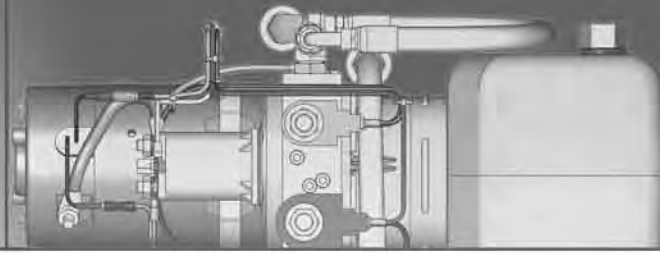
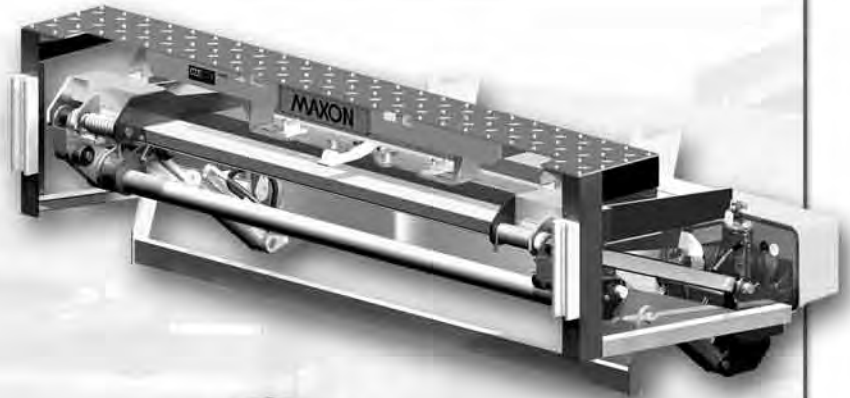


M-08-33  
REV. B  
AUGUST 2010



# MAXON® GPT-Series

## INSTALLATION MANUAL GPT-25, GPT-3, GPT-4 & GPT-5



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Comply with the following **WARNINGS** and **SAFETY INSTRUCTIONS** while installing Liftgates. See **Operation Manual** for operating safety requirements.

## **⚠ WARNING**

- Do not stand, or allow obstructions, under the platform when lowering the Liftgate. **Be sure your feet are clear of the Liftgate.**
- **Keep fingers, hands, arms, legs, and feet clear of moving Liftgate parts (and platform edges) when operating the Liftgate.**
- **Correctly stow platform when not in use. Extended platforms could create a hazard for people and vehicles passing by.**
- **Make sure vehicle battery power is disconnected** while installing Liftgate. Connect vehicle battery power to the Liftgate only when installation is complete or as required in the installation instructions.
- If it is necessary to stand on the platform while operating the Liftgate, keep your feet and any objects clear of the inboard edge of the platform. Your feet or objects on the platform can become trapped between the platform and the Liftgate extension plate.
- Never perform unauthorized modifications on the Liftgate. Modifications may result in early failure of the Liftgate and may create hazards for Liftgate operators and maintainers.
- Recommended practices for welding on steel parts are contained in the current **AWS (American Welding Society) D1.1 Structural Welding Code - Steel**. Damage to Liftgate and/or vehicle, and personal injury can result from welds that are done incorrectly.

## **SAFETY INSTRUCTIONS**

- Read and understand the instructions in this **Installation Manual** before installing Liftgate.
- Before operating the Liftgate, read and understand the operating instructions in **Operation Manual**.
- Comply with all **WARNING** and instruction decals attached to the Liftgate.
- Keep decals clean and legible. If decals are illegible or missing, replace them. Free replacement decals are available from **Maxon Customer Service**.
- Consider the safety and location of bystanders and location of nearby objects when operating the Liftgate. Stand to one side of the platform while operating the Liftgate.
- Do not allow untrained persons to operate the Liftgate.
- Wear appropriate safety equipment such as protective eyeglasses, faceshield and clothing while performing maintenance on the Liftgate and handling the battery. Debris from drilling and contact with battery acid may injure unprotected eyes and skin.
- Be careful working by an automotive type battery. Make sure the work area is well ventilated and there are no flames or sparks near the battery. Never lay objects on the battery that can short the terminals together. If battery acid gets in your eyes, immediately seek first aid. If acid gets on your skin, immediately wash it off with soap and water.
- If an emergency situation arises (vehicle or Liftgate) while operating the Liftgate, release the control switch to stop the Liftgate.
- A correctly installed Liftgate operates smoothly and reasonably quiet. The only noticeable noise during operation comes from the power unit while the platform is raised and lowered. Listen for scraping, grating and binding noises and correct the problem before continuing to operate Liftgate.

# STANDARD LIFTGATE COMPONENTS

## ⚠ CAUTION

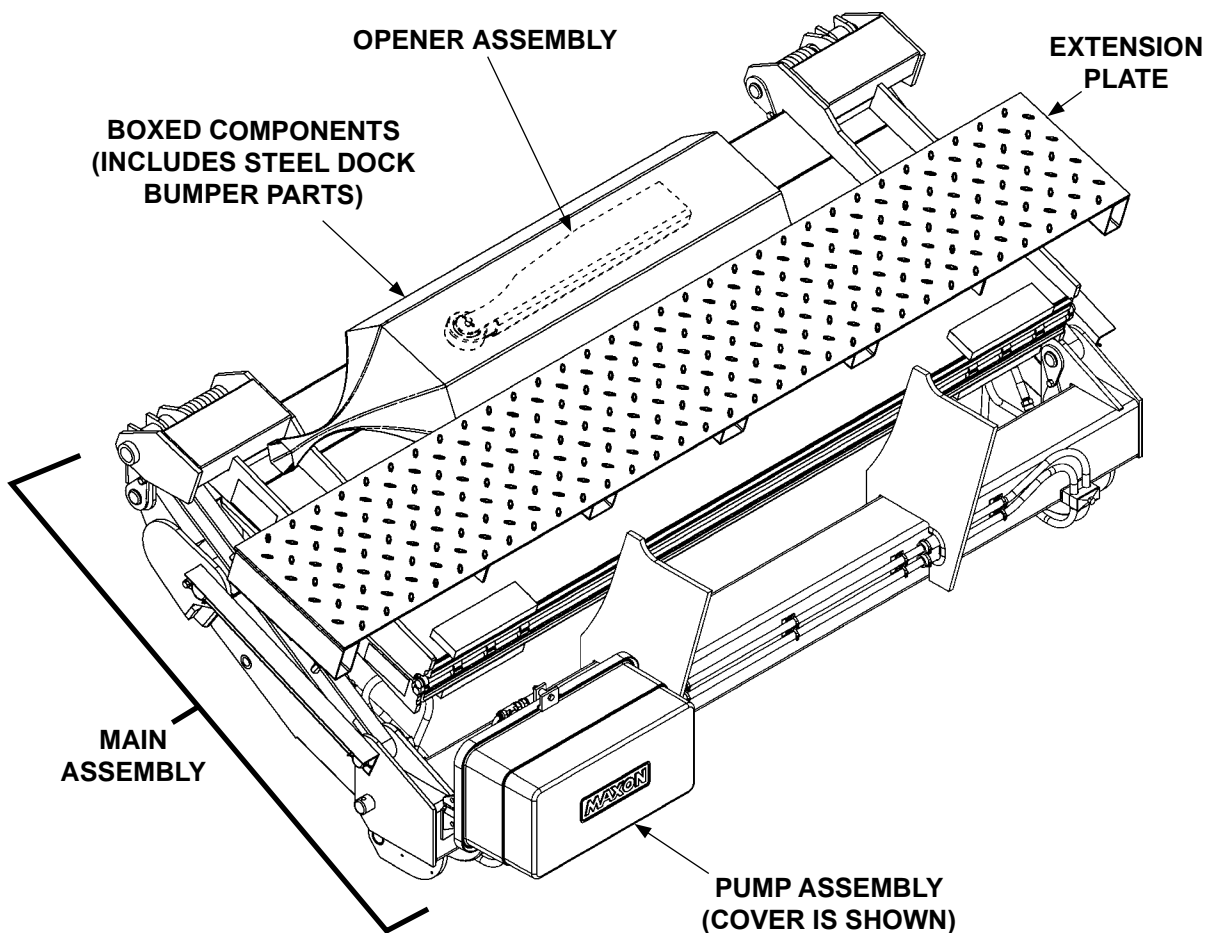
Unpacking the Liftgate on unlevel surface may allow heavy components to slide off when shipping bands are cut. Injury and equipment damage could result. Before the shipping bands are cut, put Liftgate on level surface that will support 1500 lbs. When unpacking the Liftgate, remove heavy components carefully to avoid injury and damage.

**NOTE:** Make sure you have all components and parts before you start installing Liftgate. Compare parts in the part box and each kit box with packing list enclosed in each box. If parts and components are missing or incorrect, call:

**Maxon Customer Service**

**Call (800) 227-4116 or**

**Send e-mail to [cservice@maxonlift.com](mailto:cservice@maxonlift.com)**



**TYPICAL LIFTGATE PACKAGED FOR SHIPMENT  
FIG. 4-1**

# GPT-SERIES INSTALLATION PARTS BAGS

	NOMENCLATURE OR DESCRIPTION	QTY.	PART NUMBER
<b>1</b>	HEAT SHRINK TUBING, 3/4" X 1-1/2" LG.	1	253316-04
<b>2</b>	MOLDED SWITCH ASSEMBLY	1	264951-04
<b>3</b>	SHIM, 3-1/2" X 1-3/4" X 1/4"	2	264731
<b>4</b>	SHIM, 2-1/2" X 1" X 1/16"	2	264732
<b>5</b>	FLAT, 2-1/2" 1" X 1/8"	2	201999
<b>6</b>	FLAT, 5" X 4" X 3/8"	2	229295
<b>7</b>	COPPER LUG (2GA)	1	906497-02
<b>8</b>	SELF-TAPPING SCREW, 10-24 X 1" LG.	4	900057-5
<b>9</b>	CLAMP, #10 RUBBER LOOM	2	801681
<b>10</b>	FRAME CLIP, 1/2" X 1-3/8"	7	050079
<b>11</b>	DECAL & MANUAL KIT	1	282842-01 (GPT-25) 282843-01 (GPT-3) 282844-01 (GPT-4) 282845-01 (GPT-5)
	A. INSTALLATION MANUAL	1	M-08-33
	B. OPERATION MANUAL	1	M-08-34
	C. MAINTENANCE MANUAL	1	M-08-35
	D. DECALS	-	282848-01 (GPT-25) 282848-02 (GPT-3) 282848-03 (GPT-4) 282848-04 (GPT-5)
<b>12</b>	FUSED POWER CABLE, 175 AMP, 38' LG.	1	264422
<b>13</b>	RUBBER DOCK BUMPER KIT	1	203410
<b>14</b>	PLASTIC TIE, 8" LG.	1	905322-01
<b>15</b>	DOCK BUMPER ANGLE, 23-1/2" LG.	2	226856
<b>16</b>	BRACE ANGLE, LH	1	266019-01
<b>17</b>	BRACE ANGLE, RH	1	266019-02

**TABLE 5-1**

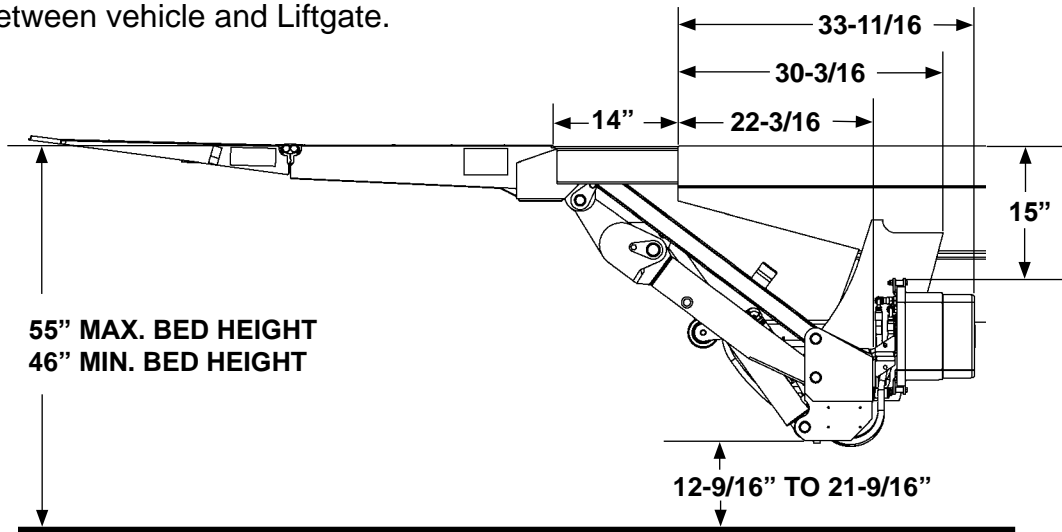
# VEHICLE REQUIREMENTS

**NOTE: BODY maximum and minimum operating bed height:**  
**For GPT-25, GPT-3, GPT-4, & GPT-5 with standard platform:**  
 Maximum height is **55"** (Unloaded). Minimum height is **46"** (Loaded).  
 On vehicle bodies equipped with swing open doors, the extension plate and vehicle body must be modified to install this Liftgate.

**NOTE:** Make sure vehicle is parked on level ground while preparing vehicle and installing Liftgate.

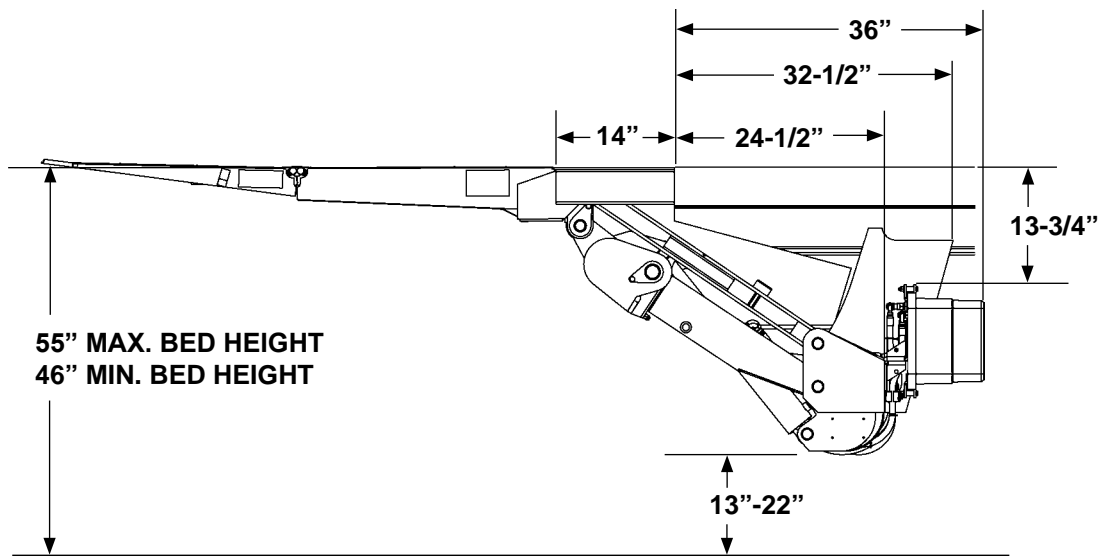
**NOTE:** Dimensions are provided as reference for fitting Liftgate to vehicle body.

1. Check for correct clearances (**FIGS. 6-1 and 6-2**) on vehicle to prevent interference between vehicle and Liftgate.



**GPT-25 & GPT-3 CLEARANCES**

**FIG. 6-1**



**GPT-4 & GPT-5 CLEARANCES**

**FIG. 6-2**

# VEHICLE REQUIREMENTS - Continued

## CAUTION

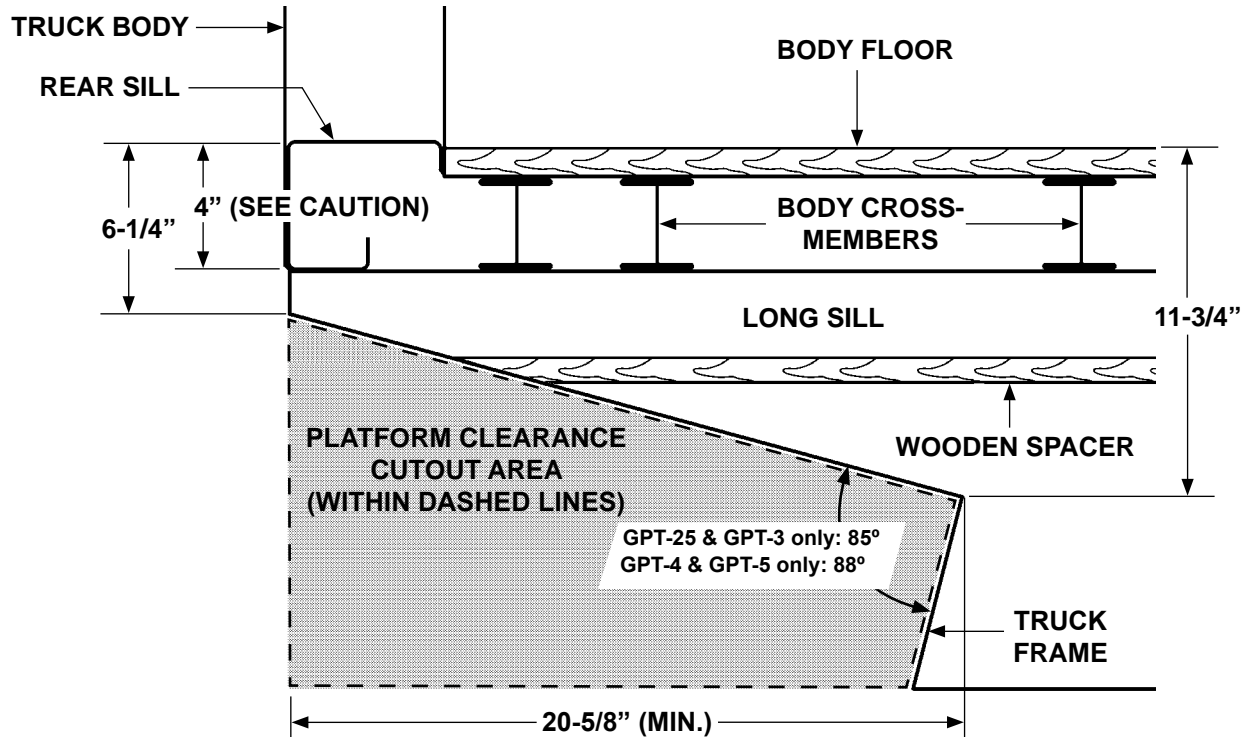
- To prevent aluminum platform from being damaged, make sure vehicle frame is cut correctly and rear sills are modified if over 4" in height. If the cutouts are incorrect, platform may hit vehicle frame or underbody when stowing the Liftgate. If the rear sill is over 4" in height, bottom of the platform may hit the sill.
- Installer is responsible for ensuring that vehicle body and frame modifications do not adversely affect the integrity of the body and frame.

**NOTE:** The dimensions, illustrated below, are maximums except as indicated.

**NOTE:** The platform cutout area illustrated below is required to prevent vehicle frame interference when platform is being stowed and unstowed. Truck frame is shown. For trailers, refer to instructions supplied with trailer mounting kit for Liftgate.

**NOTE:** See the next page for interference areas that can result from rear sills over 4" in height.

2. Fit the Liftgate to vehicle body by cutting vehicle frame as shown in **FIG. 7-1**.

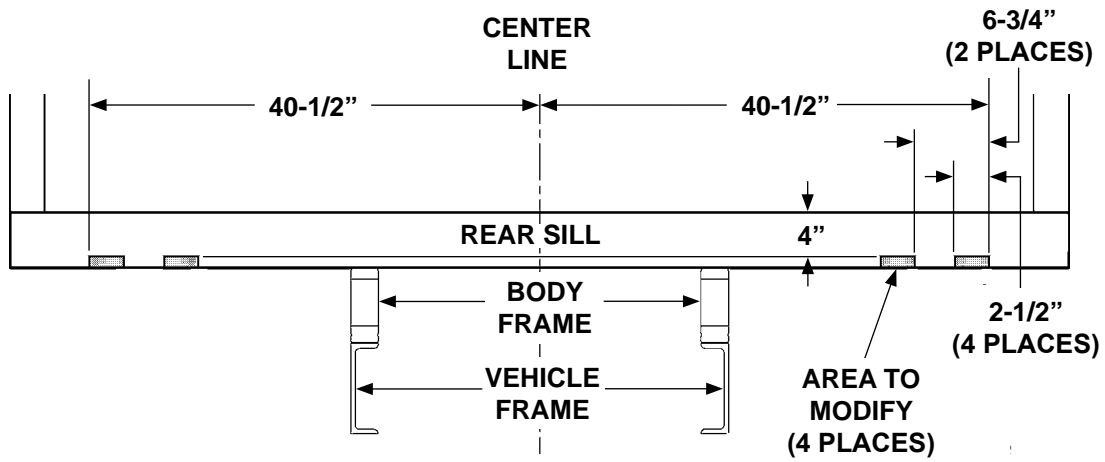


**VEHICLE FRAME CUTOUT FOR PLATFORM CLEARANCE  
(GPT-25, GPT-3, GPT-4 & GPT-5)  
(TRUCK FRAME IS SHOWN)**

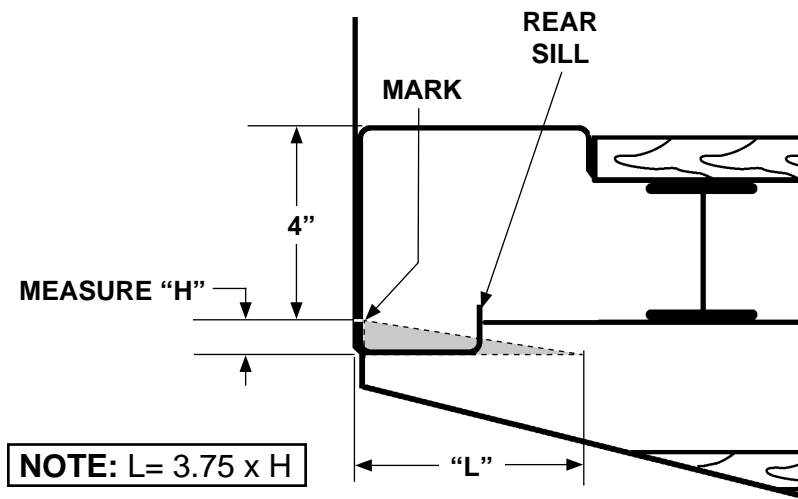
**FIG. 7-1**

## VEHICLE REQUIREMENTS - Continued

3. If the rear sill is over 4" in height, measure and mark the areas to be modified on the sill as shown in FIG. 8-1. A side view of the interference areas is shown in FIG. 8-2.



FRONT VIEW - REAR SILL MORE THAN 4" IN HEIGHT  
(LIFTGATE & EXTENSION PLATE NOT SHOWN)  
FIG. 8-1



SIDE VIEW - REAR SILL MORE THAN 4" IN HEIGHT  
FIG. 8-2

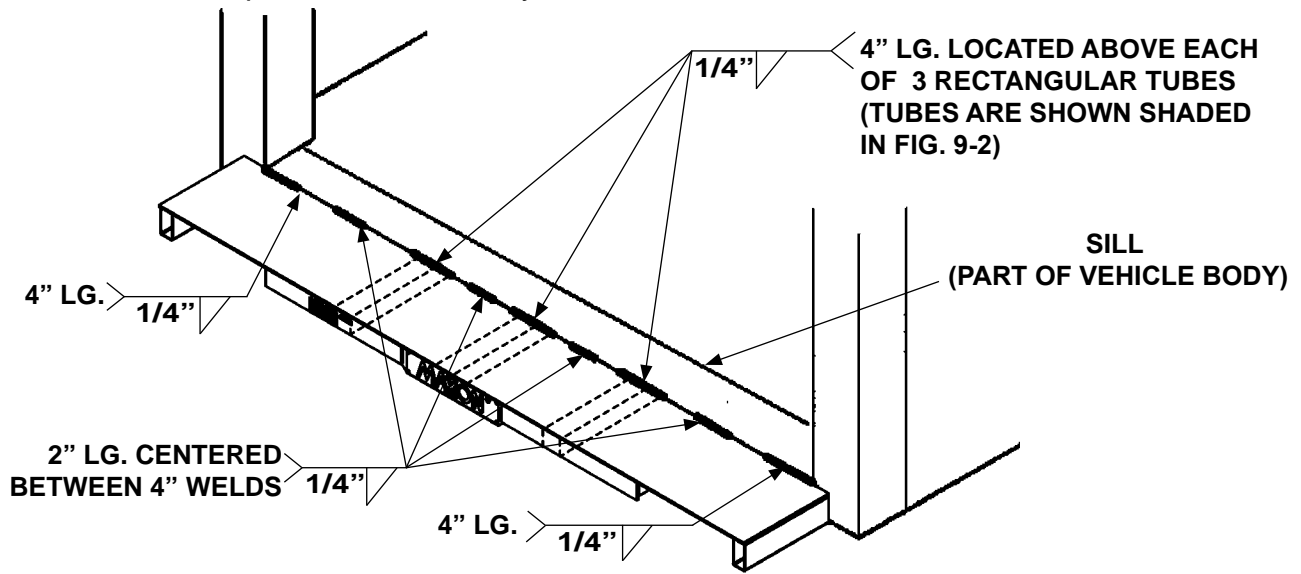


# STEP 1 - WELD EXTENSION PLATE TO VEHICLE

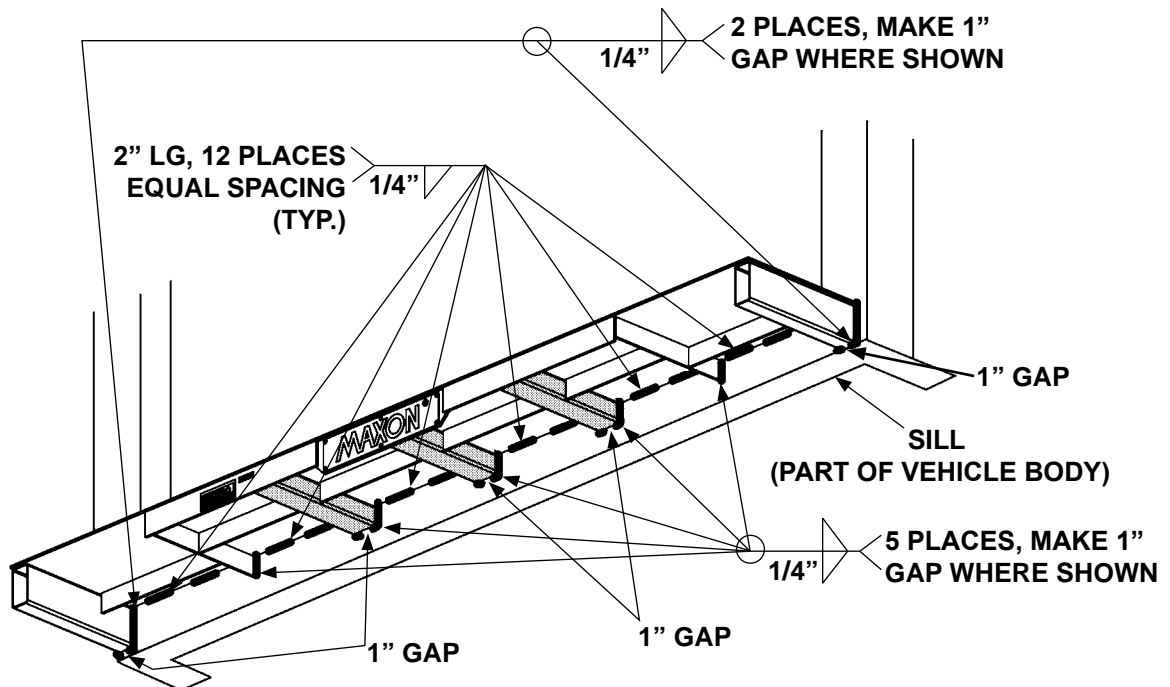
## CAUTION

To protect the original paint system, a 3" wide area of paint must be removed from all sides of the weld area before welding.

1. Center the extension plate on vehicle body. Before welding extension plate to vehicle body, make sure top surface of extension plate is flush with floor of vehicle body. Weld the extension plate to vehicle body sill as shown in **FIGS. 9-1 and 9-2**.



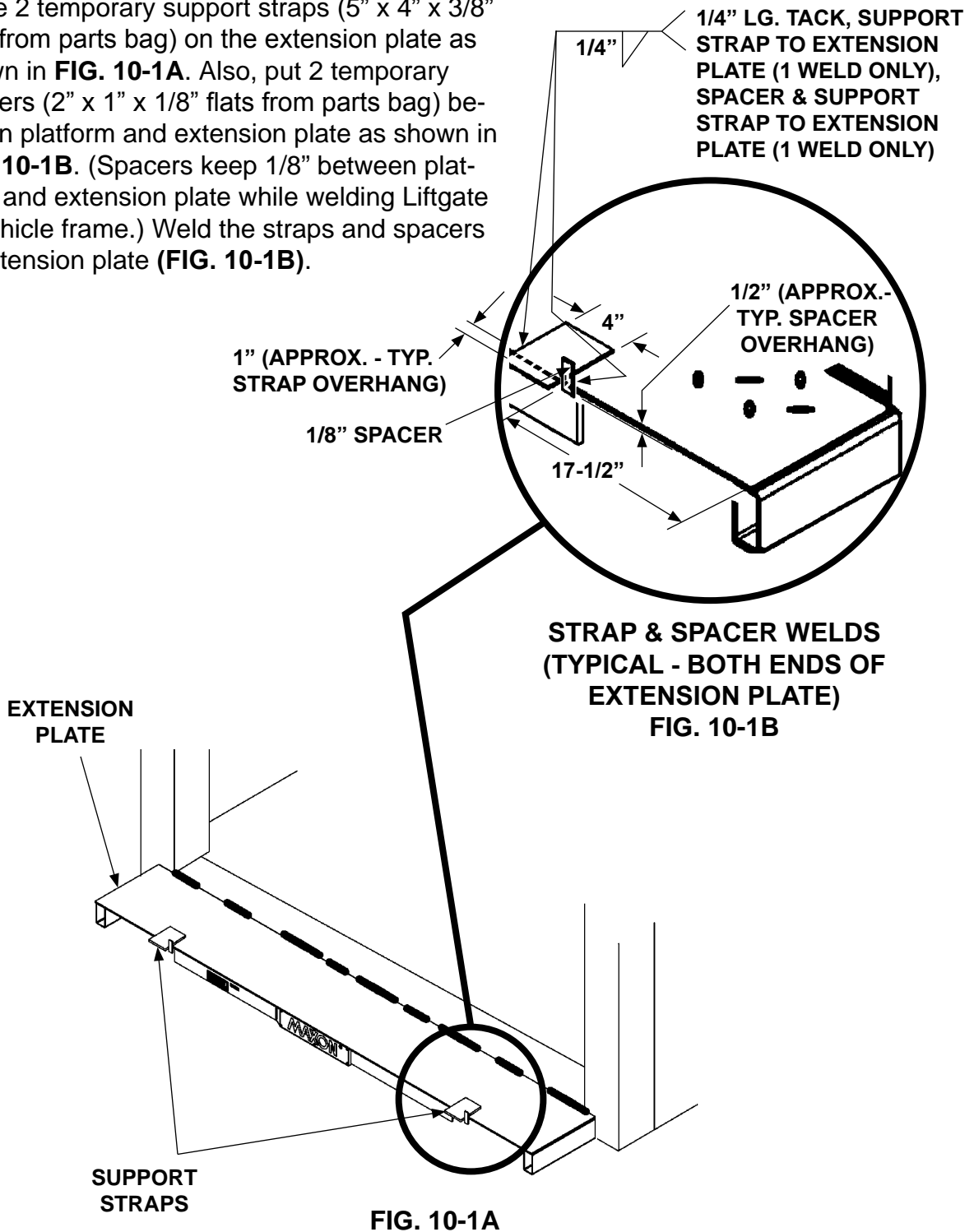
**EXTENSION PLATE WELDS - VIEWED FROM ABOVE**  
**FIG. 9-1**



**EXTENSION PLATE WELDS - VIEWED FROM UNDERNEATH**  
**FIG. 9-2**

## STEP 1 - WELD EXTENSION PLATE TO VEHICLE - Continued

2. Place 2 temporary support straps (5" x 4" x 3/8" flats from parts bag) on the extension plate as shown in **FIG. 10-1A**. Also, put 2 temporary spacers (2" x 1" x 1/8" flats from parts bag) between platform and extension plate as shown in **FIG. 10-1B**. (Spacers keep 1/8" between platform and extension plate while welding Liftgate to vehicle frame.) Weld the straps and spacers to extension plate (**FIG. 10-1B**).



## STEP 2 - WELD LIFTGATE TO VEHICLE

1. Remove split looms from mounting plates (FIG. 11-1). (Split looms will be reinstalled later after final welding.)

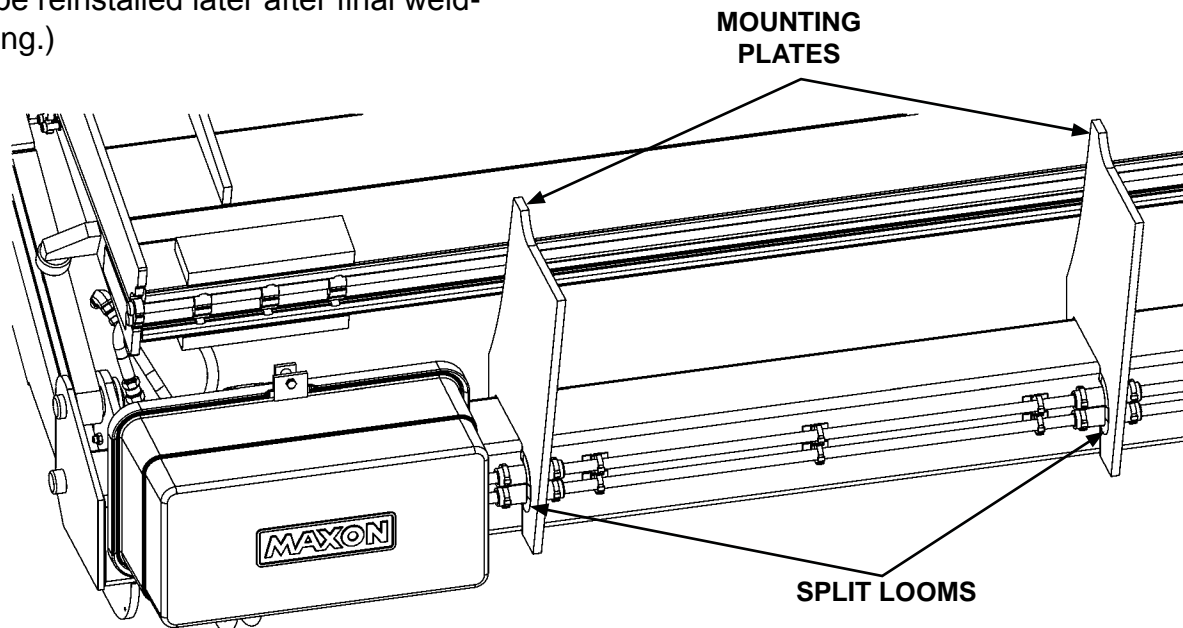
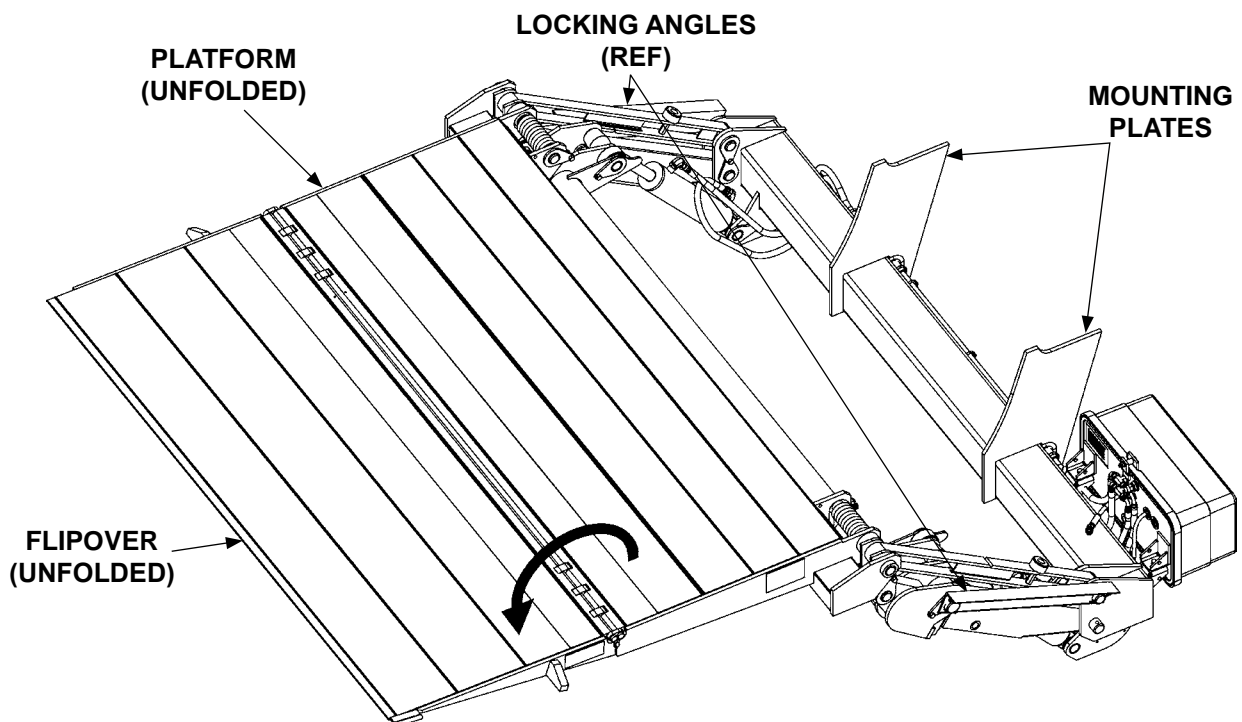


FIG. 11-1

2. Unfold the platform and flipover (FIG. 11-2).



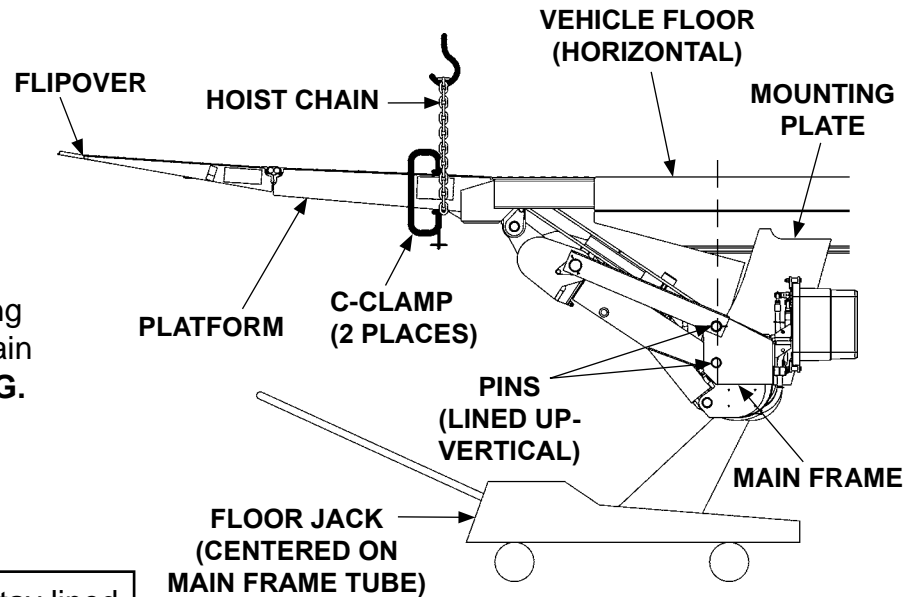
PLATFORM & FLIPOVER UNFOLDED  
FIG. 11-2

## STEP 2 - WELD LIFTGATE TO VEHICLE - Continued

### ⚠ CAUTION

To prevent damage to aluminum flipover, **NEVER** hoist the Liftgate by the flipover as shown in the NO illustration. Hoist the Liftgate by the platform only as shown in the YES illustration.

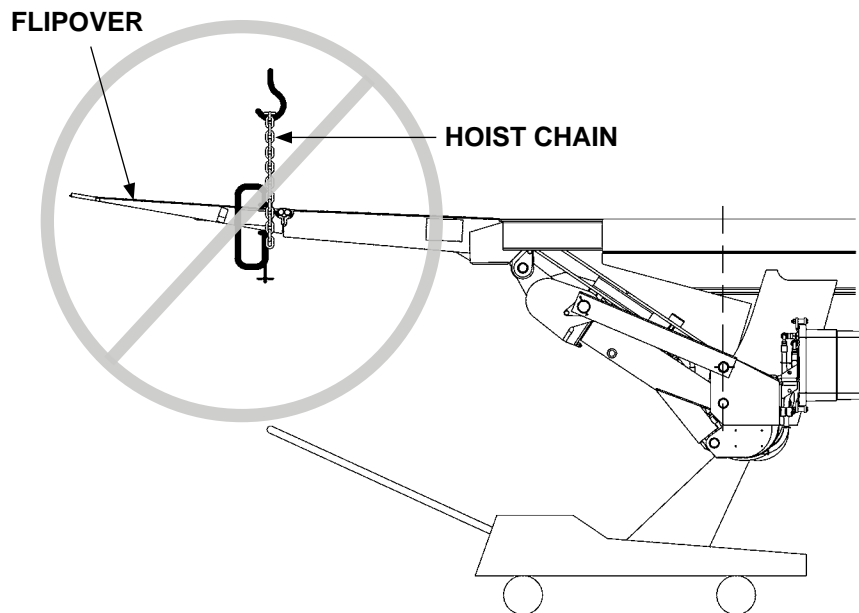
3. Make sure hoist is not being set up the incorrect way (FIG. 12-2). Place a "C"-clamp on each side of platform as shown in FIG. 12-1. (Clamps prevent hoist chain from slipping off platform.) Place chain all around platform (FIG. 12-1).



**CORRECT WAY TO HOIST LIFTGATE**  
FIG. 12-1

**NOTE:** Ensure pins stay lined up vertical (see illustration) while Liftgate is being welded to vehicle frame.

4. Hoist the Liftgate. Then, place floor jack under main frame (FIG. 12-1). Jack the Liftgate into position. Make sure vehicle floor is horizontal and pins are lined up vertical (FIG. 12-1).



**INCORRECT WAY TO HOIST LIFTGATE**  
FIG. 12-2

## STEP 2 - WELD LIFTGATE TO VEHICLE - Continued

### ⚠ WARNING

Liftgate is shipped from factory with mounting plates that are only tack welded to main frame. Weld as shown in illustration before operating Liftgate.

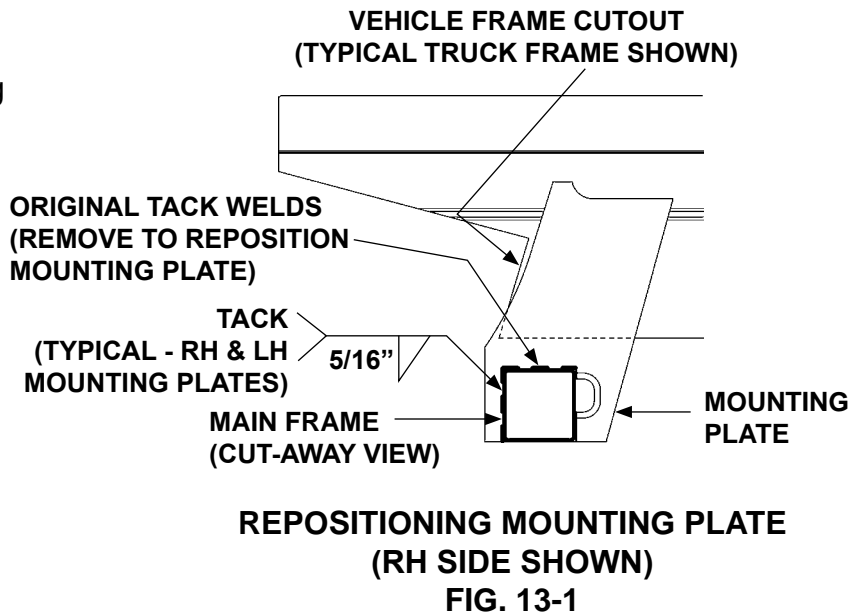
### CAUTION

Prevent damage to hydraulic hoses. If welding next to hydraulic hoses, use a protective cover such as a welding blanket to cover the hoses.

### CAUTION

To protect the original paint system, a 3" wide area of paint must be removed from all sides of the weld area before welding.

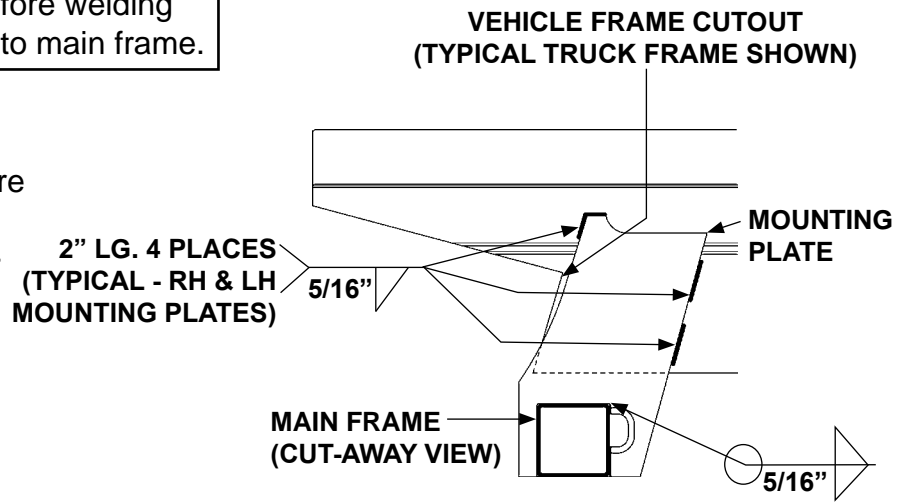
5. Check if both mounting plates line up with the vehicle frame. If the mounting plates do not line up, remove the tack welds from one mounting plate (**FIG. 13-1**). Make sure Liftgate stays centered on vehicle. Reposition the mounting plate against vehicle frame. Tack weld as shown in **FIG. 13-1**. Repeat for second mounting plate (reposition and tack weld).



## STEP 2 - WELD LIFTGATE TO VEHICLE - Continued

**NOTE:** Weld both mounting plates to vehicle frame before welding mounting plates to main frame.

6. Clamp both mounting plates to vehicle frame. Before welding, make sure cutout in vehicle frame does not block the 2 slotted holes in mounting plate (**FIG. 14-1**). Weld the mounting plates to vehicle frame as shown in **FIG. 14-1**. Next, weld both mounting plates to main frame (**FIG. 14-1**). Remove clamps.



**WELDING TO VEHICLE FRAME AND  
MAIN FRAME (RH SIDE SHOWN)  
FIG. 14-1**

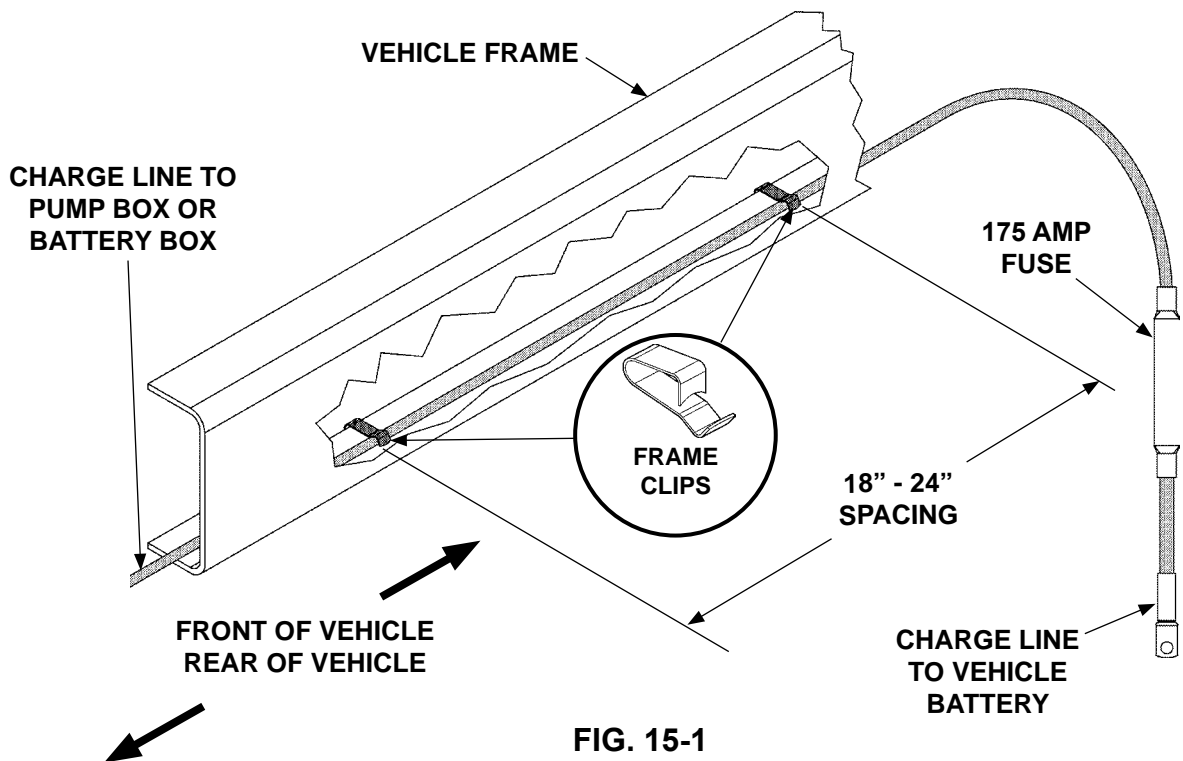
## STEP 3 - RUN POWER CABLE

### ⚠ CAUTION

Never route an energized wire. Make sure the vehicle battery is disconnected. Always route electrical wires clear of moving parts, brake lines, sharp edges and exhaust systems. Avoid making sharp bends in wiring. Attach securely. If drilling is necessary, first check behind the drilling surface to prevent damage to any fuel lines, vent lines, brake lines or wires.

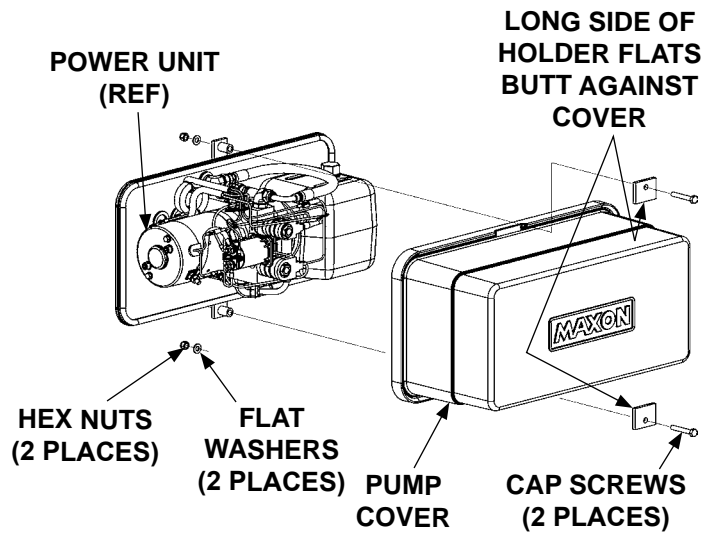
**NOTE:** Make sure cable is long enough to reach positive terminal on Liftgate pump box without putting tension on the cable.

Install vehicle charge line by running the line along the inside of vehicle frame (**FIG. 15-1**). Make sure **175 amp fuse (FIG. 15-1)** end of cable is by the battery. Run the charge line from vehicle battery to Liftgate pump box positive terminal. Use frame clips (parts box item) and plastic ties (as required) from charge line kit to secure cable.



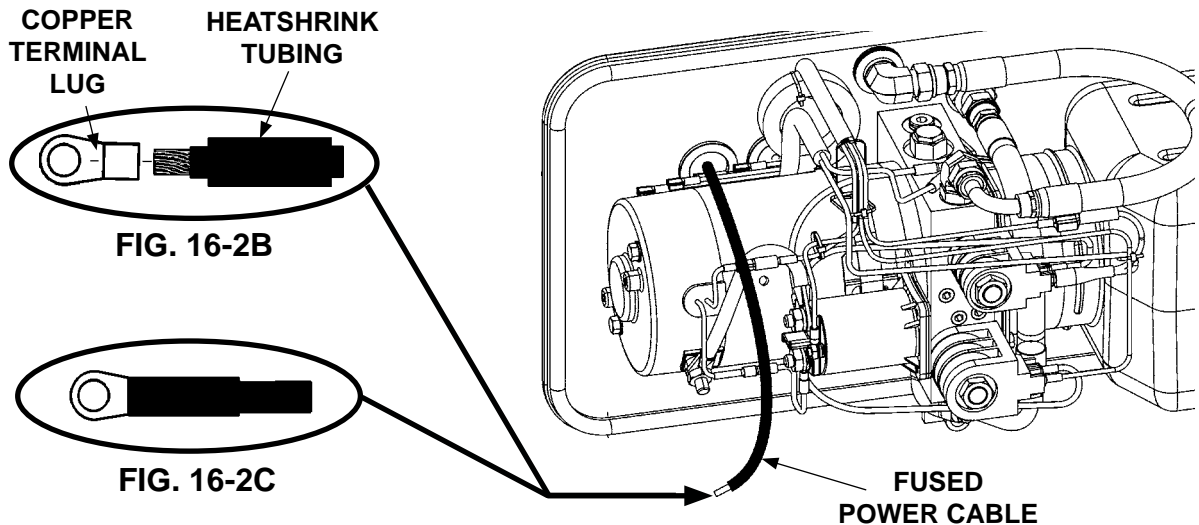
## STEP 4 - CONNECT POWER CABLE

1. Unbolt and remove pump cover (FIG. 16-1).



UNBOLTING PUMP COVER  
FIG. 16-1

2. On the bare wire end of fused power cable, keep enough length to attach copper terminal lug and reach motor solenoid without putting tension on cable (after connection) (FIG. 16-2A). Measure (if needed), and then cut excess cable from bare wire end of cable. Put heatshrink tubing (parts bag item) (FIG. 16-2B) on the end of the cable and leave room for terminal lug. Crimp copper terminal lug (parts bag item) on the fused power cable and shrink the heatshrink tubing (FIG. 16-2C).



TYPICAL FUSED POWER CABLE ROUTING  
FIG. 16-2A



## STEP 4 - CONNECT POWER CABLE - Continued

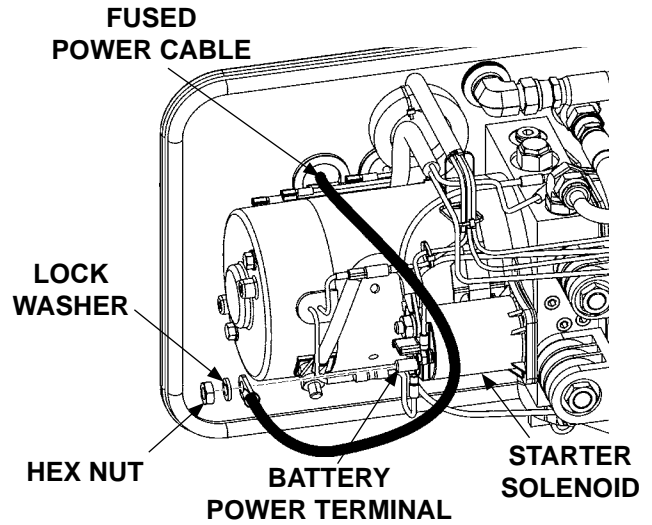
### CAUTION

Do not over-tighten the terminal nuts on starter solenoid. For the load terminals, torque nuts to 40 lbs.-in. max. Torque the nuts on #10-32 control terminals 15-20 lbs.-in.

**NOTE:** MAXON recommends using dielectric grease on all electrical connections.

**NOTE:** Do not remove flat washer from the battery power terminal.

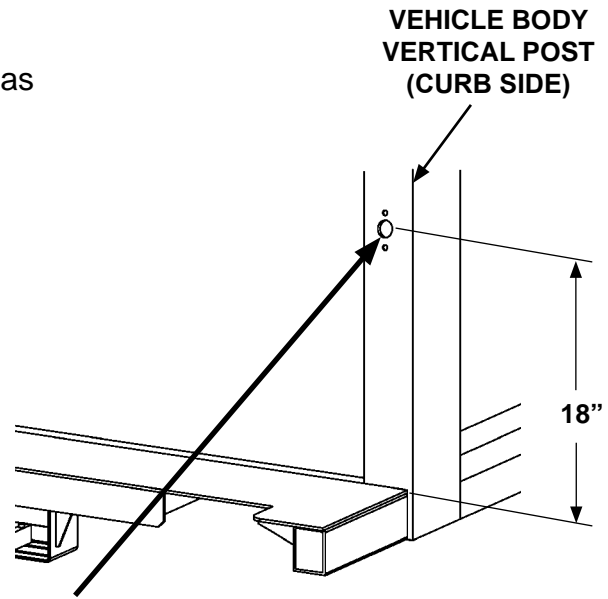
3. Remove hex nut and lock washer from battery power terminal on the starter solenoid. Connect the fused power cable to the starter solenoid as shown in **FIG. 17-1**. Reinstall and tighten lock washer and hex nut.



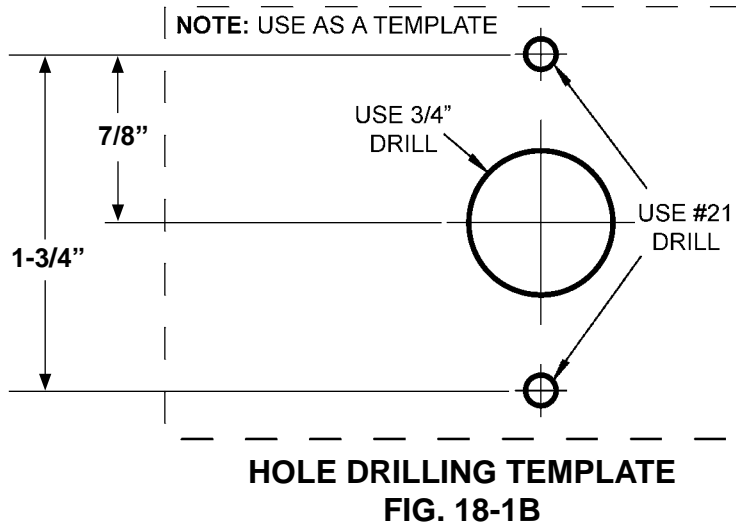
**TYPICAL FUSED POWER  
CABLE ELECTRICAL CONNECTION  
FIG. 17-1**

# STEP 5 - INSTALL CONTROL SWITCH

1. Drill one 3/4" hole and two #21-size holes in the vertical post on curb side of vehicle body as shown in **FIG. 18-1A**. Use template shown in **FIG. 18-1B**.



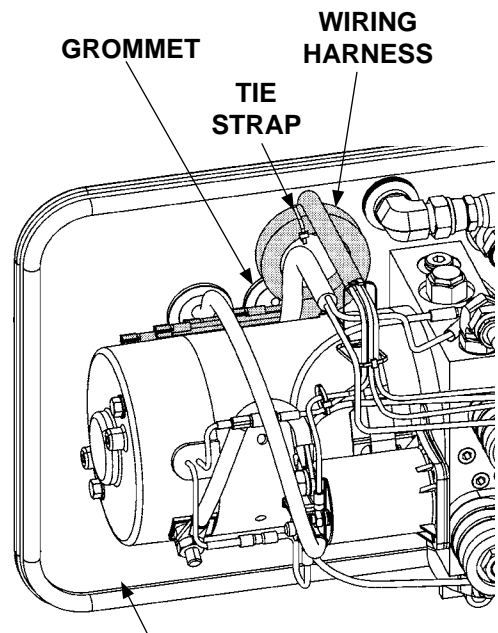
**FIG. 18-1A**



**HOLE DRILLING TEMPLATE  
FIG. 18-1B**

**NOTE:** Hydraulic lines and electrical lines must run into pump box through sealing grommets (**FIG. 18-2**). To ensure a good seal on hydraulic & electrical lines, never cut the sealing grommets.

2. Cut tie strap on coiled wiring harness (**FIG. 18-2**). Pull the wiring harness through grommet on the pump mounting plate (**FIG. 18-2**).



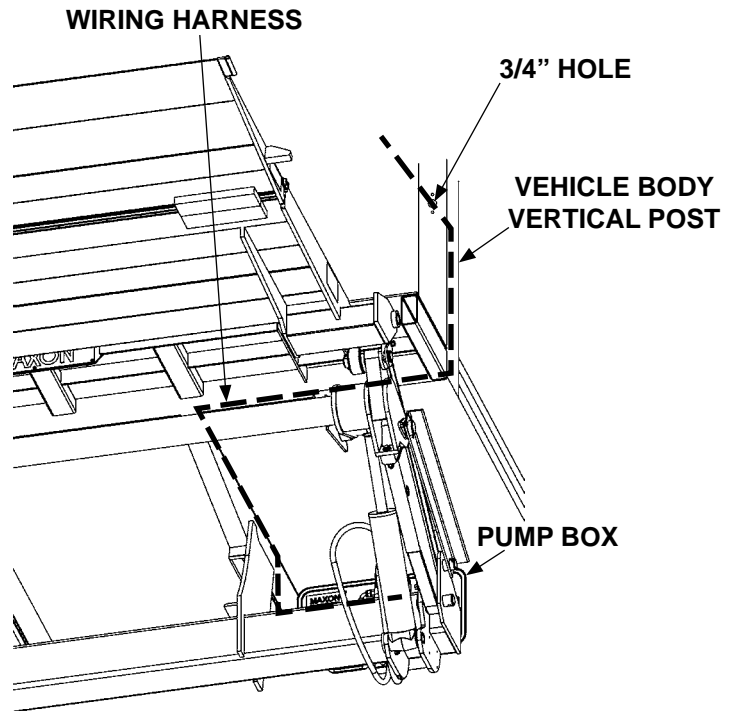
**PUMP MOUNTING  
PLATE**

**FIG. 18-2**

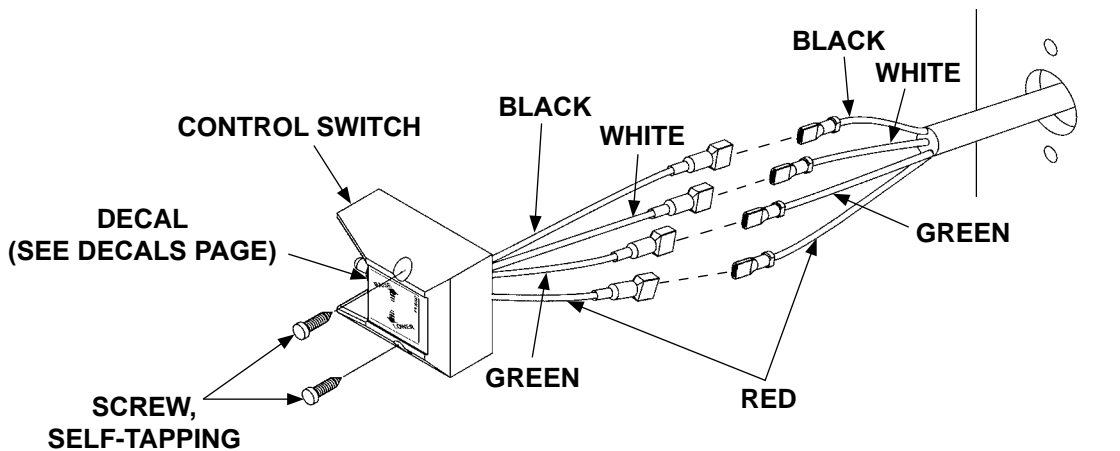
## STEP 5 - INSTALL CONTROL SWITCH - Continued

**NOTE:** MAXON recommends using dielectric grease on all electrical connections.

3. Run wiring harness under vehicle body (see dashed line - FIG. 19-1) and up through inside of vertical post. Pull control switch wiring harness out the 3/4" hole drilled in vertical post (FIG. 19-1). Connect the control switch wiring to the wiring harness as shown in FIG. 19-2. Push extended wiring back into the 3/4" hole in the vertical post until control switch touches the post. Attach control switch to vertical post with 2 self-tapping screws (FIG. 19-2).



ROUTING CONTROL SWITCH WIRING  
FIG. 19-1



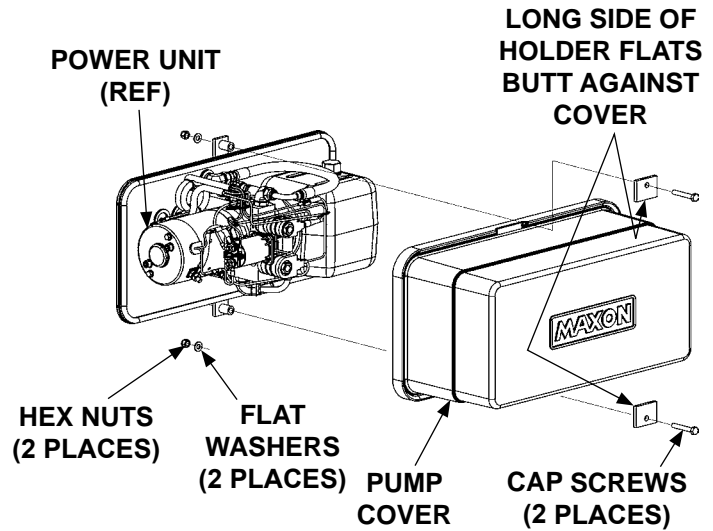
CONTROL SWITCH WIRING CONNECTIONS  
FIG. 19-2

## STEP 5 - INSTALL CONTROL SWITCH - Continued

### CAUTION

Pump cover must be correctly secured to prevent it from becoming a hazard. To secure pump cover, the long side of the holder flats must butt against pump cover as shown in the illustration.

4. Bolt on the pump cover as shown in FIG. 20-1. Torque the 5/16"-18 cover bolts from 10 to 14 lbs.-ft.

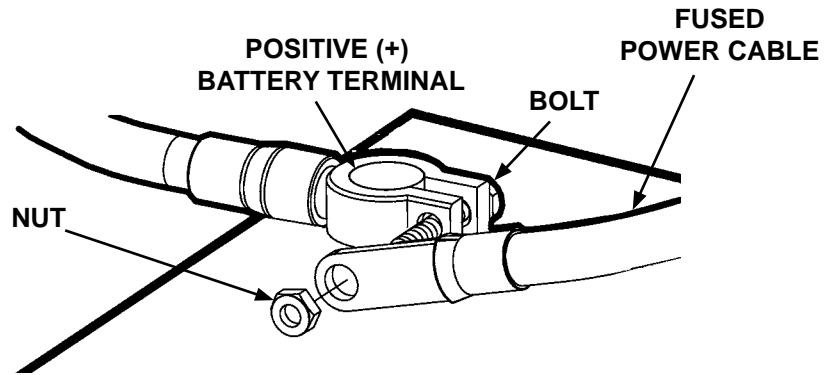


**BOLTING ON PUMP COVER**  
FIG. 20-1

## STEP 6 - CONNECT POWER CABLE TO BATTERY

**NOTE:** MAXON recommends using dielectric grease on all electrical connections.

Remove nut from positive (+) battery terminal connector. Connect power cable to the positive (+) battery terminal connector (**FIG. 21-1**). Re-install and tighten nut.



**CONNECTING POWER CABLE  
FIG. 21-1**

# STEP 7 - REMOVE LOCKING ANGLES & KNUCKLE BOLTS

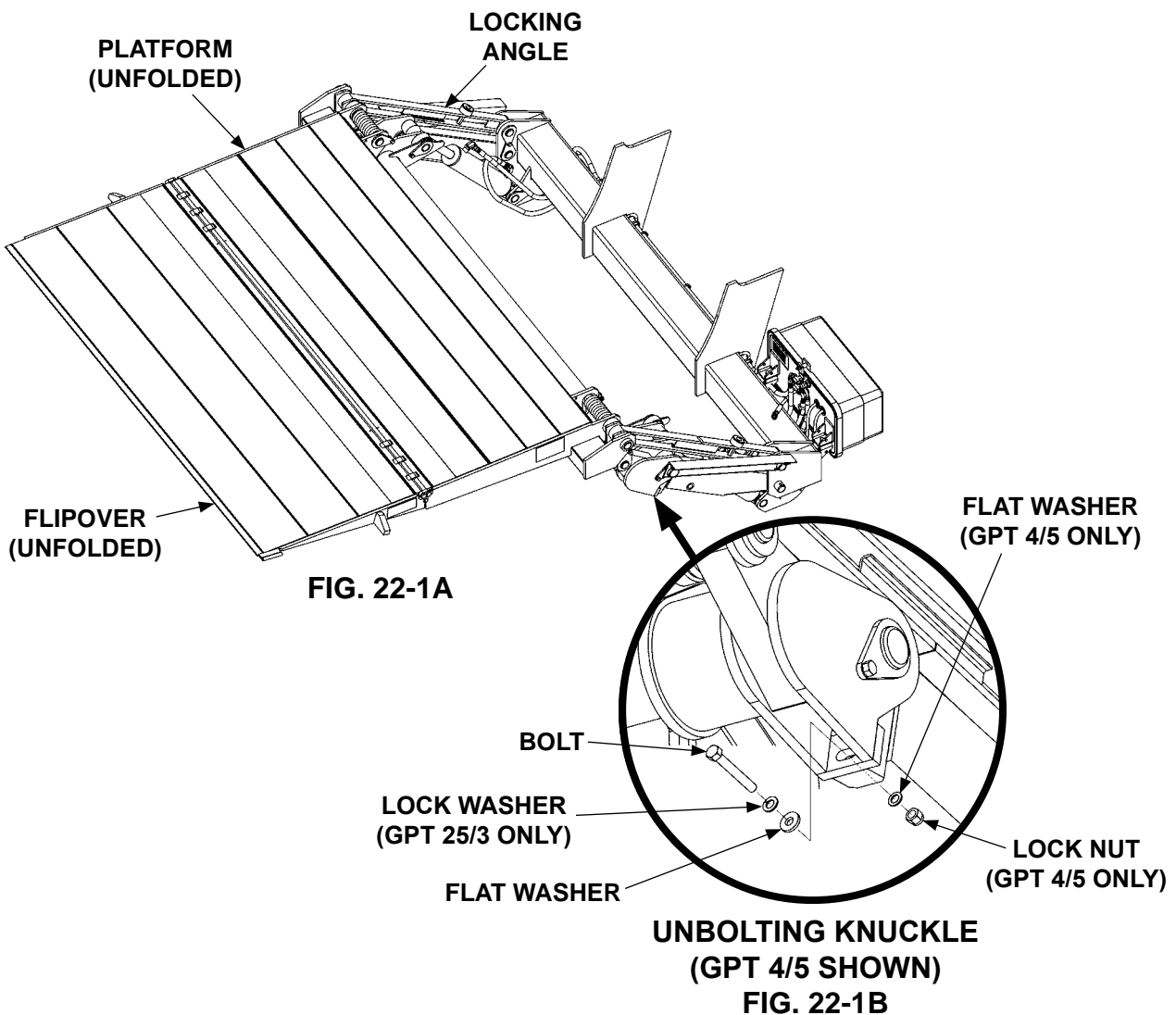
## CAUTION

Check for leaking hydraulic fluid as the system is being pressurized. If there is leakage, stop & correct the problem before fully pressurizing the system.

1. Push control switch to **UP** position to pressurize hydraulic system. Listen for hydraulic fluid flowing through the system. Check for fluid leaks. When the sound of flowing fluid stops, release control switch. Hydraulic system is ready.

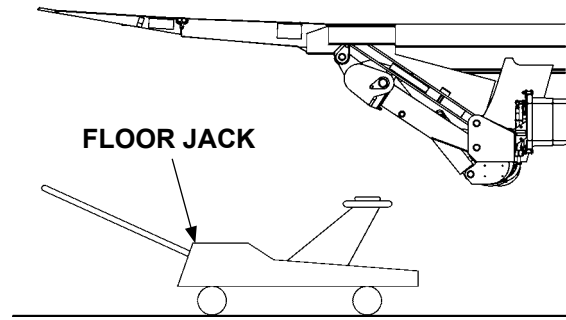
**NOTE:** To operate Liftgate, locking angles must be removed from the hydraulic cylinders and shipping bolt must be removed from both knuckles.

2. Remove locking angles from hydraulic cylinders (**FIG. 22-1A**).
3. With platform open (**FIG. 22-1A**), unbolt each knuckle as shown in **FIG. 22-1B**.



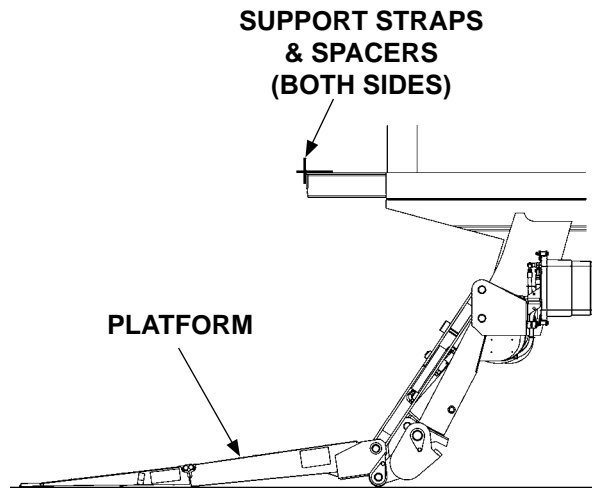
## STEP 8 - WELD PLATFORM OPENER TO LIFTGATE

1. Remove floor jack and hoist supporting Liftgate (**FIG. 23-1**).



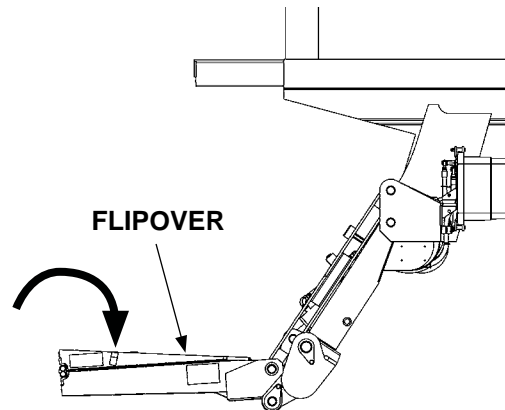
**FIG. 23-1**

2. Lower the platform to the ground. Remove both support straps and both spacers from extension plate (**FIG. 23-2**).



**FIG. 23-2**

3. Fold flipover (**FIG. 23-3**).

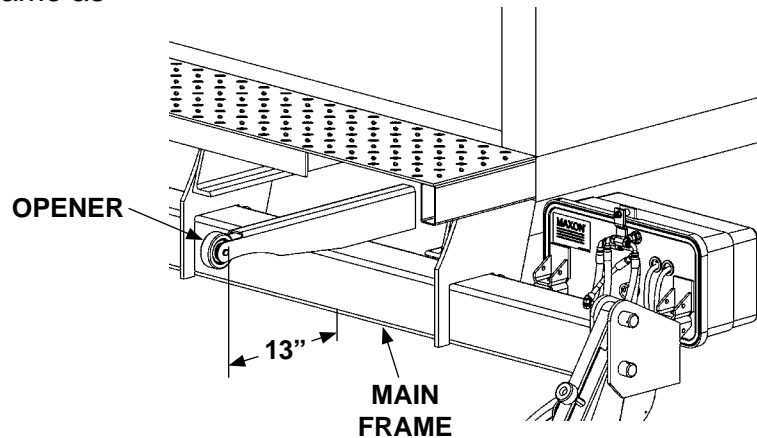


**FOLDING FLIPOVER  
FIG. 23-3**

# STEP 8 - WELD PLATFORM OPENER TO LIFTGATE - Continued

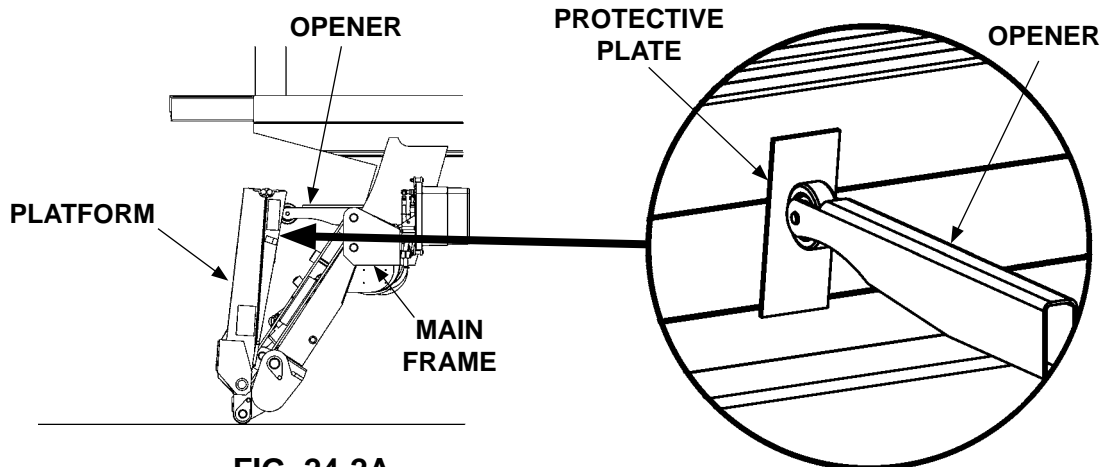
**NOTE:** Platform opener may only be installed on center of main frame (see the illustrations on this page).

4. Position the opener on main frame as shown in **FIG. 24-1**.



**POSITIONING OPENER  
FIG. 24-1**

5. Fold the platform against opener (**FIG. 24-2A**). Make sure opener is entered on protective plate as shown in **FIG. 24-2B**. Reposition the opener if necessary. Clamp opener to main frame.



**FIG. 24-2A**

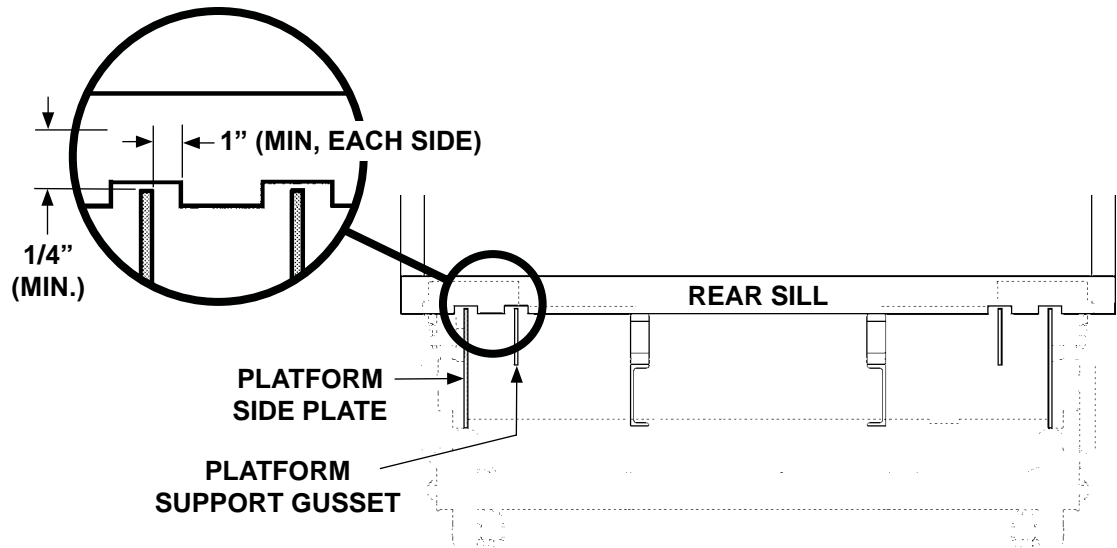
**CENTERING OPENER  
ON PLATE  
FIG. 24-2B**



# STEP 8 - WELD PLATFORM OPENER TO LIFTGATE - Continued

## ⚠ CAUTION

If there is any interference with the platform while stowing Liftgate, check for damage on bottom of platform, flipover, and the hinge in between. A damaged platform or flipover may result in personal injury and additional damage to Liftgate.



**CHECKING FOR MINIMUM CLEARANCES BETWEEN PLATFORM & MODIFIED AREAS ON REAR SILL (EXTENSION PLATE NOT SHOWN)**

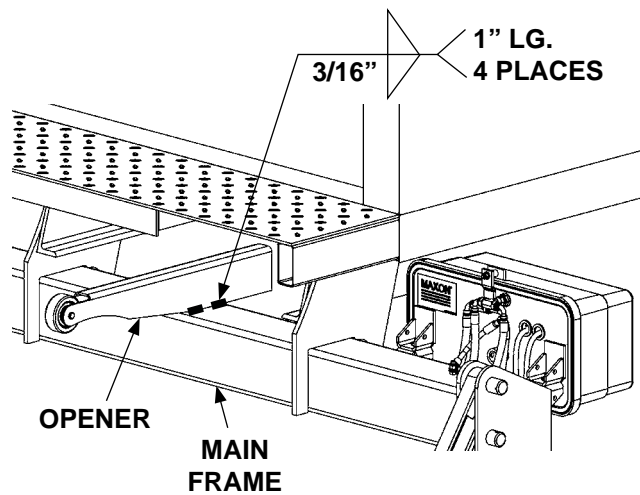
**FIG. 25-1**

## CAUTION

To protect the original paint system, a 3" wide area of paint must be removed from all sides of the weld area before welding.

**NOTE:** If the rear sill is over 4" in height and needs to be modified, check the modified areas for the minimum clearances shown in **FIG. 25-1**.

6. Stow and unfold Liftgate several times to verify there is no interference. If there is no interference, weld opener to main frame (**FIG. 25-2**). If you notice the platform lowering with a jerking motion, do step 7 on the next page.

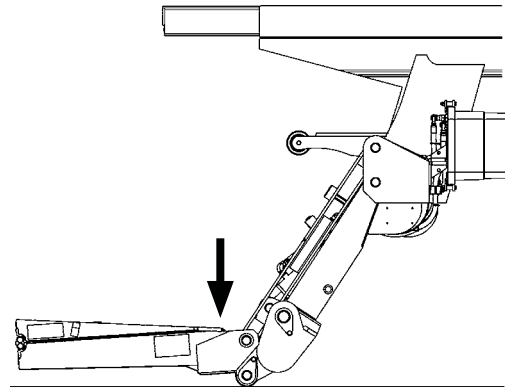


**WELDING OPENER TO MAIN FRAME**

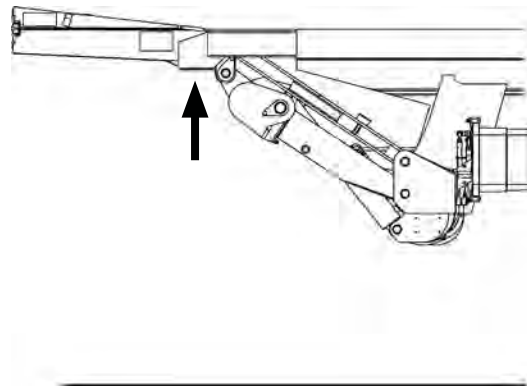
**FIG. 25-2**

## STEP 8 - WELD PLATFORM OPENER TO LIFTGATE - Continued

7. If the platform lowers with a “jerking” motion, bleed air from the hydraulic system by doing the following. Push the control switch to the **DOWN** position until you hear air escaping into the hydraulic fluid reservoir (**FIG. 26-1**). Raise the platform (**FIG. 26-2**). Repeat this step until there is no air left in the system and platform lowers smoothly.



**LOWERING PLATFORM**  
**FIG. 26-1**



**RAISING PLATFORM**  
**FIG. 26-2**

# STEP 9 - FINISH WELDING LIFTGATE TO VEHICLE

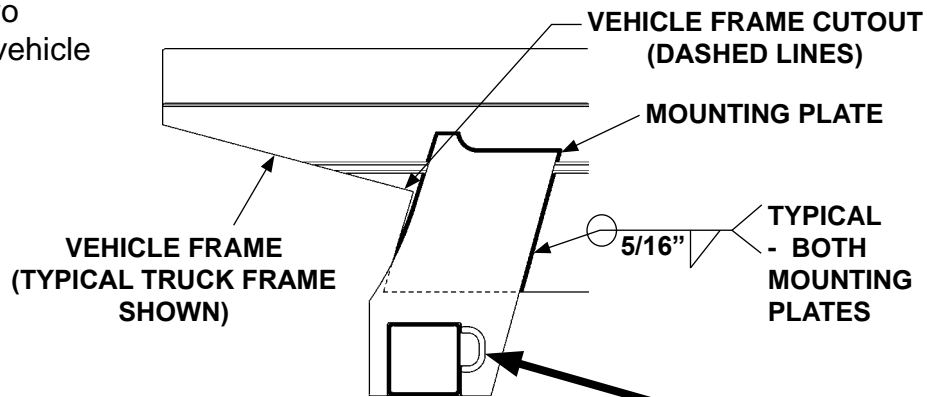
## CAUTION

Prevent damage to hydraulic hoses. Before welding next to hydraulic hoses, protect the hoses with a heat-resistant cover such as a welding blanket.

## CAUTION

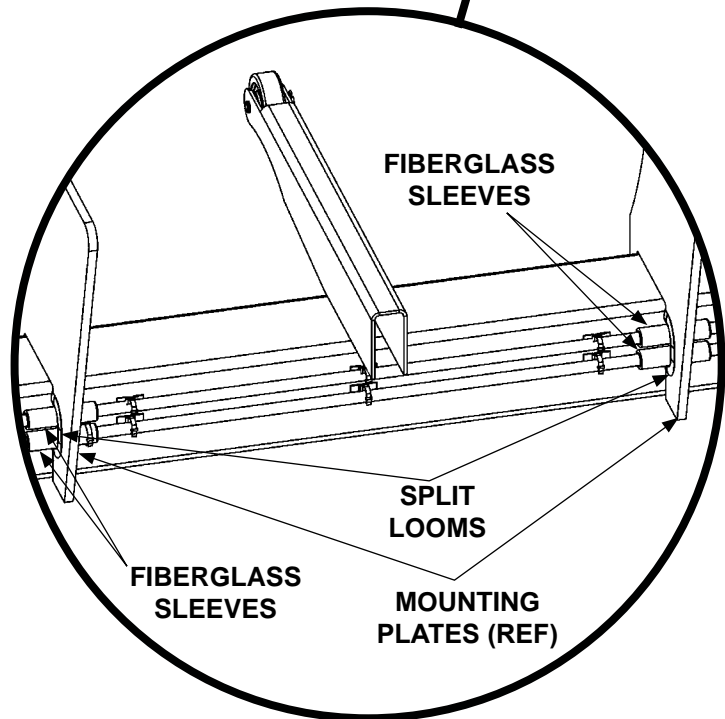
To protect the original paint system, a 3" wide area of paint must be removed from all sides of the weld area before welding.

1. Weld each of the two mounting plates to vehicle frame (**FIG. 27-1A**).



WELDING MOUNTING PLATE  
FIG. 27-1A

2. After welding is done and mounting plates are cool, remove the 4 fiberglass sleeves shown in **FIG. 27-1B**. Next, reinstall the split looms removed in **STEP 2 (FIG. 27-1B)**.

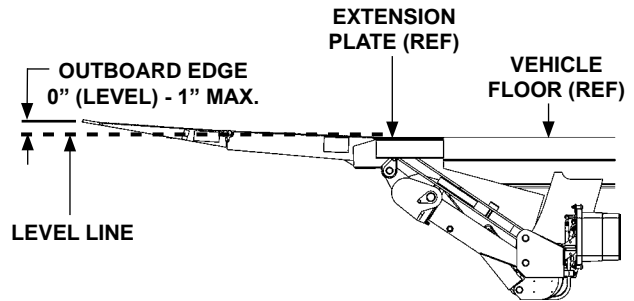


REINSTALLING SPLIT LOOMS  
FIG. 27-1B

## STEP 10 - ADJUST PLATFORM (IF REQUIRED)

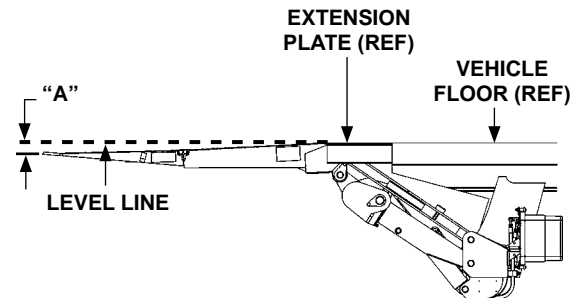
**NOTE:** Before doing the following procedure, make sure vehicle is parked on level ground.

1. With the platform and flipover unfolded, raise platform to bed level (**FIG. 28-1**). Measure how much the outboard edge of platform rises above bed level (**FIG. 28-1**). The outboard edge must be level or a maximum of 1" above bed level (**FIG. 28-1**). If indication is correct, Liftgate is installed correctly and no adjustment is needed. If the outboard edge is below bed level, do instructions **2, 3, and 6**. If outboard edge is higher than 1", do instructions **4 through 6**.



**PLATFORM EDGE AT OR ABOVE BED LEVEL**  
**FIG. 28-1**

2. Compare measurement "A" (**FIG. 28-2**) with the distances and shims in **TABLE 28-1**. For example: If measurement "A" (**FIG. 28-2**) is 1" below level and you want to raise outboard edge of platform 1" above level, use 1/8" shim to raise 2" (**TABLE 28-1**).

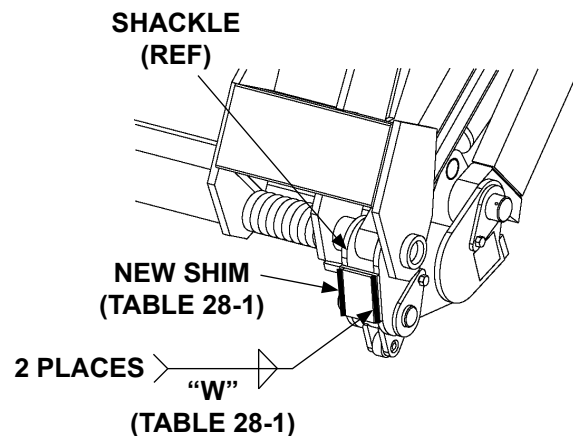


**PLATFORM EDGE BELOW BED LEVEL**  
**FIG. 28-2**

RAISE PLATFORM EDGE (OUTBOARD) THIS DISTANCE ("A")	REQUIRED SHIM THICKNESS	WELD SIZE "W"
1"	1/16"	1/16"
2"	1/8"	1/8"
3"	3/16"	3/16"
4"	1/4"	1/4"

**TABLE 28-1**

3. Weld shims (parts bag item) on both platform stops (**FIG. 28-3**) to raise outboard edge of platform to correct position.



**WELDING SHIMS (CURBSIDE SHOWN)**  
**FIG. 28-3**

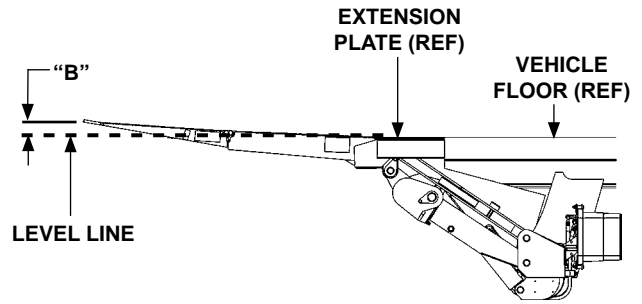
# STEP 10 - ADJUST PLATFORM - Continued

4. Compare measurement “B” (FIG. 29-1) with distances and grinding depths in TABLE 29-1. For example: If measurement “B” (FIG. 29-1) is 3” above bed level and you want to lower the outboard edge of platform to 1” above bed level, grind 1/8” from each platform stop (TABLE 29-1).

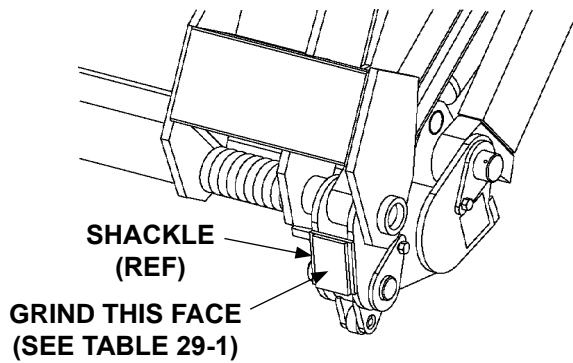
LOWER PLATFORM EDGE (OUTBOARD) THIS DISTANCE (“B”)	GRIND METAL FROM PLATFORM STOP
1”	1/16”
2”	1/8”
3”	3/16”
4”	1/4”

TABLE 29-1

5. Grind metal from platform stops (FIG. 29-2) to lower outboard edge of platform to correct position.

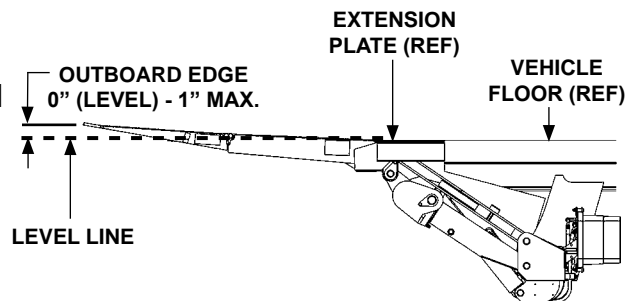


PLATFORM EDGE ABOVE BED LEVEL  
FIG. 29-1



GRINDING PLATFORM STOPS  
(CURBSIDE SHOWN)  
FIG. 29-2

6. Lower the platform, then raise it to bed level. The outboard edge of platform should be level or up to 1” maximum above bed level (FIG. 29-3).



PLATFORM EDGE ABOVE BED LEVEL  
FIG. 29-3

# STEP 11 - CHECKING HYDRAULIC FLUID

## CAUTION

Keep dirt, water and other contaminants from entering the hydraulic system. Before opening the hydraulic fluid reservoir filler cap, drain plug and hydraulic lines, clean up contaminants that can get in the openings. Also, protect the openings from accidental contamination.

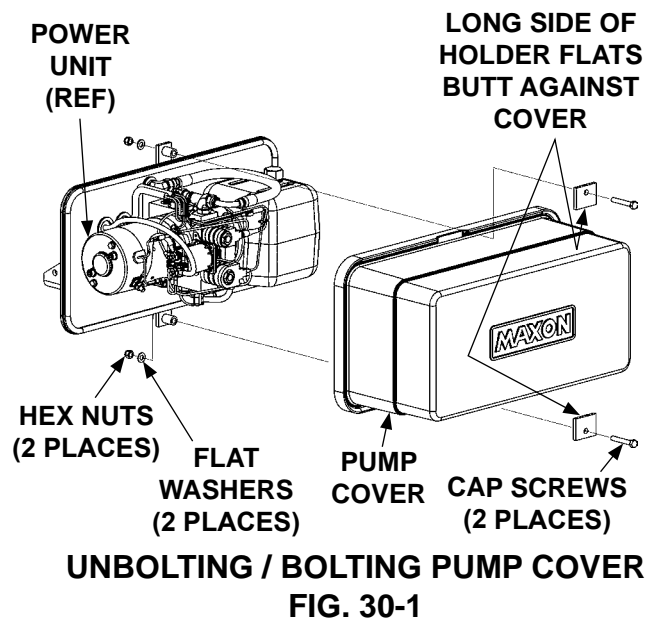
**NOTE:** Use correct grade of hydraulic fluid for your location.

**+50 to +120 Degrees F - Grade ISO 32**

**Below + 70 Degrees F - Grade ISO 15 or MIL-H-5606**

See **TABLES 31-1 & 31-2** for recommended brands.

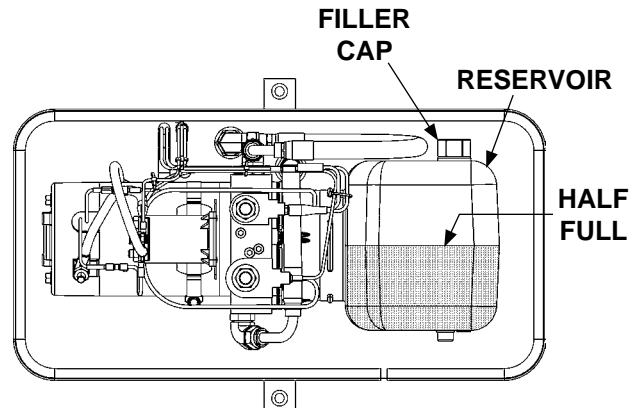
1. Unbolt and remove pump cover (FIG. 30-1).
2. Check the hydraulic fluid level in reservoir as follows. With Liftgate stowed, or platform at vehicle bed height, level should be as shown in FIG. 30-2.



3. If needed, add fluid to the reservoir as follows. Pull out (no threads) filler cap (FIG. 30-2). Fill the reservoir with hydraulic fluid until reservoir looks about half full (FIG. 30-2). Reinstall filler cap (FIG. 30-2).

## CAUTION

Pump cover must be correctly secured to prevent it from becoming a hazard. To secure pump cover, the long side of the holder flats must butt against pump cover as shown in the illustration.



4. Bolt on the pump cover as shown in FIG. 30-1. Torque the 5/16"-18 cover bolts from **10 to 14 lb-ft.**

## STEP 11 - CHECK HYDRAULIC FLUID - Continued

ISO 32 HYDRAULIC OIL	
RECOMMENDED BRANDS	PART NUMBER
AMSOIL	AWH-05
CHEVRON	HIPERSYN 32
KENDALL	GOLDEN MV
SHELL	TELLUS S2 V32
EXXON	UNIVIS N-32
MOBIL	DTE-13M, DTE-24, HYDRAULIC OIL-13

**TABLE 31-1**

ISO 15 OR MIL-H-5606 HYDRAULIC OIL	
RECOMMENDED BRANDS	PART NUMBER
AMSOIL	AWF-05
CHEVRON	FLUID A, AW-MV-15
KENDALL	GLACIAL BLU
SHELL	TELLUS S2 V15
EXXON	UNIVIS HVI-13
MOBIL	DTE-11M
ROSEMEAD	THS FLUID 17111

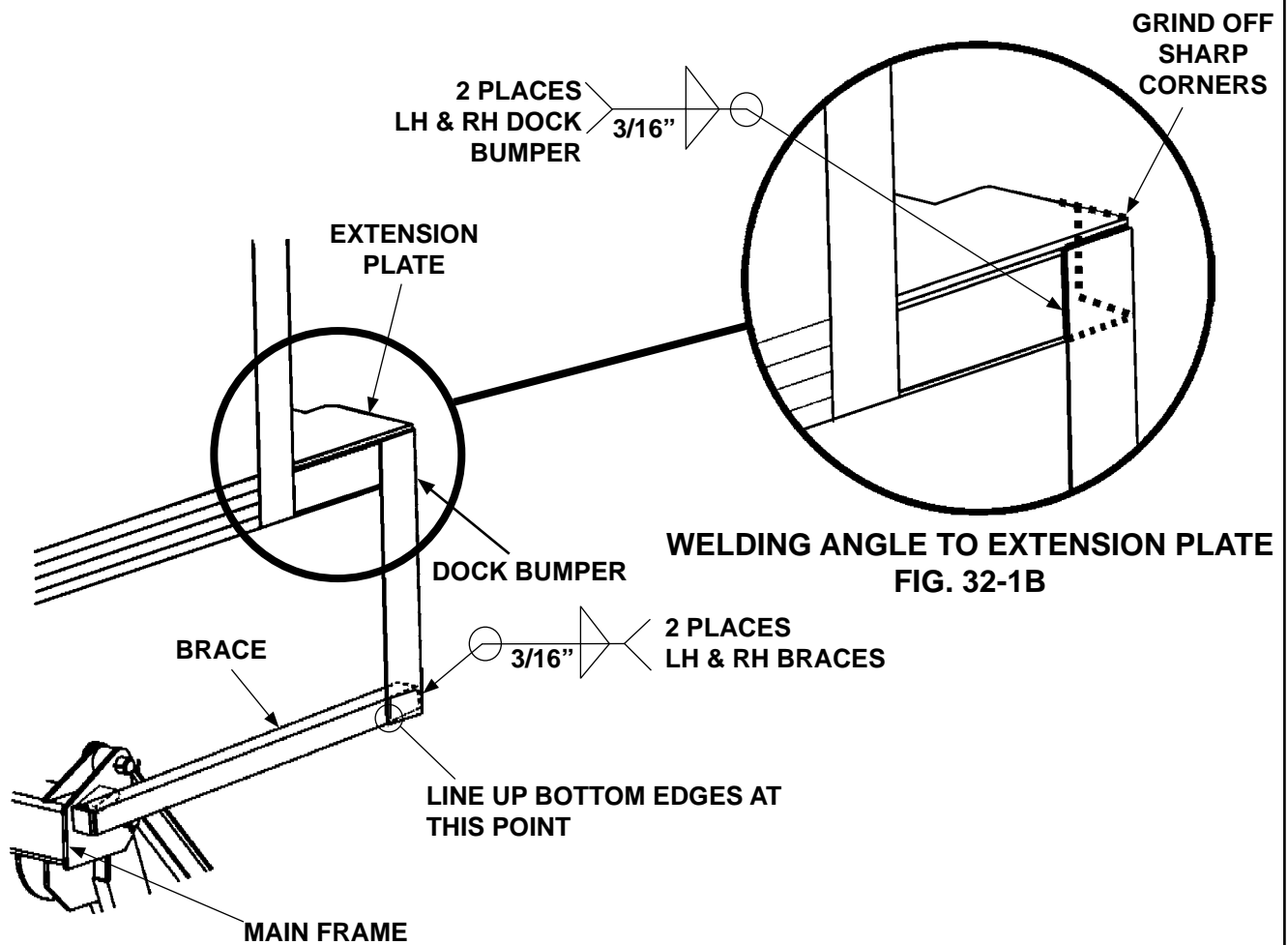
**TABLE 31-2**

## STEP 12 - WELD DOCK BUMPER TO LIFTGATE

### CAUTION

To protect the original paint system, a 3" wide area of paint must be removed from all sides of the weld area before welding.

1. Lower the platform to the ground (**see Operation Manual**).
2. Clamp a dock bumper to left hand (LH) side of extension plate as shown in **FIG. 32-1A**. Weld the dock bumper to extension plate as shown in **FIG. 32-1B**. Make sure bolt holes in the dock bumper are visible from the rear of the vehicle. Repeat step for dock bumper on right hand (RH) side of extension plate.



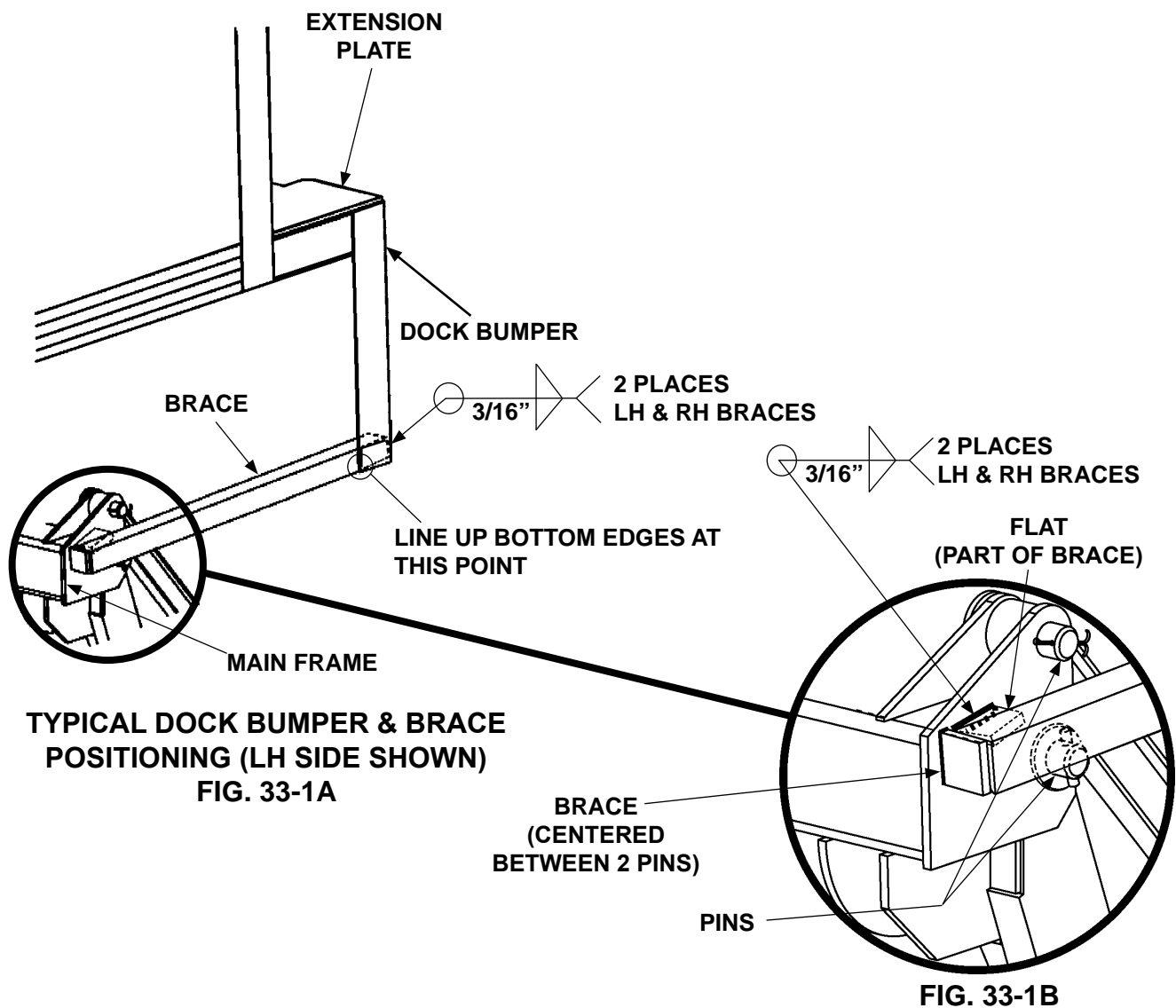
TYPICAL DOCK BUMPER & BRACE  
POSITIONING (LH SIDE SHOWN)  
FIG. 32-1A

WELDING ANGLE TO EXTENSION PLATE  
FIG. 32-1B



## STEP 12 - WELD DOCK BUMPER TO LIFTGATE - Continued

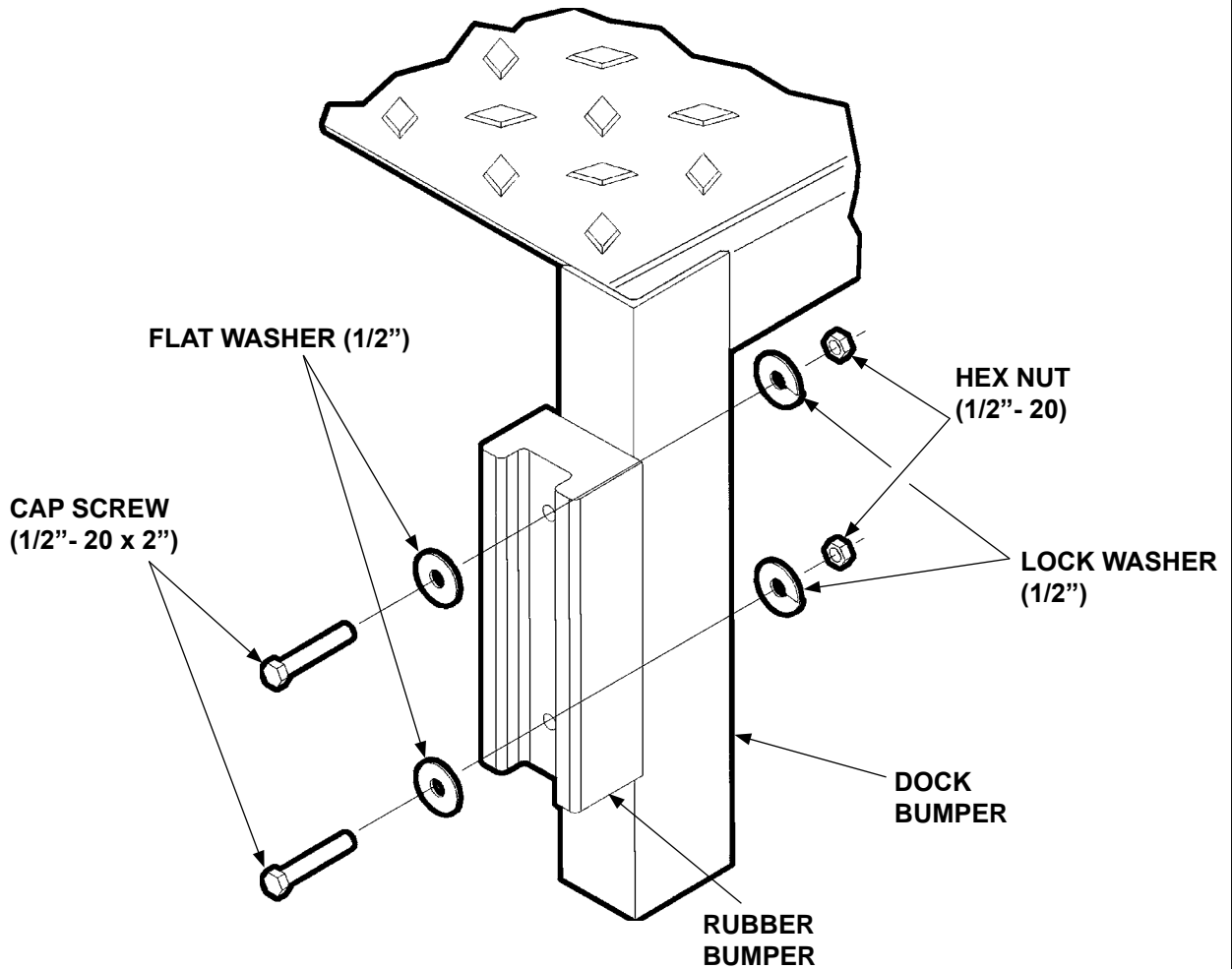
3. Clamp open end of brace to dock bumper as shown in **FIG. 33-1A**. Clamp closed end of brace to main frame (**FIG. 33-1A**). Weld the brace to dock bumper (**FIG. 33-1A**) and main frame (**FIG. 33-1B**). Repeat step for brace and dock bumper on RH side of extension plate.
4. Raise and lower platform. Next, stow Liftgate (**see Operation Manual**). Make sure dock bumper does not interfere with Liftgate.



# STEP 13 - BOLT RUBBER BUMPERS TO LIFTGATE

**NOTE:** The rubber dock bumpers kit P/N 203410 contains 2 rubber bumpers and 2 sets of fasteners.

Bolt a rubber bumper to each of the 2 dock bumpers (FIG. 34-1).



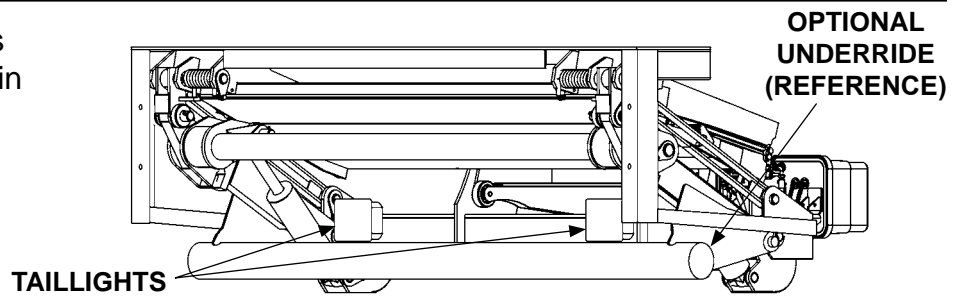
**BOLTING RUBBER BUMPER TO DOCK BUMPER  
(RIGHT HAND SIDE DOCK BUMPER SHOWN)**

**FIG. 34-1**

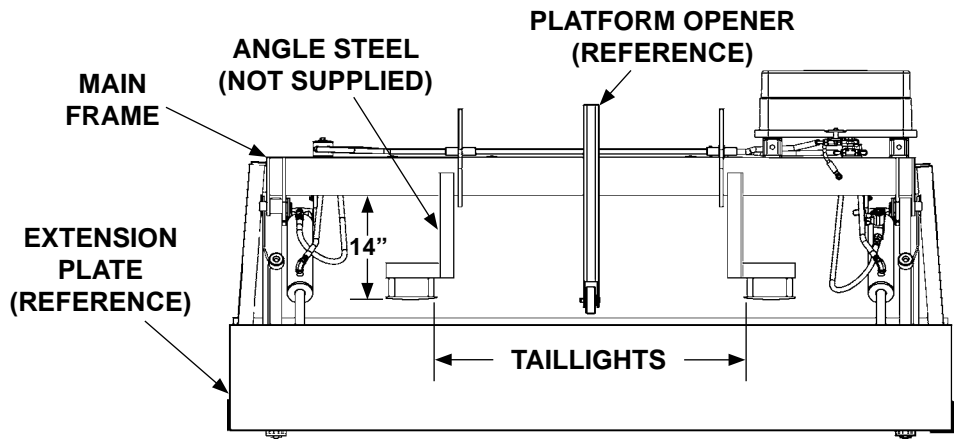
# STEP 14 - VEHICLE TAILLIGHT POSITIONING (IF REQUIRED)

**NOTE:** Positions are based on using taillights of 6-3/4" height by 5-3/4" width. Larger taillights may interfere with Liftgate. Taillights and attaching hardware are not provided with the Liftgate. Underride is optional equipment.

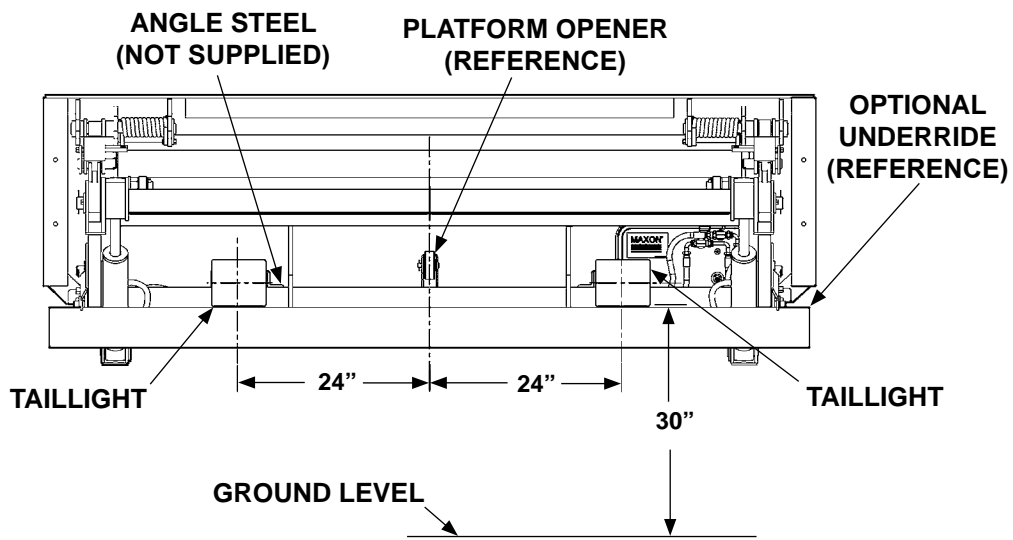
Install vehicle taillights (FIG. 35-1) as shown in FIGS. 35-2 and 35-3.



**VEHICLE TAILLIGHTS INSTALLED ON LIFTGATE  
FIG. 35-1**



**TAILLIGHTS POSITION (TOP VIEW)  
FIG. 35-2**



**TAILLIGHTS HORIZONTAL SPACING (FRONT VIEW)  
FIG. 35-3**

**MAXON**<sup>®</sup> 11921 Slauson Ave. Santa Fe Springs, CA. 90670 (800) 227-4116 FAX (888) 771-7713

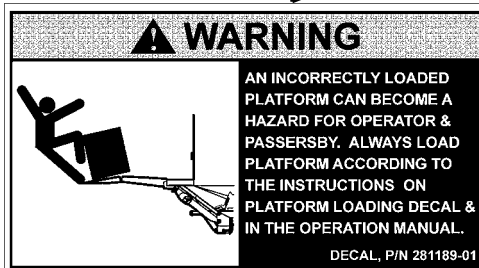
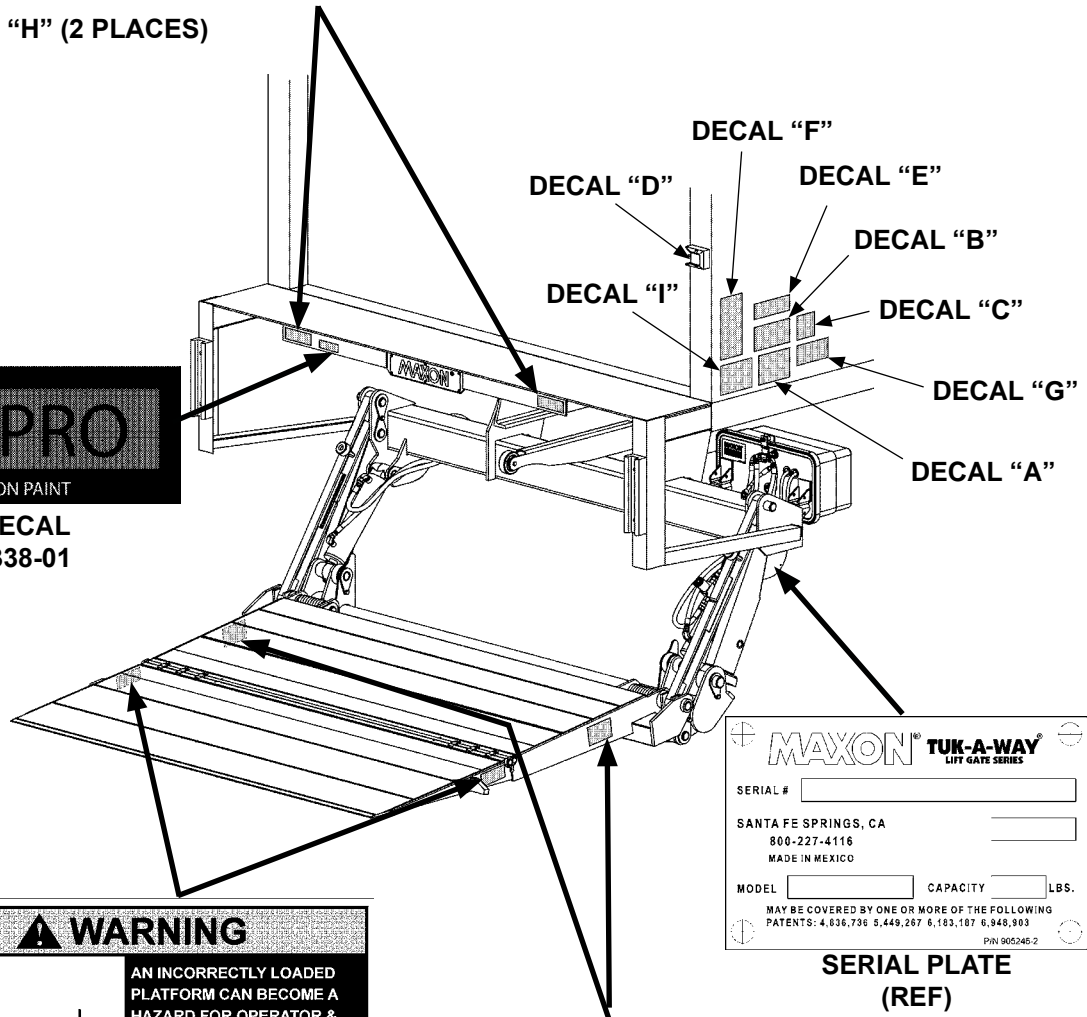
# ATTACH DECALS



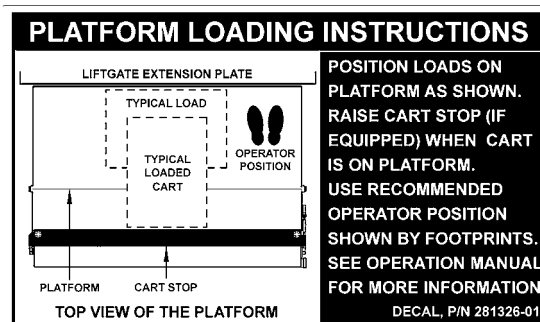
DECAL "H" (2 PLACES)



PAINT DECAL  
P/N 267338-01



PLATFORM WARNING DECAL  
(2 PLACES)  
P/N 281189-01



PLATFORM LOADING DECAL  
(2 PLACES)  
P/N 281326-01

FIG. 36-1

**MAXON** 11921 Slauson Ave. Santa Fe Springs, CA. 90670 (800) 227-4116 FAX (888) 771-7713

# ATTACH DECALS - Continued

### 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.

(A)

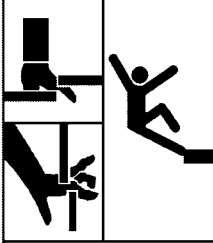
### WARNING

Read this information carefully.

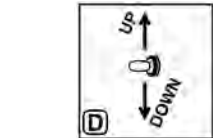
- Improper operation of this Liftgate can result in serious personal injury. If you do not have a copy of the operating instructions, please obtain them from your employer, distributor, or lessor before you attempt to operate Liftgate.
- If there are signs of improper maintenance, damage to vital parts, 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](http://www.maxonlift.com) or call Customer Service at (800) 227-4116

(C)



Read and understand all instructions and WARNINGS before use.



(D)

### WARNING

Liftgate hazards can result in crushing or falling.

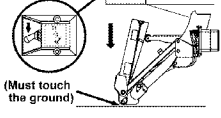
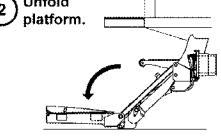
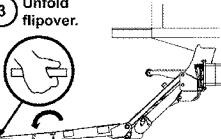
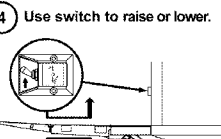
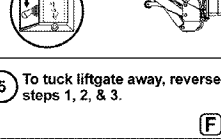
Keep hands and feet clear of pinch points.

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

(G)

### OPERATING INSTRUCTIONS

GPT Series Liftgates

- 1 Push control switch.  (Must touch the ground)
- 2 Unfold platform. 
- 3 Unfold flipover. 
- 4 Use switch to raise or lower. 
- 5 To tuck liftgate away, reverse steps 1, 2, & 3. 

(F)

## CAUTION

Always stand clear of platform area.

(E)

THE MAXIMUM CAPACITY OF THIS LIFT IS

## POUNDS

WHEN THE LOAD IS CENTERED ON THE LOAD CARRYING PLATFORM

(B)

(See TABLE 37-1)

**DECAL SHEET  
FIG. 37-1**

MODEL	DECAL SHEET P/N	DECAL "B"
GPT-25	282848-01	2500 POUNDS
GPT-3	282848-02	3000 POUNDS
GPT-4	282848-03	4000 POUNDS
GPT-5	282848-04	5000 POUNDS

**DECAL SHEET  
TABLE 37-1**

**MAXON** 11921 Slauson Ave. Santa Fe Springs, CA. 90670 (800) 227-4116 FAX (888) 771-7713

37

# TOUCHUP PAINT

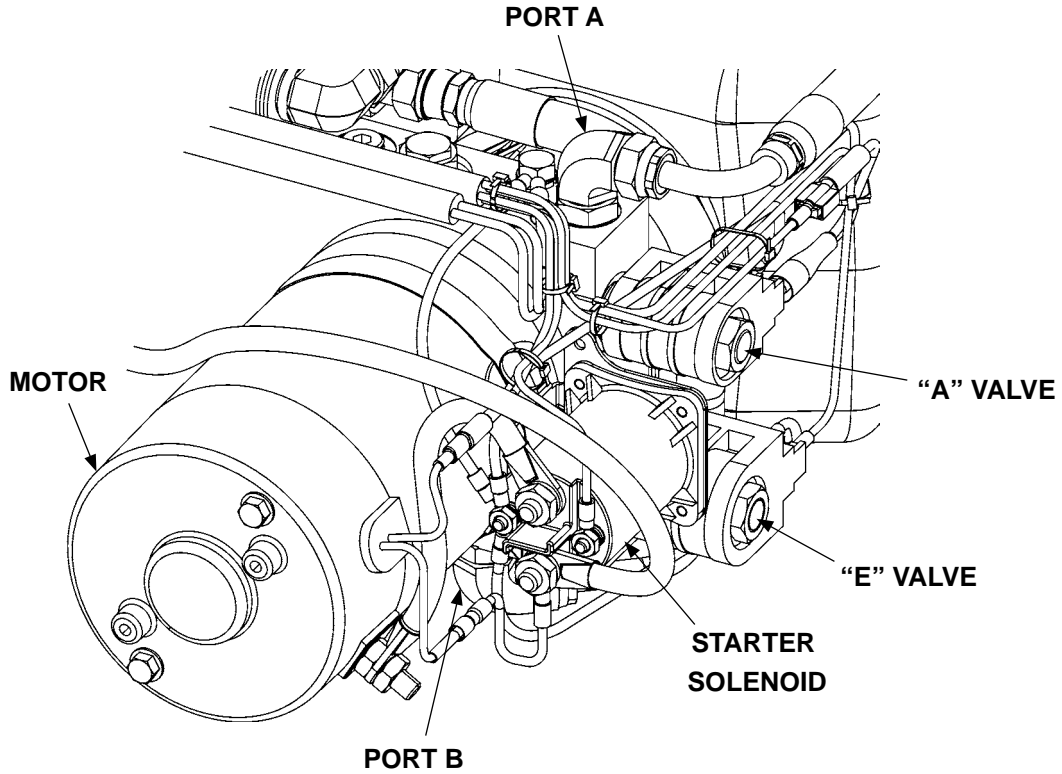
## CAUTION

Damaged cylinder seals and contaminated hydraulic fluid can result from painting the polished portion of the cylinder rod. To prevent damage, protect the exposed polished portion of the cylinder rod while painting.

If bare metal or primer is exposed on the painted portions of the Liftgate, touch up the paint. To maintain the protection provided by the original paint system, **MAXON** recommends aluminum primer touchup paint kit, P/N 908134-01.

# SYSTEM DIAGRAMS

## PUMP & MOTOR SOLENOID OPERATION



**POWER UNIT  
FIG. 39-1**

**NOTE:** Hydraulic lock valve is on the RH cylinder.

POWER UNIT MOTOR & SOLENOID OPERATION					
LIFTGATE FUNCTION	PORT	SOLENOID OPERATION (✓ MEANS ENERGIZED)			
		MOTOR	VALVE "A"	VALVE "E"	LOCK VALVE
RAISE	A	✓	-	✓	-
LOWER	B	✓	✓	-	✓
REFER TO VALVES SHOWN ON HYDRAULIC SCHEMATIC					

**TABLE 39-1**

# HYDRAULIC SCHEMATIC (POWER DOWN)

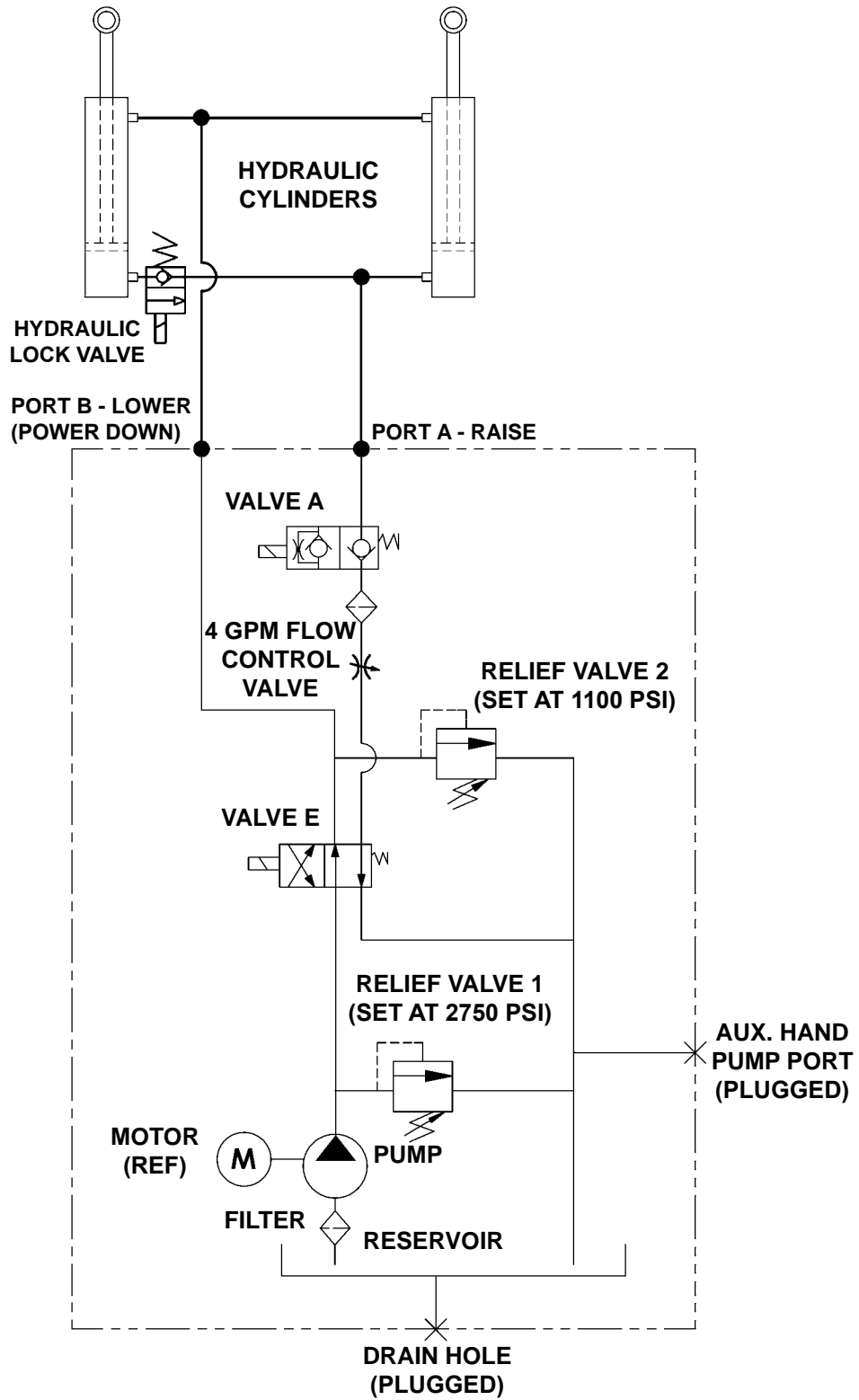


FIG. 40-1



# ELECTRICAL SCHEMATIC (POWER DOWN)

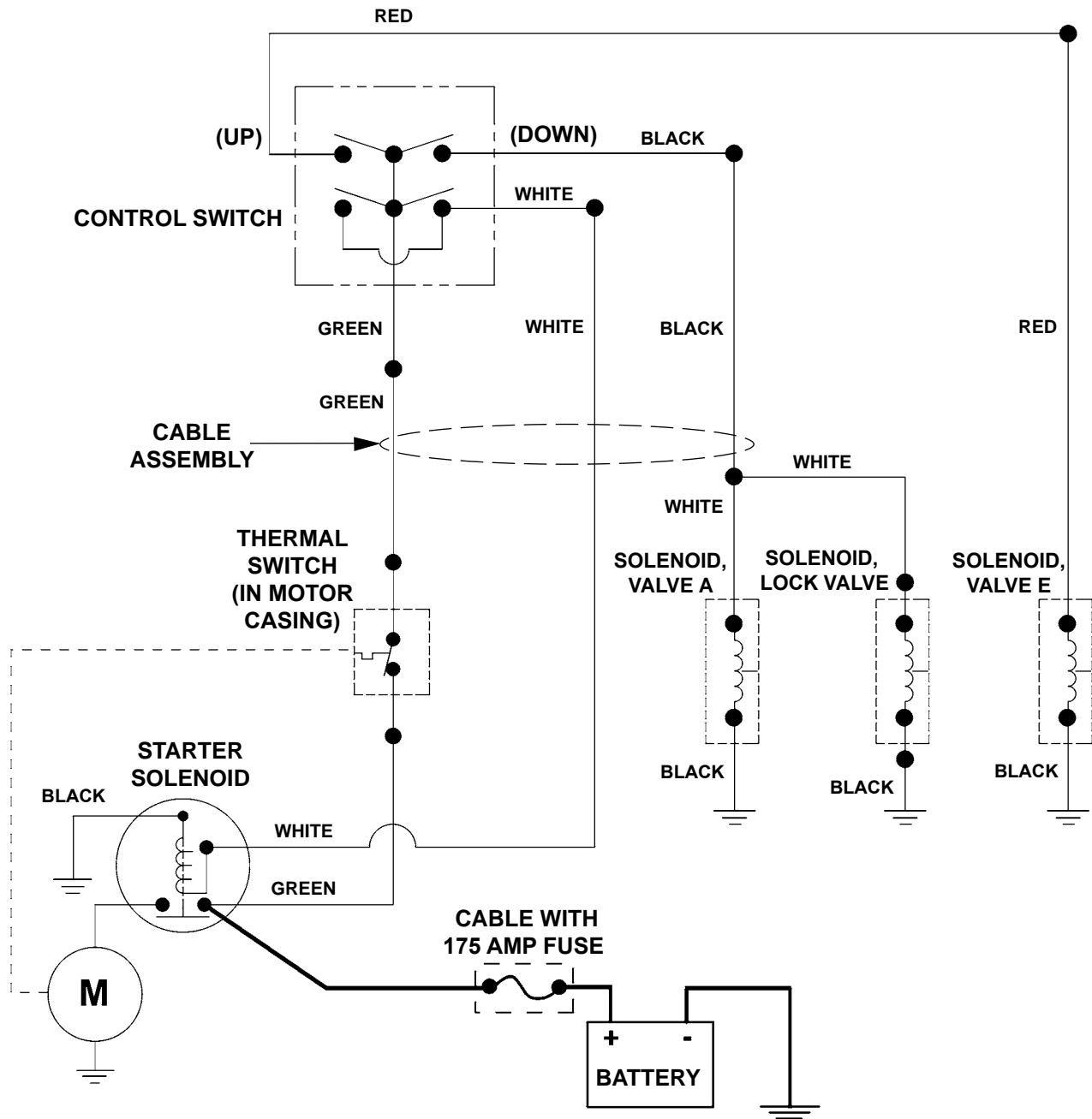


FIG. 41-1

# OPTIONS

## OPTIONAL LIFTGATE COMPONENTS

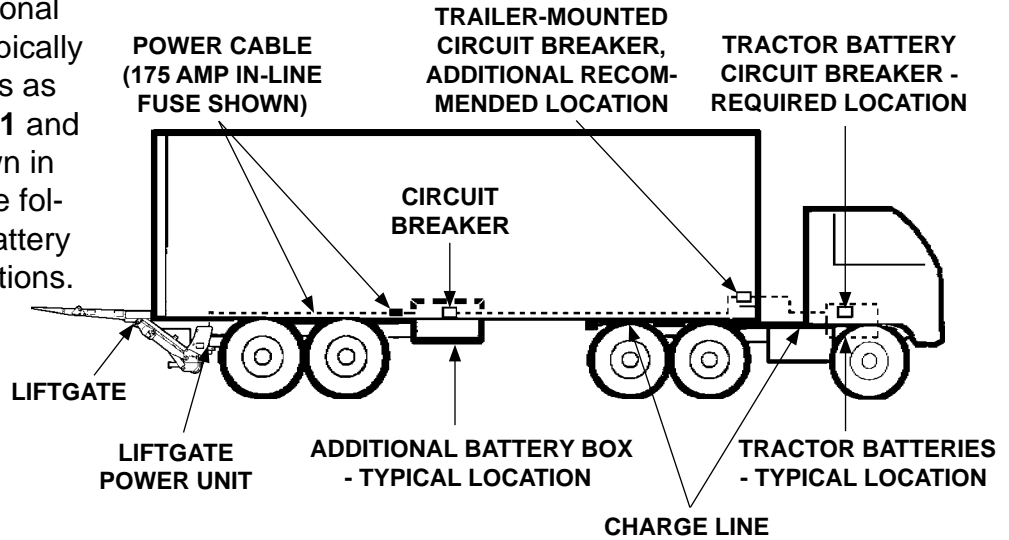
MISCELLANEOUS KITS	PART NO.
IN CAB ON-OFF SWITCH	250477
LOW VOLTAGE THERMAL SWITCH (LVTS), GPT	282473-01
FRAMELESS TRAILER BRACKET MOUNTING	282665-01
102" WIDE TRAILER	263552
CIRCUIT BREAKER (150 AMP)	251576
HAND PUMP, GPT POWER DOWN	283330-01
GREASE-ABLE PINS (GPT-25, GPT-3 & GPTWR-3 ONLY)	283450-01
GREASE-ABLE PINS (GPT-4 & GPT-5 ONLY)	283460-01
FRAME MOUNTING BRACKET FOR 2 OVAL LIGHTS	282372-01
<b>EXTRA CONTROLS &amp; CONTROL KITS</b>	
CONTROL STATION, POWER UP & DOWN (120" LG)	229068-04
CONTROL STATION, POWER UP & DOWN (144" LG)	229068-05
CONTROL STATION, POWER UP & DOWN, COILED CORD (20' LG)	229068-06
HAND HELD CONTROL, POWER DOWN	263260-11
STREET SIDE CONTROL, POWER DOWN	280265-04
DUAL SWITCH CONTROL, POWER DOWN	264845-02
<b>BUMPER/UNDERRIDE KITS</b>	
UNDERRIDE (GPT-4 & GPT-5 ONLY) <b>NOTE:</b> MEETS FMVSS & CANADIAN MOTOR VEH. SAFETY REG.	282838-01
UNDERRIDE (GPT-25 & GPT-3 ONLY) <b>NOTE:</b> MEETS FMVSS ONLY	282838-02
LIFTGATE BUMPER (ICC-STYLE, ALL GPT MODELS)	282734-01
<b>2 STEP DOCK BUMPER KIT</b>	
DOCK BUMPER, 2-STEP	266220-01
<b>BATTERY BOX KITS</b>	
TRUCK BATTERY BOX WITHOUT BATTERY (FOR 6V BATTERY)	251154-03
TRUCK BATTERY BOX WITHOUT BATTERY (FOR 12V BATTERY)	251154-05
<b>TRAILER CHARGE LINE KITS</b>	
TRAILER, SINGLE POLE CHARGE LINE	280275-01
TRAILER, DUAL POLE CHARGE LINE	280275-02
TRAILER, SINGLE & DUAL POLE CHARGE LINE	280275-06
TRAIL CHARGER	267370-01
HIGH PERFORMANCE CHARGER	267580-01
<b>TRACTOR CHARGE LINE KIT</b>	
TRACTOR SINGLE POLE CHARGE LINE	280275-03
TRACTOR DUAL POLE CHARGE LINE	280275-04
TRACTOR CHARGE LINE WITH ADAPTER	280275-05
<b>BATTERY</b>	
BATTERY, 12V HD (SEALED, MAINTENANCE FREE, GROUP SZ 31)	267318-01
<b>CYCLE COUNTER KIT</b>	
CYCLE COUNTER, GPT	282520-01
<b>TOUCH-UP PAINT KIT</b>	
TOUCH-UP PAINT (BCG) WITH ALUMINUM PRIMER, SMALL	908134-01

TABLE 42-1

## RECOMMENDED LIFTGATE POWER CONFIGURATION

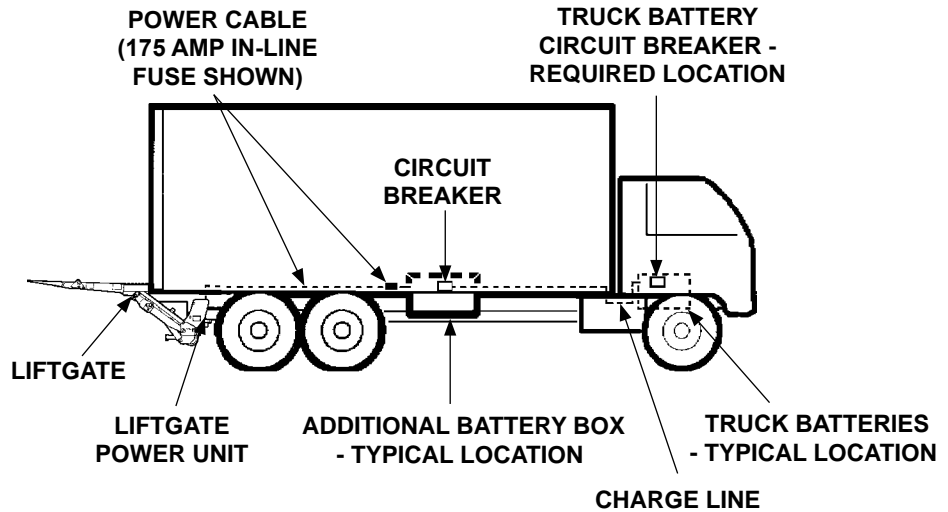
**NOTE:** Make sure the Liftgate power unit, and all batteries on the vehicle for the power unit, are connected correctly to a common chassis ground.

1. Liftgate and additional battery box are typically installed on trailers as shown in **FIG. 43-1** and on trucks as shown in **FIG. 43-2**. See the following page for battery and cable connections.



**RECOMMENDED LIFTGATE & BATTERY BOX  
INSTALLATION ON TRAILER**

**FIG. 43-1**



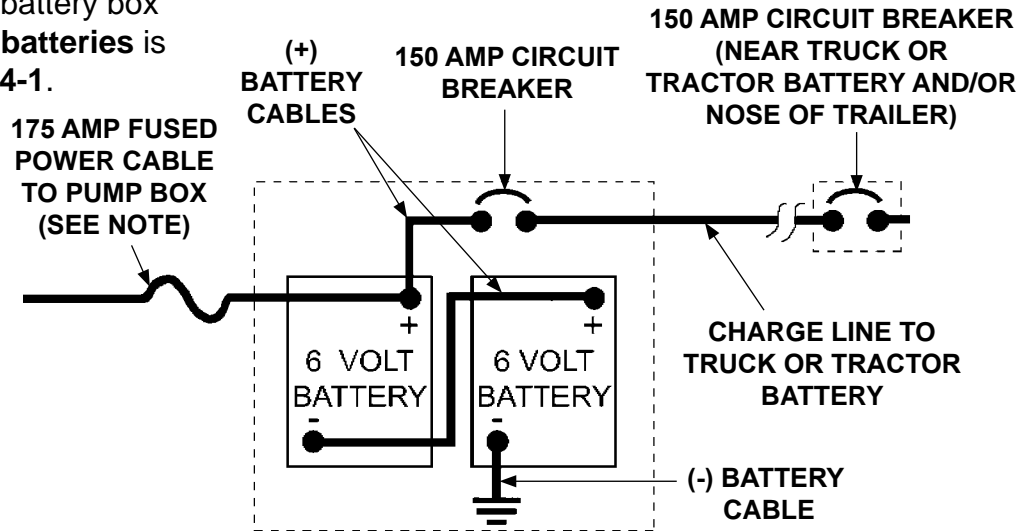
**RECOMMENDED LIFTGATE & BATTERY BOX  
INSTALLATION ON TRUCK**

**FIG. 43-2**

## RECOMMENDED LIFTGATE POWER CONFIGURATION - Continued

**NOTE:** Always connect fused end of power cable to battery positive (+) terminal.

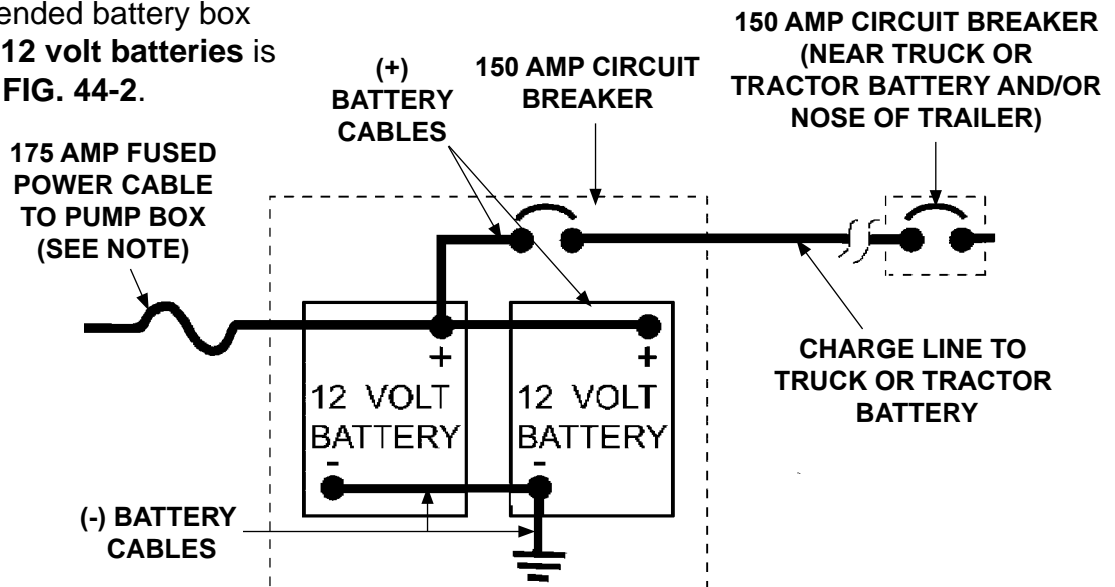
2. Recommended battery box setup for **6 volt batteries** is shown in **FIG. 44-1**.



**6 VOLT BATTERY CONNECTIONS**  
**FIG. 44-1**

**NOTE:** Always connect fused end of power cable to battery positive (+) terminal.

3. Recommended battery box setup for **12 volt batteries** is shown in **FIG. 44-2**.



**12 VOLT BATTERY CONNECTIONS**  
**FIG. 44-2**

