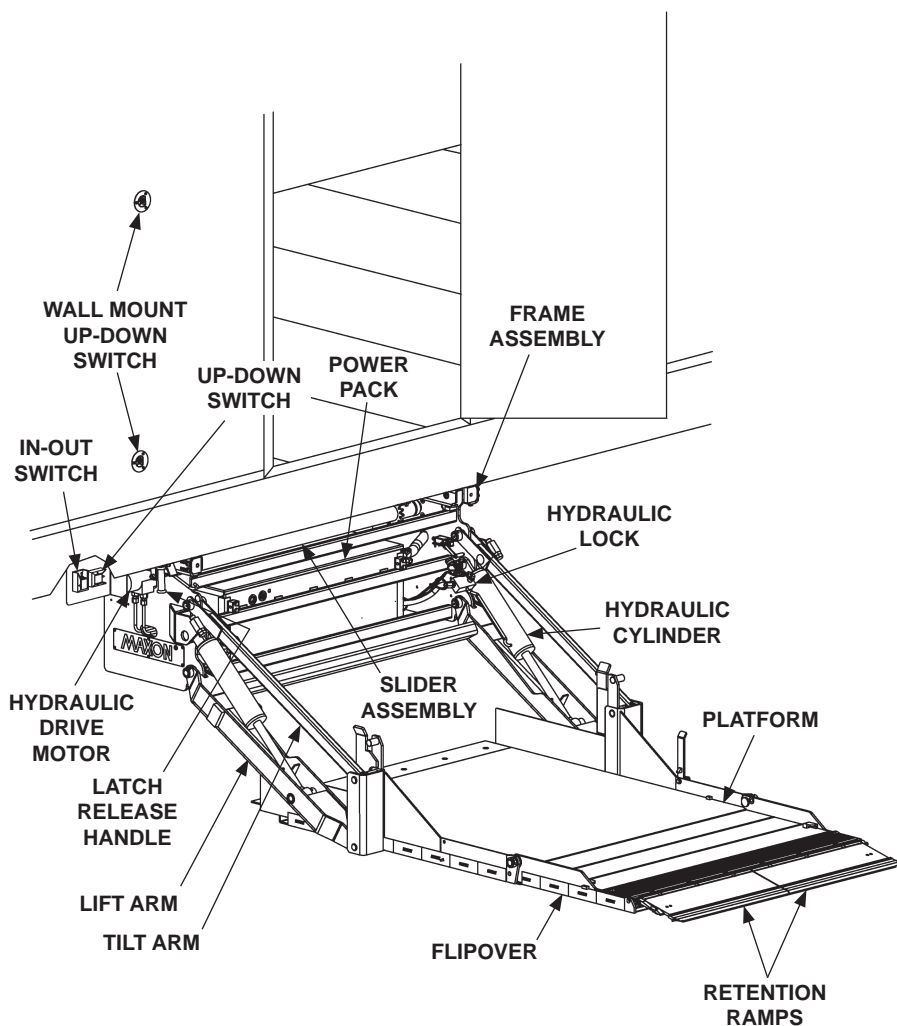
1. Incorrect operation of this Liftgate can result in serious personal injury. Comply with **WARNINGS** and Liftgate operating instructions in this manual. Do not allow untrained persons or children to operate the Liftgate. If you need to replace an **Operation Manual**, additional copies are available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

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

NOTE: For latest version manuals (and replacements), download manuals from Maxon's website at **www.maxonlift.com**.

2. Do not exceed rated load capacity of the Liftgate, which is **3500 lbs. for the RA-35 and 4500 lbs. for the RA-45**.
3. 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 operating.
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 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 the 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.

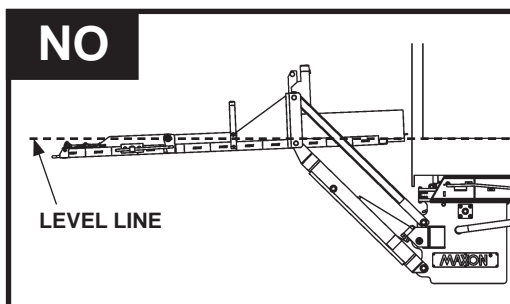
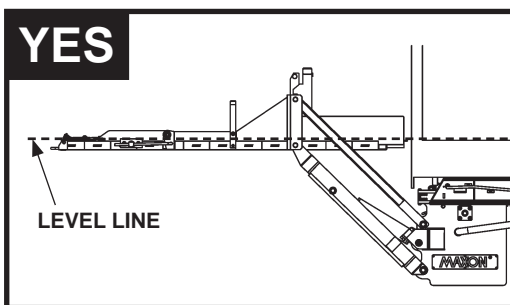
Before operating the Liftgate, the operator should do the following:

- ☐ Make sure battery is fully charged and battery terminal connections are clean and tight.
- ☐ Make sure cab cutoff switch is **ON**, if equipped.
- ☐ Visually check that pump cover is latched closed securely and undamaged. Look for hydraulic fluid leaking from the pump box.
- ☐ Visually check that the in-out and up-down control switches are in place and undamaged.
- ☐ Visually check that hydraulic locks are in place and undamaged.
- ☐ Visually check that all decals and reflective tape are in place (see **DECAL** pages). Also make sure decals and reflective tape are clean, legible, and undamaged.

Use the operation instructions in this manual to run the Liftgate out to operating position, lower platform to the ground, and open flipover or flip ramp (if equipped). Open retention ramp if equipped.

- ☐ Check slider assembly, frame assembly, lift arms, and parallel arms for cracks and bends. Also, make sure all bolts, nuts and pins are in place and undamaged.
- ☐ Make sure slider assembly, frame assembly, lift arms, and parallel arms are clean (no oil, debris, or corrosion).
- ☐ Check the hydraulic cylinders for leaking seals and hose connections. Follow the hydraulic hoses (or return lines for gravity down Liftgates) from the cylinders to pump box. Make sure all hoses are connected at both ends and there are no cracks, chafing, and fluid leaks.

- ☐ With the flipover (or flip ramp) unfolded and platform raised to bed level, check if the platform is level (**YES illustration**). If the platform looks like the **YES illustration**, you can operate Liftgate. If the top surface of platform is below level line like the **NO illustration**, do not operate the Liftgate. (See **NOTE** at beginning of the **DAILY OPERATION CHECKS**.)



- ☐ Check the platform, flipover (or flip ramp) for cracks, holes, and bends on the load-carrying surface and side plates. If equipped, check retention ramp for cracks, holes, and bends. Also, make sure torsion bars and fasteners are in place and undamaged.
- ☐ Make sure platform and flipover load-carrying surfaces are clean (no oil, debris, or corrosion).

Use the operation instructions in this manual to operate the Liftgate through one cycle without a load on the platform. Raise the platform to vehicle bed height. Next, lower the platform to ground level.

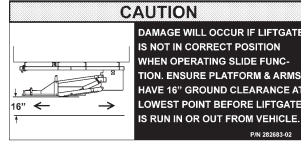
- ☐ When the Liftgate is moving, listen for unusual noises and look for a “jerking” motion or uneven movement on either side of the platform.

If service or repairs are not required (or if completed), stow the Liftgate according to operating instructions in this manual.

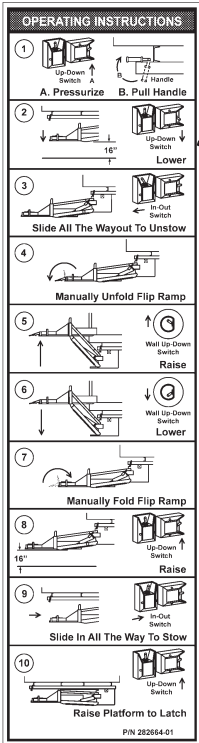
DECALS



CAUTION DECAL
P/N 282682-02



CAUTION DECAL
P/N 282683-02



OPERATION DECAL
P/N 282664-01



FAMILY OWNED DECAL
P/N 283445-01



**CAPACITY DECAL
(RA-35 ONLY)**
P/N 220388-04



**CAPACITY DECAL
(RA-45 ONLY)**
P/N 220388-05

DECAL "C"

DECAL "B"

DECAL "A"

DECAL "F"



SERIAL PLATE (REF)

FIG. 10-1



CAUTION

Always stand clear of platform area.

P/N 282522-01 **F**



WARNING

Read this information carefully.

- Improper operation of this Liftgate can result in serious personal injury. If you do not have a copy of the operating instructions, please obtain them from your employer, distributor, or lessor before you attempt to operate Liftgate.
- If there are signs of improper maintenance, damage to vital parts, or slippery platform surface, do not use the Liftgate until these problems have been corrected.
- If you are using a pallet jack, be sure it can be maneuvered safely.
- Do not operate a forklift on the platform.
- Do not allow any part of yours or your helper's 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 ground or truck when the Liftgate is operated.
- If a helper is riding the platform with you, make sure you are both doing so safely and that you are not in danger of coming in contact with any moving or potentially moving obstacles.
- **USE GOOD COMMON SENSE.**
- If load appears to be unsafe, do not lift or lower it.

For a free copy of other manuals that pertain to this model Liftgate, please visit our website at www.maxonlift.com or call Customer Service at (800) 227-4116.

P/N 282522-01 **C**

SAFETY INSTRUCTIONS

Read all decals and operation manual before operating liftgate.

1. Do not use liftgate unless you have been properly instructed and have read, and are familiar with, the operating instructions.
2. Be certain vehicle is properly and securely braked before using the liftgate.
3. Always inspect this liftgate for maintenance or damage before using it. Do not use liftgate if it shows any sign of damage or improper maintenance.
4. Do not overload
5. Make certain the area in which the platform will open and close is clear before opening or closing the platform.
6. Make certain platform area, including the area in which loads may fall from platform, is clear before and at all times during operation of liftgate.
7. This liftgate is intended for loading and unloading of cargo only. Do not use this liftgate for anything but its intended use.

P/N 282522-01 **A**



WARNING

Liftgate hazards can result in crushing or falling.

Keep hands and feet clear of pinch points.

If riding liftgate, make sure load is stable and footing is solid.

P/N 282522-01 **B**

Read and understand all instructions and WARNINGS before use.

DECAL SHEET

P/N 282522-01

FIG. 11-1

DECALS - Continued

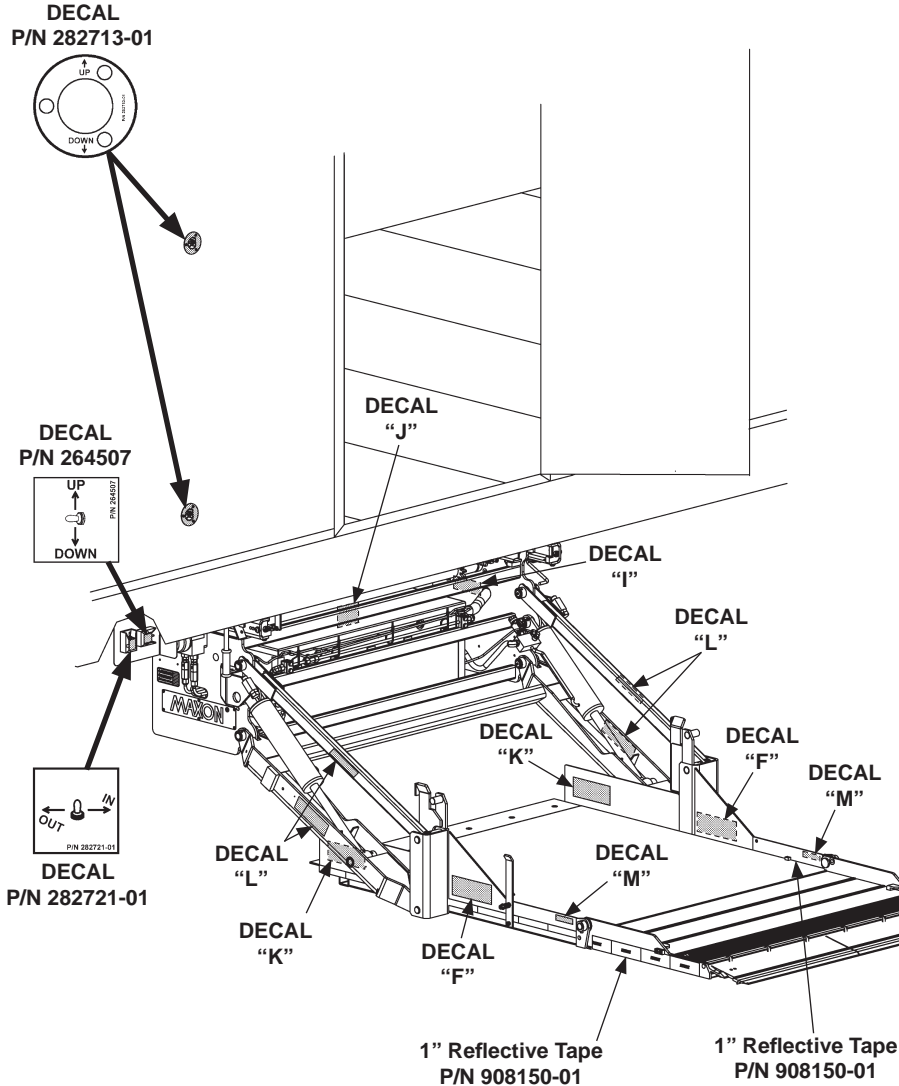


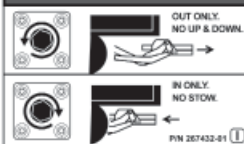
FIG. 12-1

⚠ WARNING

To prevent personal injury & equipment damage, avoid working on liftgate and power unit while platform is raised off the ground. Refer to Maintenance Manual for additional safety instructions.

P/N 267432-01 **F**

MANUAL SLIDER OPERATION & ACCESS INSTRUCTIONS



P/N 267432-01 **I**

⚠ WARNING

Avoid possible injury & damage to equipment if slider moves under power. Ensure battery is disconnected from liftgate before operating the slider manually.

P/N 267432-01 **J**



⚠ WARNING

To avoid possible injury and damage to equipment, never stand on lift arms, parallel arms, or bottom side of platform.

P/N 267432-01 **K**



⚠ WARNING

Keep hands & feet clear of lifting arms.



P/N 267432-01 **L**



⚠ WARNING

Keep hands clear of pinch points when folding flipover.

M

DECAL SHEET

P/N 282724-01

FIG. 13-1

FORKLIFT ADVISORY

⚠ WARNING

Keep forklift OFF of platform.

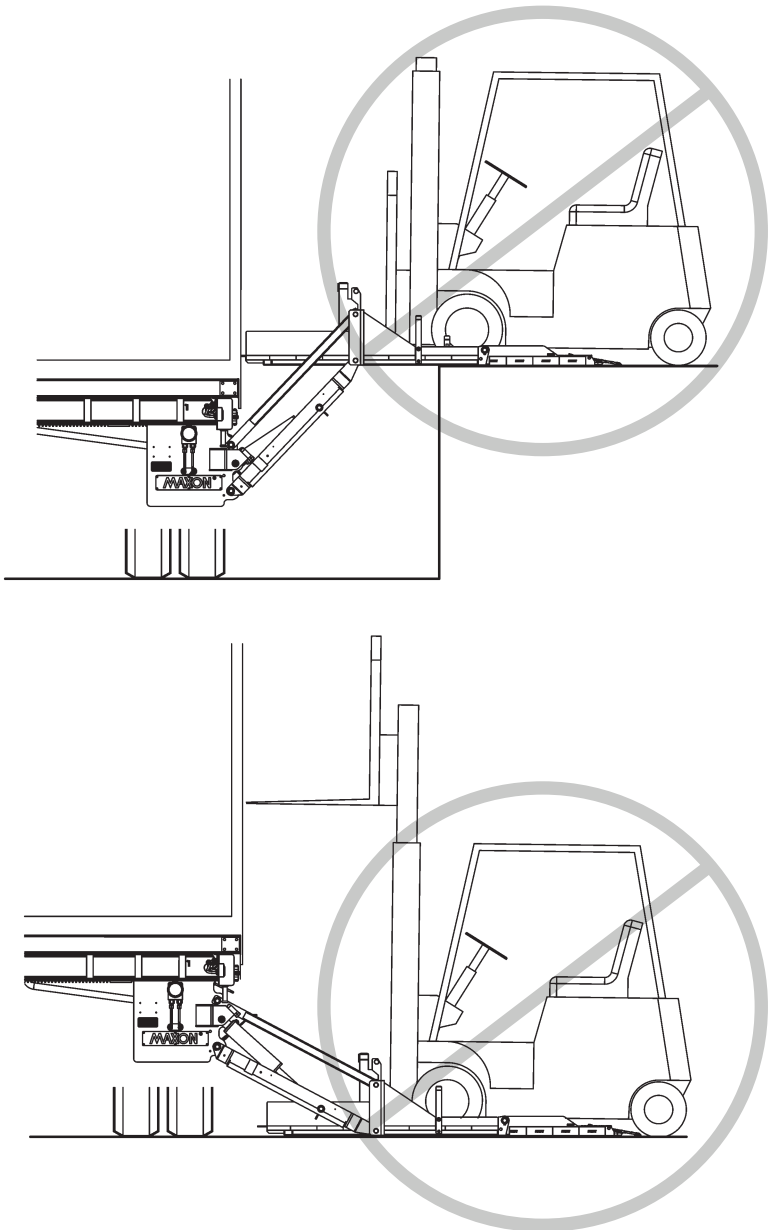


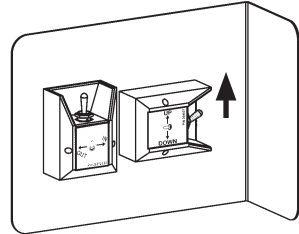
FIG. 14-1

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OPERATION

NOTE: Platform must be released from latch before it can be lowered. To allow latch release handle to move freely and release platform, push up-down switch to **RAISE** position with one hand and pull latch release handle at same time.

1. Tap **UP** button (**FIG. 16-1**) to take pressure off the hook (**FIGS. 16-2 and 16-2B**). Then pull latch release handle (**FIGS. 16-2 and 16-2A**).



UP
FIG. 16-1

2. Ensure latch is disengaged from pin (**16-2 and 16-2B**).

LATCH RELEASE
HANDLE

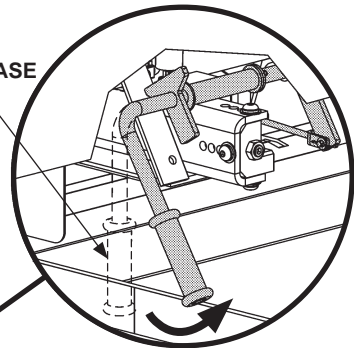


FIG. 16-2A

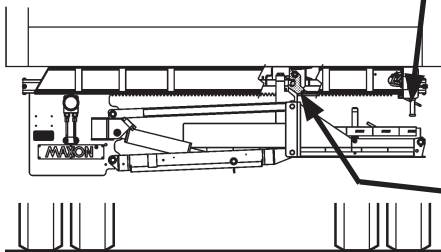


FIG. 16-2

HOOK

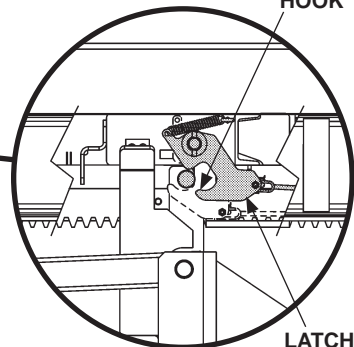


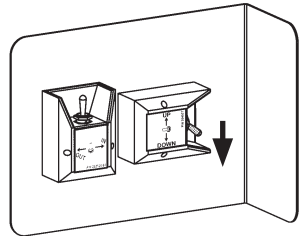
FIG. 16-2B

CAUTION

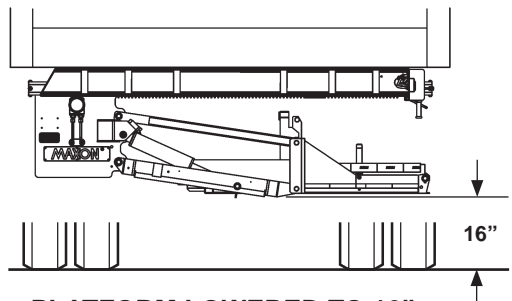
To prevent damage to Liftgate & vehicle, Liftgate will not travel in or out from vehicle unless platform is at a certain height. To enable in and out travel, ensure platform is 16" above the ground at its lowest point.

NOTE: If necessary, release toggle switch to stop platform from moving.

3. While holding the latch release handle (**FIG. 16-2A**), hold the up-down toggle switch in the **DOWN** position (**FIG. 17-1**) until platform is 16" above the ground (**FIG. 17-2**). Let go of latch release handle as the platform is lowered.



DOWN
FIG. 17-1

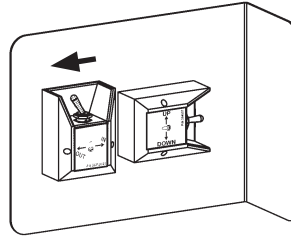


PLATFORM LOWERED TO 16"
ABOVE GROUND

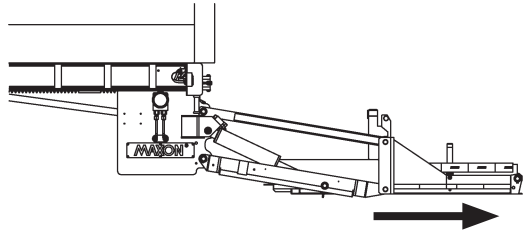
FIG. 17-2

OPERATION - Continued

4. Hold the in-out toggle switch in the **OUT** position (**FIG. 18-1**) until the Liftgate travels to the outboard stops as shown in **FIG. 18-2**.



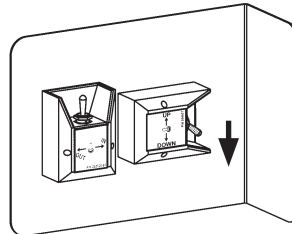
OUT
FIG. 18-1



LIFTGATE TRAVELS TO OUTBOARD STOPS
FIG. 18-2

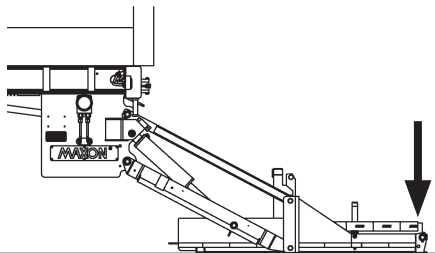
CAUTION

To prevent damage to Liftgate & vehicle, platform cannot be raised to bed height unless Liftgate is in position at the outboard stops. To enable full raise and lower operation, ensure Liftgate is at the outboard stops.



DOWN
FIG. 18-3

5. Hold the up-down toggle switch in the **DOWN** position (**FIG. 18-3**) to lower platform to ground level (**FIG. 18-4**).

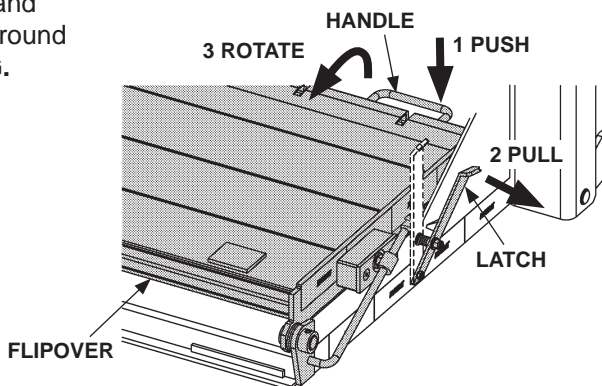


PLATFORM LOWERED TO GROUND
FIG. 18-4

WARNING

To prevent possible injury, never operate control switch while unfolding the flipover or retention ramp.

6. If equipped with a flipover and retention ramp, unfold flipover (**FIG. 19-1**) by pushing down on handle to relieve pressure from the latch. Then, pull latch and rotate flip over to the ground using the handles (**FIG. 19-1**).



UNFOLDING FLIPOVER (RH SIDE SHOWN)
FIG. 19-1

OPERATION - Continued

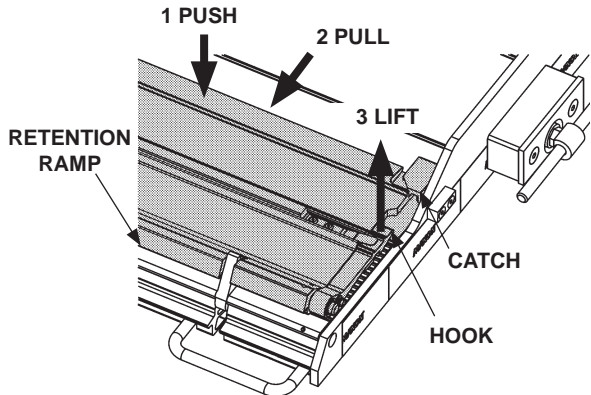
CAUTION

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.

NOTE: To unhook retention ramps, stand at side of the flipover of the ramp that is to be unhooked. After the retention ramps are unhooked, the recommended place for handling the retention ramps is at the center of the free edges (**FIG. 20-2**).

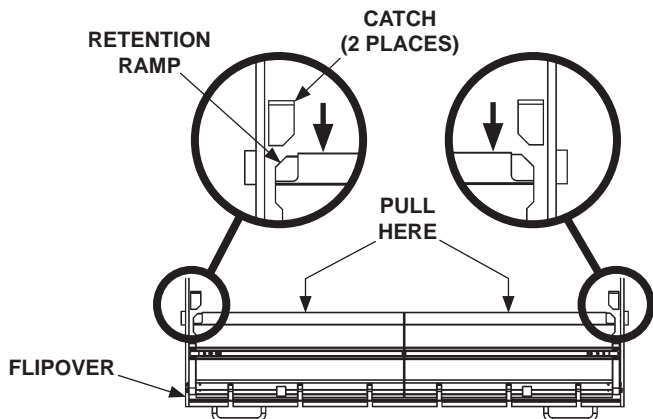
7. Unhook retention ramp (**FIGS. 20-1 and 20-2**).

To release RH ramp from the catch, push down on ramp while lifting up on the hook. Then, slide ramp back to disengage from the catch. Repeat for LH ramp (**FIG. 20-2**).



UNFOLDING RETENTION RAMP
(RH SIDE SHOWN)

FIG. 20-1



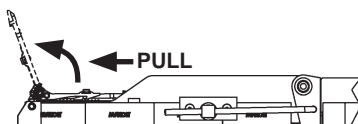
RELEASING RETENTION RAMP
(TOP VIEW OF FLIPOVER)

FIG. 20-2

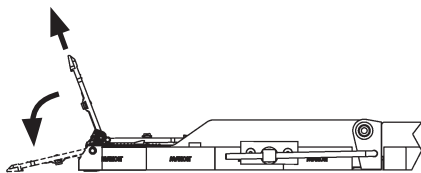
CAUTION

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.

8. Continue to pull retention ramp to the retention position (**FIG. 21-1**), and then to the ramp position (**FIG. 21-2**).



**MOVING TO RETENTION POSITION
(RH SIDE SHOWN)
FIG. 21-1**



**MOVING TO RAMP POSITION
(RH SIDE SHOWN)
FIG. 21-2**

OPERATION - Continued

NOTE: Before raising or lowering platform, retention ramp should be in the retention or stowed position (**FIG. 21-1**).

NOTE: If necessary, release the toggle switch to stop the platform from moving.

9. To raise platform to bed level (**FIG. 22-2**), hold the up-down toggle switch on the wall, in the **UP** position (**FIG. 22-1**).

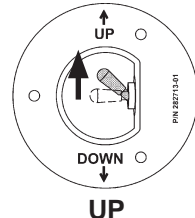
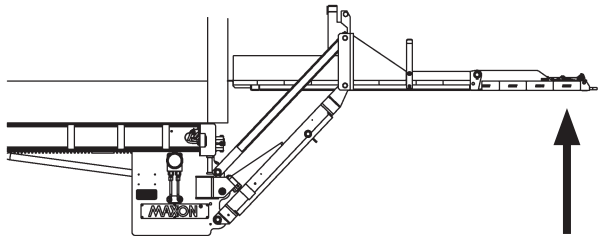


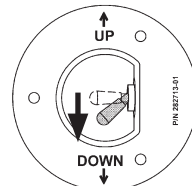
FIG. 22-1



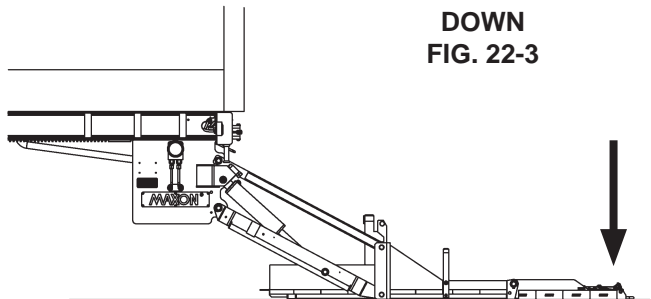
PLATFORM RAISED TO BED LEVEL

FIG. 22-2

10. To lower platform to ground level (**FIG. 22-4**), hold the up-down toggle switch in the **DOWN** position (**FIG. 22-3**).



DOWN
FIG. 22-3



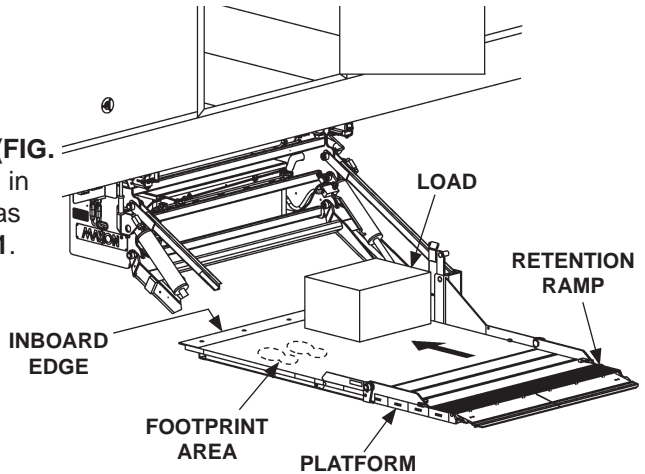
PLATFORM LOWERED TO GROUND

FIG. 22-4

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 the lifting capacity of the Liftgate. If standing on platform, do not allow your feet to extend beyond the inboard edge of the platform.

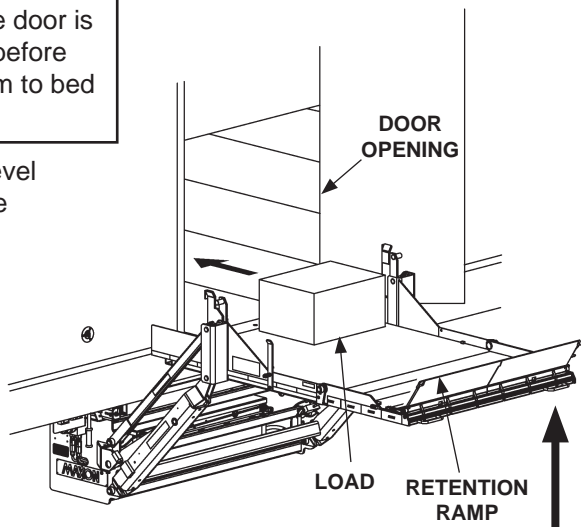
11. Move load on platform (**FIG. 23-1**). If equipped, rotate retention ramp to retention position (**FIG. 23-2**). Then, stand in the footprint area as shown in **FIG. 23-1**.



LOADING PLATFORM AT GROUND LEVEL
FIG. 23-1

NOTE: Ensure vehicle door is latched open before raising platform to bed level.

12. Raise platform to bed level (**FIG. 23-2**). Then, move load from platform into vehicle body.



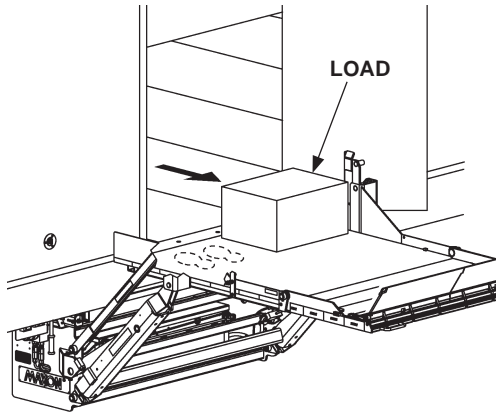
UNLOADING PLATFORM AT BED LEVEL
FIG. 23-2

OPERATION - Continued

WARNING

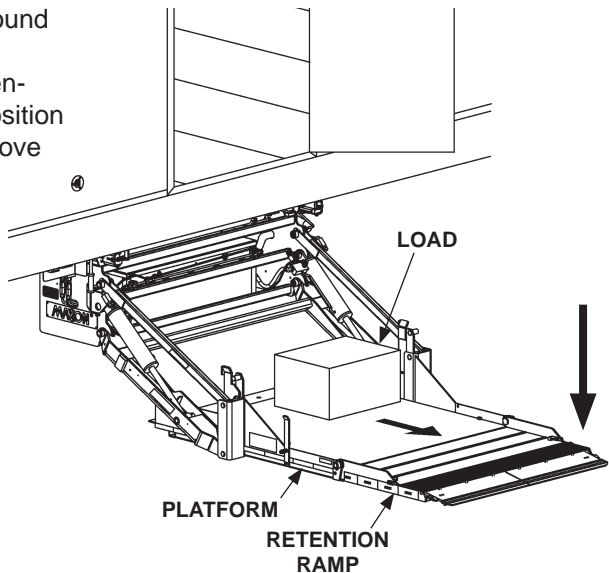
Pulling the load from vehicle to platform can result in a fall from platform and serious injury. When unloading vehicle, always push the load out on the platform.

13. Load the platform at bed level as follows. Push load out of the vehicle body to correct position on platform (**FIG. 24-1**). Place all loads as close as possible to the inboard edge of the platform with the heaviest part toward the trailer body as shown in **FIG. 24-1**. If standing on platform with the load, stand in the footprint area shown and comply with the **WARNING** on the previous page.



LOADING PLATFORM AT BED LEVEL
FIG. 24-1

14. Lower platform to ground level (**FIG. 24-2**). If equipped, rotate retention ramp to ramp position (**FIG. 24-2**). Then, move load off the platform.



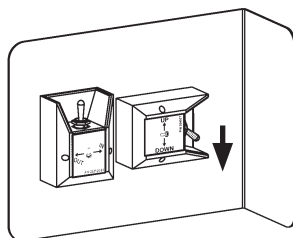
UNLOADING PLATFORM AT GROUND LEVEL
FIG. 24-2

WARNING

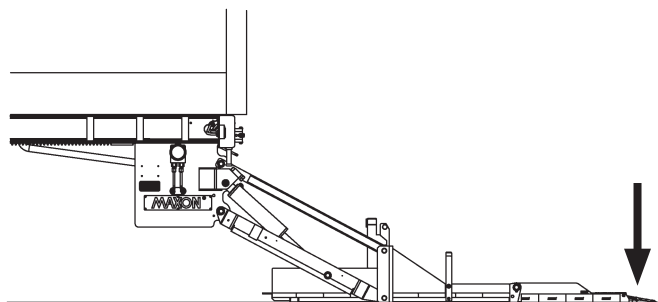
Never move the vehicle unless the Liftgate is properly stowed.

NOTE: If necessary, release the toggle switch to stop the platform from moving.

15. Before moving the vehicle, prepare the Liftgate as follows. Make sure load is removed from platform. If platform is at bed level, lower the platform to ground level by holding the up-down toggle switch in the **LOWER** position (**FIG. 25-1**) until platform is on the ground (**FIG.25-2**).



LOWER
FIG. 25-1



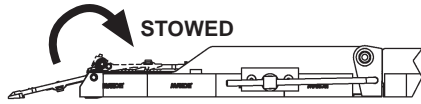
PLATFORM LOWERED TO GROUND
FIG. 25-2

OPERATION - Continued

WARNING

Never operate control switch while folding the flipover, flip ramp or retention ramp.

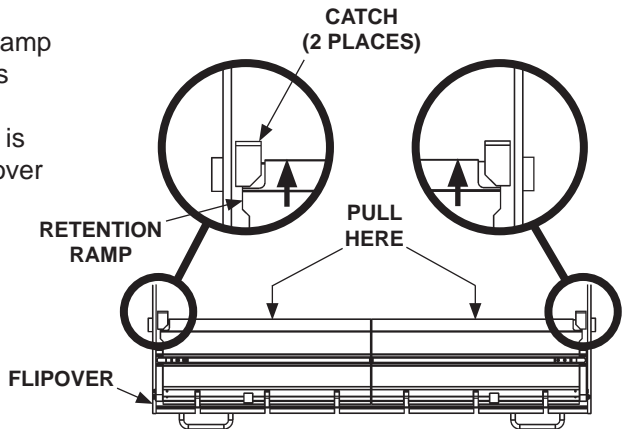
16. To stow, rotate retention ramp to retention position, and then to the flat position on flipover as shown in (FIG. 26-1).



**ROTATING RAMP TO STOWED POSITION
(RH SIDE SHOWN)**

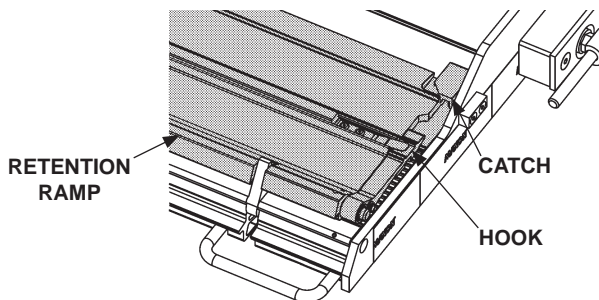
FIG. 26-1

17. Push the retention ramp fully into the catches (FIG. 26-2). Make sure retention ramp is hooked into the flipover (FIG. 26-3).



**STOWING THE RAMP
(TOP VIEW OF FLIPOVER)**

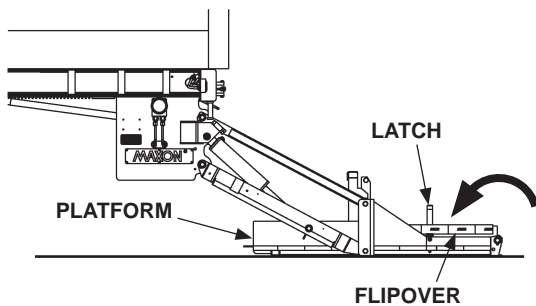
FIG. 26-2



**FOLDING RETENTION RAMP
(RH SIDE SHOWN)**

FIG. 26-3

18. Fold flipover (**FIG. 27-1**) on top of platform until latched.



FOLDING FLIPOVER
FIG. 27-1

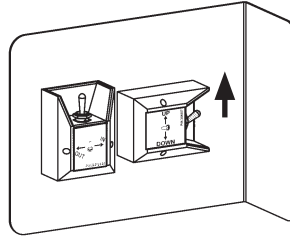
OPERATION - Continued

CAUTION

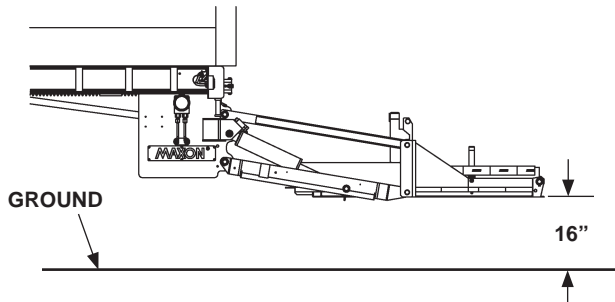
To prevent damage to Liftgate & vehicle, Liftgate will not travel in or out from vehicle unless platform is at a certain height. To enable in and out travel, ensure platform is 16" above the ground at its lowest point.

NOTE: If necessary, release the toggle switch to stop the platform from moving.

19. Stow the Liftgate as follows.
Hold the up-down toggle switch in the **UP** position (**FIG. 28-1**) until the platform is 16" above the ground (**FIG. 28-2**).



UP
FIG. 28-1

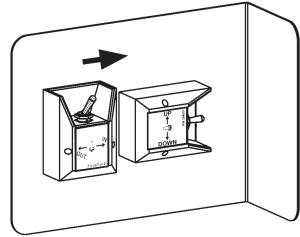


PLATFORM RAISED TO 16"
ABOVE GROUND
FIG. 28-2

CAUTION

To prevent damage to Liftgate & vehicle, platform cannot be raised to stow position unless Liftgate is **ALL THE WAY IN** at the inboard stops. To enable platform to be raised, ensure Liftgate is at the inboard stops.

20. To stow Liftgate, hold the in-out toggle switch in the **IN** position (**FIG. 29-1**). Then, let Liftgate travel all the way to inboard stop as shown in **FIGS. 29-2 & 29-2A**.



IN
FIG. 29-1

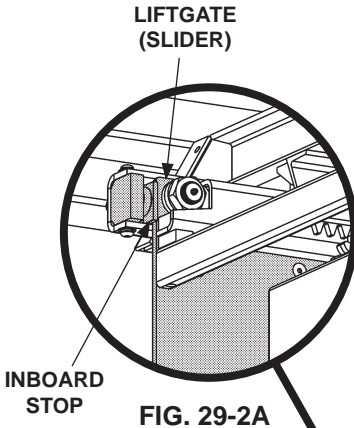
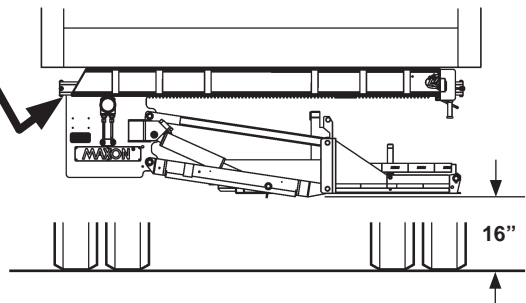


FIG. 29-2A



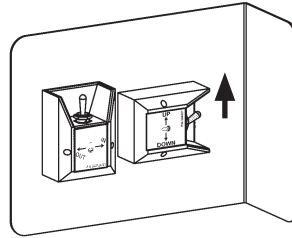
SLIDING PLATFORM IN TO STOW
FIG. 29-2

OPERATION - Continued

CAUTION

Platform must be stowed against frame under hydraulic pressure.
Do not rest platform on the latch.

21. Hold the up-down toggle switch in the **UP** position (**FIG. 30-1**) until the platform raises up against the frame and latches (**FIG. 30-2 and 30-2A**). Movement of the latch release handle (**FIG. 30-2**) indicates slider is latched.



UP
FIG. 30-1

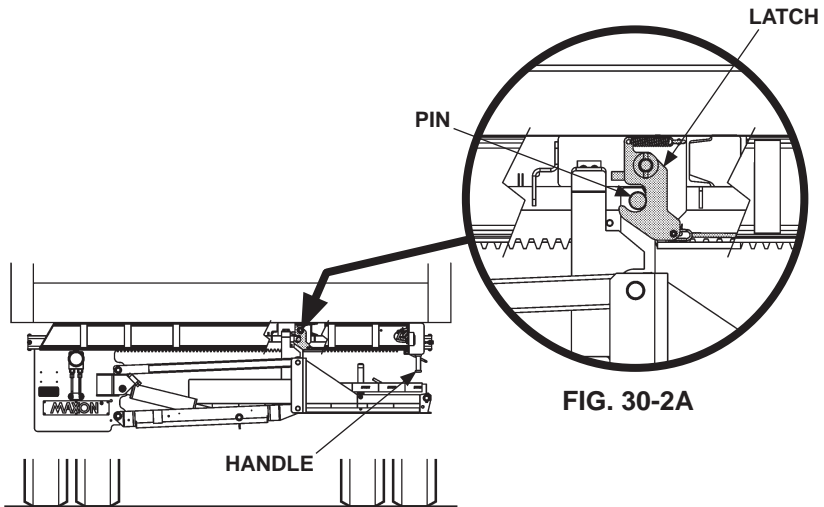
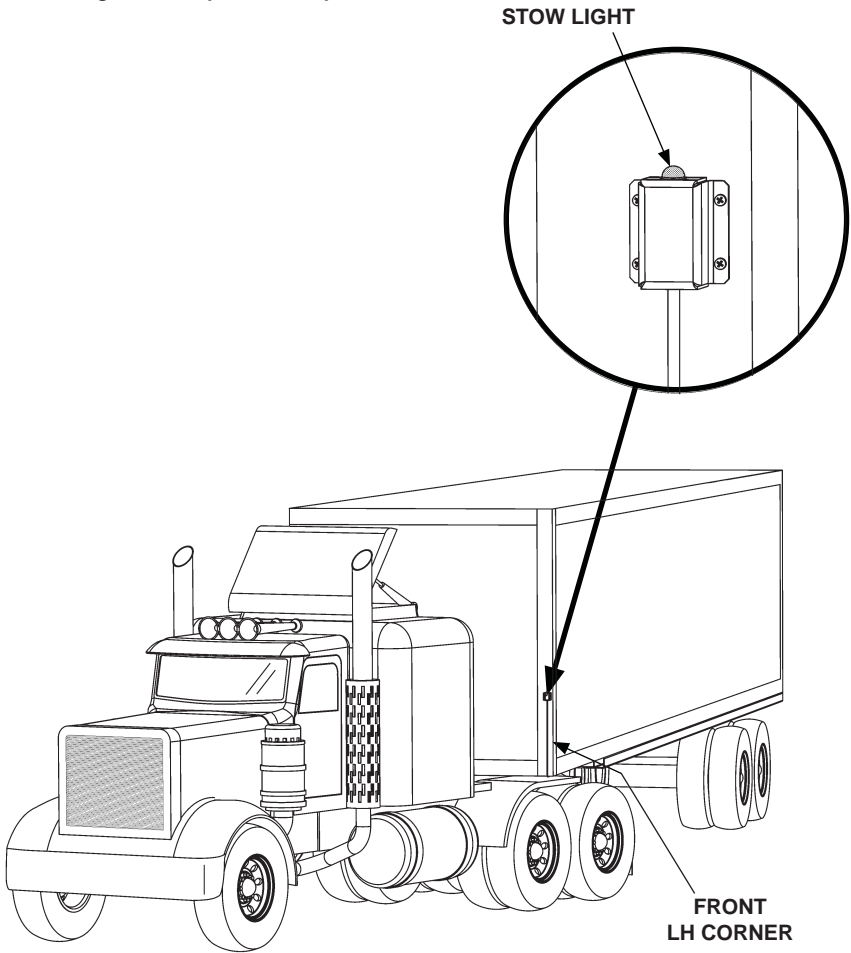


FIG. 30-2

NOTE: Stow light illuminates when the Liftgate is not in the stow position.

22. Before moving vehicle, ensure stow light is off (**FIG. 31-1**).



FRONT OF TRAILER
FIG. 31-1