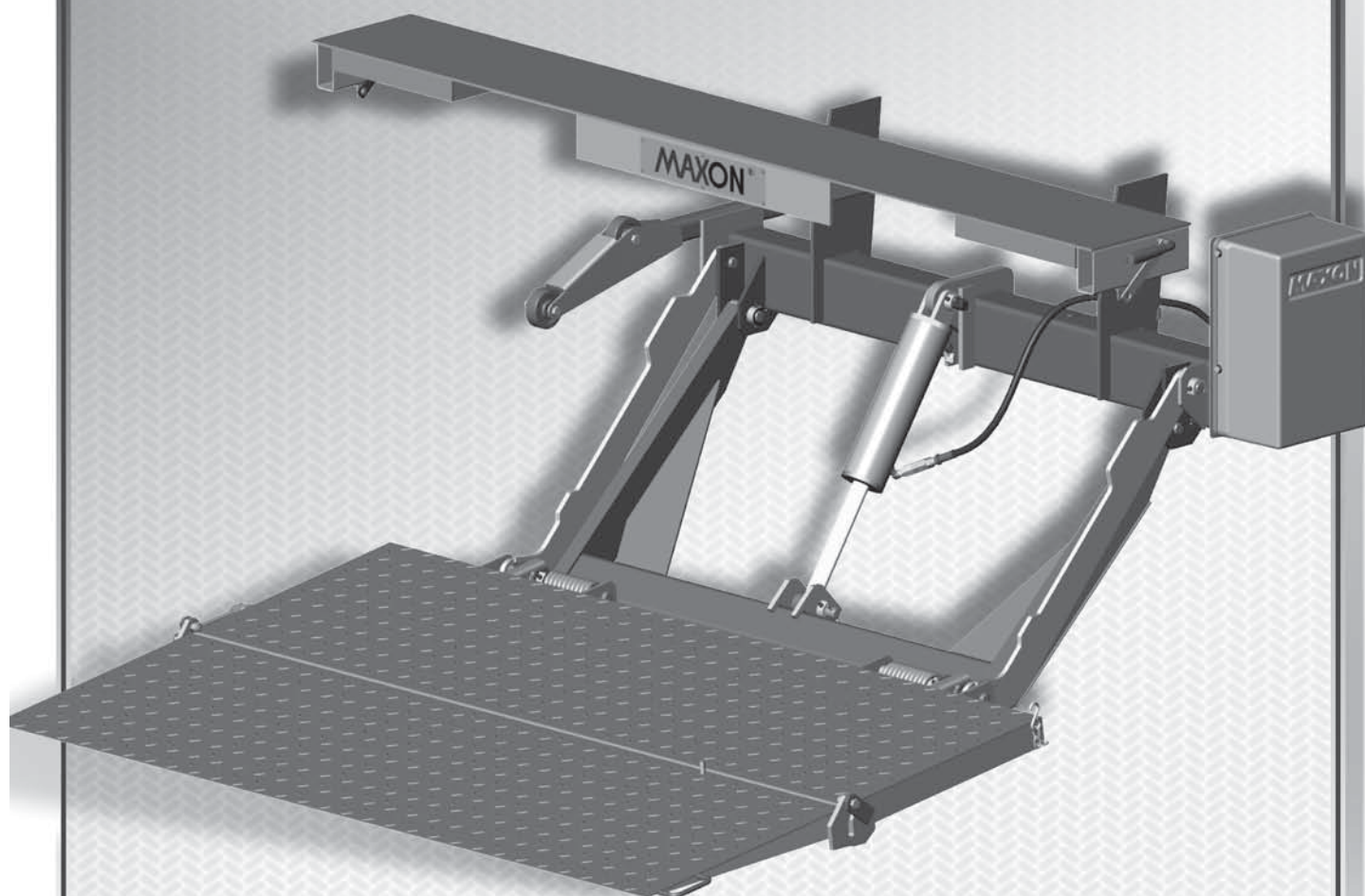


M-11-18  
REV. E  
SEPTEMBER 2015

# MAXON®

## TE-25 TE-25L

### INSTALLATION MANUAL



To find **maintenance & parts** information for your **TE-25 Liftgate**, go to [www.maxonlift.com](http://www.maxonlift.com). Click the **PRODUCTS**, **TUK-A-WAY** & **TE-25** buttons. Open the **Maintenance Manual** in the **PRODUCT DOCUMENTATION** window.

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## SUMMARY OF CHANGES: M-11-18, REVISION E

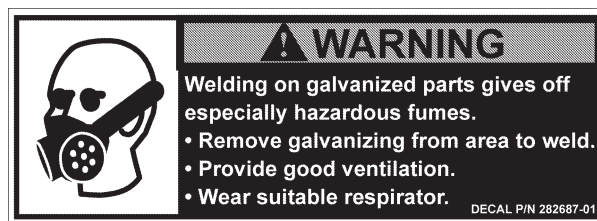
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**MAXON®** 11921 Slauson Ave. Santa Fe Springs, CA. 90670 (800) 227-4116 FAX (888) 771-7713

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.
- Welding on galvanized parts gives off especially hazardous fumes. Comply with WARNING decal on the galvanized part (**FIG. 5-1**). To minimize hazard remove galvanizing from weld area, provide adequate ventilation, and wear suitable respirator.



**FIG. 5-1**

## 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.

## NOTICE

- Maxon Lift is responsible for the instructions to correctly install **MAXON** Liftgates on trucks or trailers only.
- Liftgate installers, not Maxon Lift, are responsible for reviewing and complying with all applicable Federal, State, and Local regulations pertaining to the trailer or truck.
- Installers of the liftgate should ensure that all trucks and trailers are equipped with grab handles as needed.



# LIFTGATE COMPONENTS

## ⚠ CAUTION

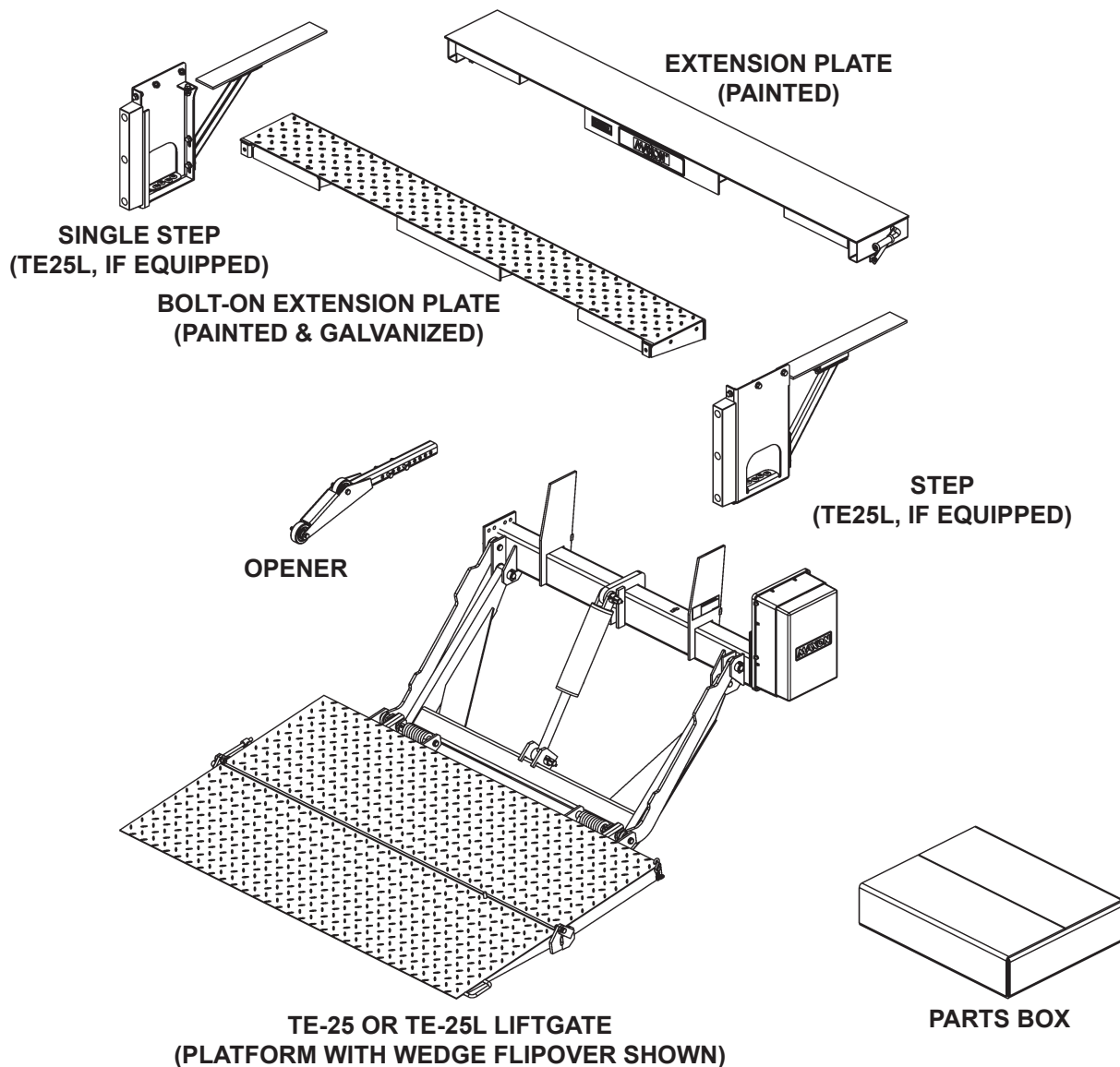
Prevent injuries and equipment damage. Before cutting the shipping straps from the Liftgate, put Liftgate on level ground that will support at least 1500 pounds. Be careful lifting and moving components (such as extension plate) after shipping straps are removed.

**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 closed in each box. If parts and components are missing or incorrect, call:

**Maxon Customer Service**

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

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



## COMPONENTS

FIG. 7-1

**PARTS BOX FOR TE-25 & TE-25L  
(96" WIDE, GRAVITY DOWN, WELD-ON  
EXTENSION PLATE)**

ITEM	QTY.	PART NO.	DESCRIPTION
REF	1	266403-22	PARTS BOX (TE-25 & TE-25L GRAVITY DOWN FOR 96" WIDE VEHICLE)
1	4	030458	SCREW, TAPPING #10 X 1/2" LG.
2	7	050079	CLIP, FRAME
3	1	055011	HANDLE, RUBBER
4	1	125674	CLAMP, JIFFY #130
5	1	203417	RENTAL LOCK BRACKET (OPTIONAL)
6	1	203570	INNER BRACKET, RENTAL LOCK (OPTIONAL)
7	10	205780	TIE, PLASTIC 7" LG.
8	8	206864	TIE, PLASTIC 12-14" LG.
9	3	214663	CLAMP, #8 RUBBER LOOM
10	1	215345	EXTENSION SPRING, 2-1/2" LG.
11	2	251333	SHIM, 1/8" X 2" X 2" LG.
12	1	264422	CABLE ASSEMBLY, 175 AMPS, 38' LG.
13	1	267959-01	MOLDED SWITCH ASSEMBLY
14	2	900057-5	SCREW, SELF TAPPING, #10-24 X 1" LG.
15	1	906497-02	LUG, 2 GA COPPER

**TABLE 8-1**



# PARTS BOX FOR TE-25 & TE-25L (96" WIDE, GRAVITY DOWN, BOLT-ON EXTENSION PLATE)

ITEM	QTY.	PART NO.	DESCRIPTION
REF	1	266403-73	PARTS BOX (TE-25 & TE-25L GRAVITY DOWN FOR 96" WIDE VEHICLE)
1	4	030458	SCREW, TAPPING #10 X 1/2" LG.
2	7	050079	CLIP, FRAME
3	1	125674	CLAMP, JIFFY #130
4	10	205780	TIE, PLASTIC 7" LG.
5	8	206864	TIE, PLASTIC 12-14" LG.
6	3	214663	CLAMP, #8 RUBBER LOOM
7	2	251333	SHIM, 1/8" X 2" X 2" LG.
8	1	264422	CABLE ASSEMBLY, 175 AMPS, 38' LG.
9	1	267959-01	MOLDED SWITCH ASSEMBLY
10	2	900057-5	SCREW, SELF TAPPING, #10-24 X 1" LG.
11	1	906497-02	LUG, 2 GA COPPER
12	2	283307-01	INSTALLATION BRACKET
13	2	900035-3	HEX HEAD CAP SCREW, 1/2"-13 X 1-1/2" LG.
14	2	901011-9	HEX NUT, 1/2"-13
15	1	215345	EXTENSION SPRING, 2-1/2" LG.
16	2	902000-13	FLAT WASHER, 1/2"-13

TABLE 9-1

# PARTS BOX FOR TE-25 & TE-25L (102" WIDE, GRAVITY DOWN, BOLT-ON EXTENSION PLATE)

ITEM	QTY.	PART NO.	DESCRIPTION
REF	1	266403-75	PARTS BOX (TE-25 & TE-25L GRAVITY DOWN FOR 102" WIDE VEHICLE)
1	4	030458	SCREW, TAPPING #10 X 1/2" LG.
2	7	050079	CLIP, FRAME
3	1	125674	CLAMP, JIFFY #130
4	10	205780	TIE, PLASTIC 7" LG.
5	8	206864	TIE, PLASTIC 12-14" LG.
6	3	214663	CLAMP, #8 RUBBER LOOM
7	2	251333	SHIM, 1/8" X 2" X 2" LG.
8	1	264422	CABLE ASSEMBLY, 175 AMPS, 38' LG.
9	1	267959-01	MOLDED SWITCH ASSEMBLY
10	2	900057-5	SCREW, SELF TAPPING, #10-24 X 1" LG.
11	1	906497-02	LUG, 2 GA COPPER
12	2	283307-01	INSTALLATION BRACKET
13	2	900035-3	HEX HEAD CAP SCREW, 1/2"-13 X 1-1/2" LG.
14	2	901011-9	HEX NUT, 1/2"-13
15	1	215345	EXTENSION SPRING, 2-1/2" LG.
16	2	902000-13	FLAT WASHER, 1/2"-13

TABLE 10-1

# PARTS BOX FOR TE-25 & TE-25L (96" WIDE, POWER DOWN, WELD-ON EXTENSION PLATE)

ITEM	QTY.	PART NO.	DESCRIPTION
REF	1	266403-72	PARTS BOX (TE-25 & TE-25L GRAVITY DOWN FOR 96" WIDE VEHICLE)
1	4	030458	SCREW, TAPPING #10 X 1/2" LG.
2	7	050079	CLIP, FRAME
3	1	055011	HANDLE, RUBBER
4	1	125674	CLAMP, JIFFY #130
5	1	203417	RENTAL LOCK BRACKET (OPTIONAL)
6	1	203570	INNER BRACKET, RENTAL LOCK (OPTIONAL)
7	10	205780	TIE, PLASTIC 7" LG.
8	8	206864	TIE, PLASTIC 12-14" LG.
9	3	214663	CLAMP, #8 RUBBER LOOM
10	1	215345	EXTENSION SPRING, 2-1/2" LG.
11	2	251333	SHIM, 1/8" X 2" X 2" LG.
12	1	264422	CABLE ASSEMBLY, 175 AMPS, 38' LG.
13	1	264951-04	MOLDED SWITCH & CABLE ASSEMBLY
14	2	900057-5	SCREW, SELF TAPPING, #10-24 X 1" LG.
15	1	906497-02	LUG, 2 GA COPPER

**TABLE 11-1**

**PARTS BOX FOR TE-25 & TE-25L  
(96" WIDE, POWER DOWN, BOLT-ON  
EXTENSION PLATE)**

ITEM	QTY.	PART NO.	DESCRIPTION
REF	1	266403-74	PARTS BOX (TE-25 & TE-25L GRAVITY DOWN FOR 96" WIDE VEHICLE)
1	4	030458	SCREW, TAPPING #10 X 1/2" LG.
2	7	050079	CLIP, FRAME
3	1	125674	CLAMP, JIFFY #130
4	10	205780	TIE, PLASTIC 7" LG.
5	8	206864	TIE, PLASTIC 12-14" LG.
6	3	214663	CLAMP, #8 RUBBER LOOM
7	2	251333	SHIM, 1/8" X 2" X 2" LG.
8	1	264422	CABLE ASSEMBLY, 175 AMPS, 38' LG.
9	1	264951-04	MOLDED SWITCH & CABLE ASSEMBLY
10	2	900057-5	SCREW, SELF TAPPING, #10-24 X 1" LG.
11	1	906497-02	LUG, 2 GA COPPER
12	2	283307-01	INSTALLATION BRACKET
13	2	900035-3	HEX HEAD CAP SCREW, 1/2"-13 X 1-1/2" LG.
14	2	901011-9	HEX NUT, 1/2"-13
15	1	215345	EXTENSION SPRING, 2-1/2" LG.
16	2	902000-13	FLAT WASHER, 1/2"-13

**TABLE 12-1**

**PARTS BOX FOR TE-25 & TE-25L  
(102" WIDE, POWER DOWN, BOLT-ON  
EXTENSION PLATE)**

ITEM	QTY.	PART NO.	DESCRIPTION
REF	1	266403-76	PARTS BOX (TE-25 & TE-25L GRAVITY DOWN FOR 96" WIDE VEHICLE)
1	4	030458	SCREW, TAPPING #10 X 1/2" LG.
2	7	050079	CLIP, FRAME
3	1	125674	CLAMP, JIFFY #130
4	10	205780	TIE, PLASTIC 7" LG.
5	8	206864	TIE, PLASTIC 12-14" LG.
6	3	214663	CLAMP, #8 RUBBER LOOM
7	2	251333	SHIM, 1/8" X 2" X 2" LG.
8	1	264422	CABLE ASSEMBLY, 175 AMPS, 38' LG.
9	1	264951-04	MOLDED SWITCH & CABLE ASSEMBLY
10	2	900057-5	SCREW, SELF TAPPING, #10-24 X 1" LG.
11	1	906497-02	LUG, 2 GA COPPER
12	2	283307-01	INSTALLATION BRACKET
13	2	900035-3	HEX HEAD CAP SCREW, 1/2"-13 X 1-1/2" LG.
14	2	901011-9	HEX NUT, 1/2"-13
15	1	215345	EXTENSION SPRING, 2-1/2" LG.
16	2	902000-13	FLAT WASHER, 1/2"-13

**TABLE 13-1**

## TE-25 MANUALS & DECALS

**NOTE:** To find **maintenance & parts** information for your **TE-25 Liftgate**, go to **www.maxonlift.com**. Click the **PRODUCTS, TUK-A-WAY & TE-25** buttons. Open the **Maintenance Manual** in the **PRODUCT DOCUMENTATION** window.

ITEM	QTY.	PART NO.	DESCRIPTION
REF.	1	266404-08	KIT, MANUAL & DECAL TE-25/TE-25L
1	1	220382	DECAL, 2500# CAPACITY
2	1	251867-03	DECAL, OPERATING INSTRUCTIONS
3	1	282522-01	DECAL, SMALL WARNING & CAUTION
4	1	264507	DECAL, UP & DOWN
5	1	265736-01	DECAL, PINCH HAZARD WARNING
6	1	282847-02	DECAL, STOW WARNING
7	1	M-11-18	MANUAL, TE-25/TE-25L INSTALLATION
8	1	M-11-19	MANUAL, TE-25/TE-25L OPERATION

**TABLE 14-1**

# VEHICLE REQUIREMENTS

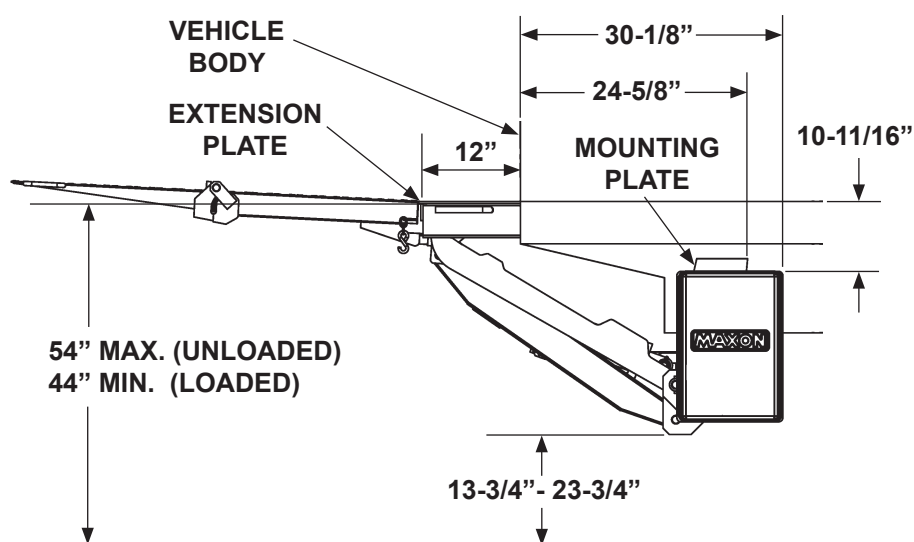
**NOTE: Body Maximum and Minimum Operating Bed Height for Standard Platform:** Maximum height for TE-25 is **54"** (Unloaded). Minimum height is **44"** (Loaded). Maximum height for TE-25L is **44"** (Unloaded). Minimum height is **38"** (Loaded). Do not install this Liftgate on vehicle bodies equipped with **swing open doors**.

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

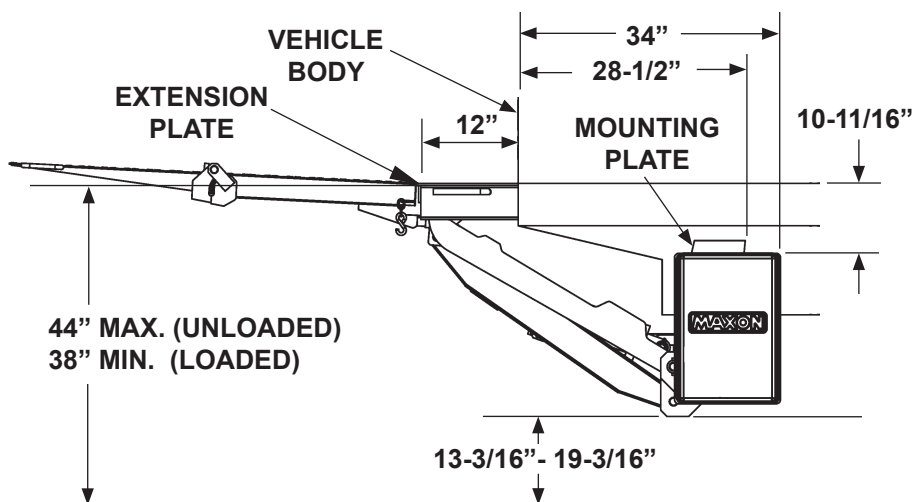
**NOTE:** Dimensions are provided as reference for fitting Liftgate to vehicle body.

**NOTE:** Measure the width of the Liftgate and the width of the vehicle body before you start doing this procedure. Ensure the Liftgate is the correct width for vehicle.

1. Check for correct clearances (**FIGS. 15-1 and 15-2**) on vehicle to prevent interference between vehicle and Liftgate.



**CLEARANCES FOR TE-25**  
**FIG. 15-1**



**CLEARANCES FOR TE-25L**  
**FIG. 15-2**



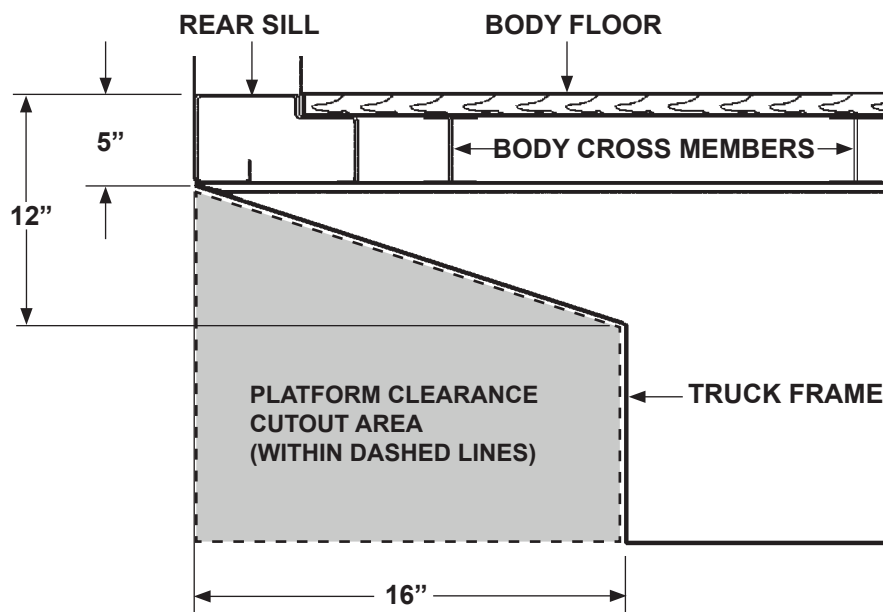
## VEHICLE REQUIREMENTS - Continued

### CAUTION

- To prevent aluminum platform from being damaged, make sure vehicle frame is cut correctly and rear sills are modified if over 5" in height for high bed models, and 4" in height for low bed models. If the cutouts are incorrect, platform may hit vehicle frame or underbody when stowing the Liftgate. The bottom of the platform may also 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.

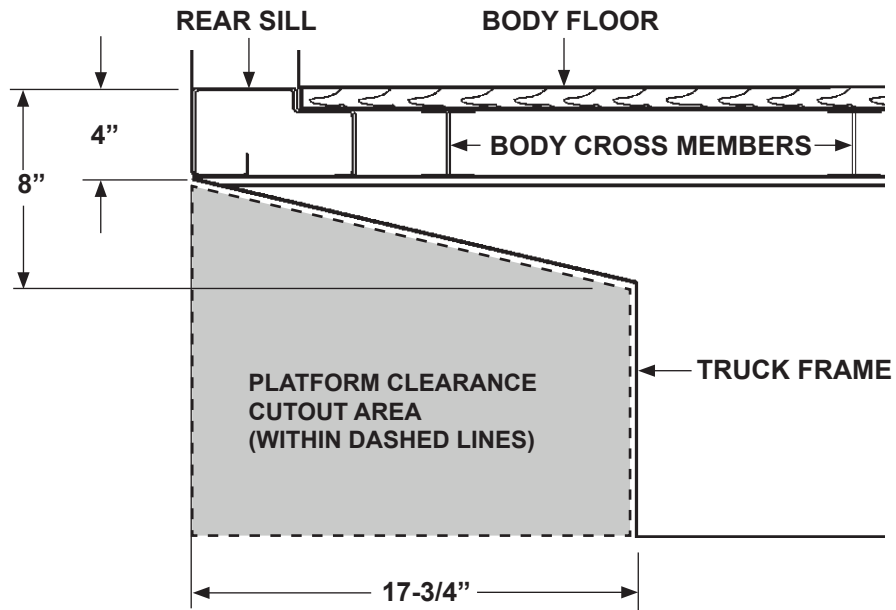
**NOTE:** The dimensions, shown in the illustration below, are maximums except as indicated.

2. Fit the Liftgate to a truck body by cutting the truck frame as shown in **FIGS. 16-1** and **17-1**.



VEHICLE FRAME CUT FOR TE-25  
FIG. 16-1

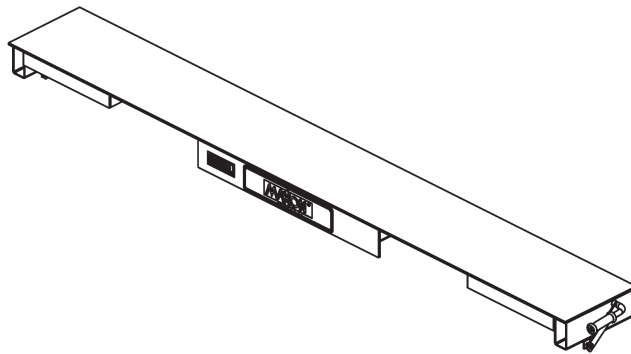
## VEHICLE REQUIREMENTS - Continued



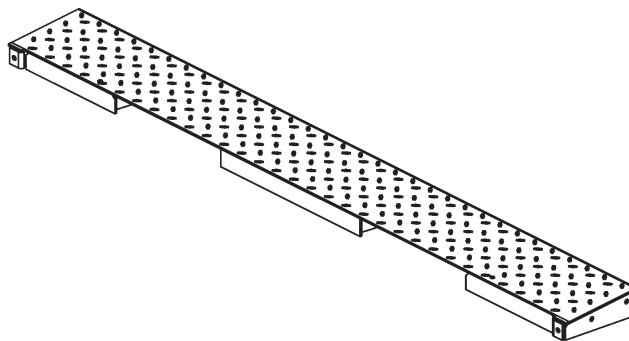
VEHICLE FRAME CUT FOR TE-25L  
FIG. 17-1

## STEP 1 - INSTALL EXTENSION PLATES

**NOTE:** TE-25 Liftgates may be equipped with two types of extensions plates. The extension plate (**FIG. 18-1**) with safety handle does not have bolt holes and is welded on. Weld-on support straps and spacers (flats), provided with parts bags, must be used. The bolt-on extension plate (**FIG. 18-2**) has bolt holes so it can be bolted to vehicle body. **Grade 8** bolts are required. **MAX-ON** recommends getting the optional extension plate hardware kit listed in **OPTIONS** section. It also has holes for bolt-on installation brackets, provided with parts bags. Refer to the following instructions for installing painted extension plates or galvanized extension plates.



**PAINTED WELD-ON EXTENSION PLATE**  
**FIG. 18-1**



**BOLT-ON EXTENSION PLATE**  
**FIG. 18-2**

# STEP 1 - INSTALL EXTENSION PLATES - Continued

## WELD EXTENSION PLATE TO VEHICLE

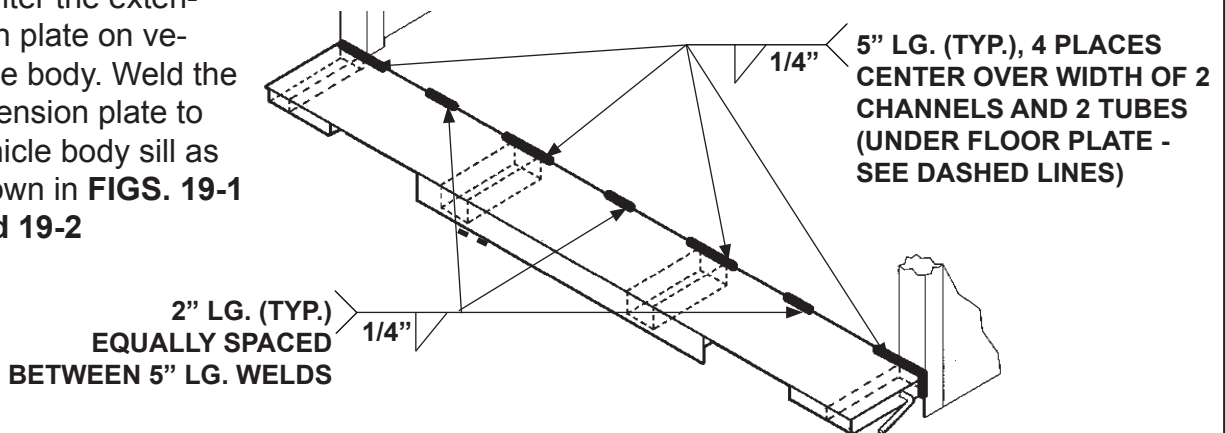
### CAUTION

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

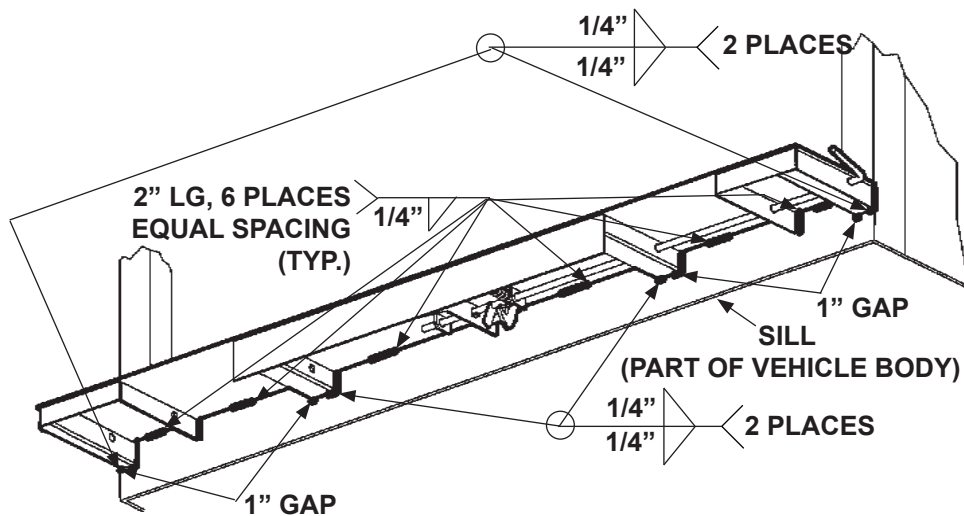
**NOTE:** Before welding extension plate to vehicle body, make sure:

- Inboard edge of extension plate is flush with the top of sill on vehicle body.
- Top surface of extension plate is level with the ground.

1. Center the extension plate on vehicle body. Weld the extension plate to vehicle body sill as shown in **FIGS. 19-1 and 19-2**



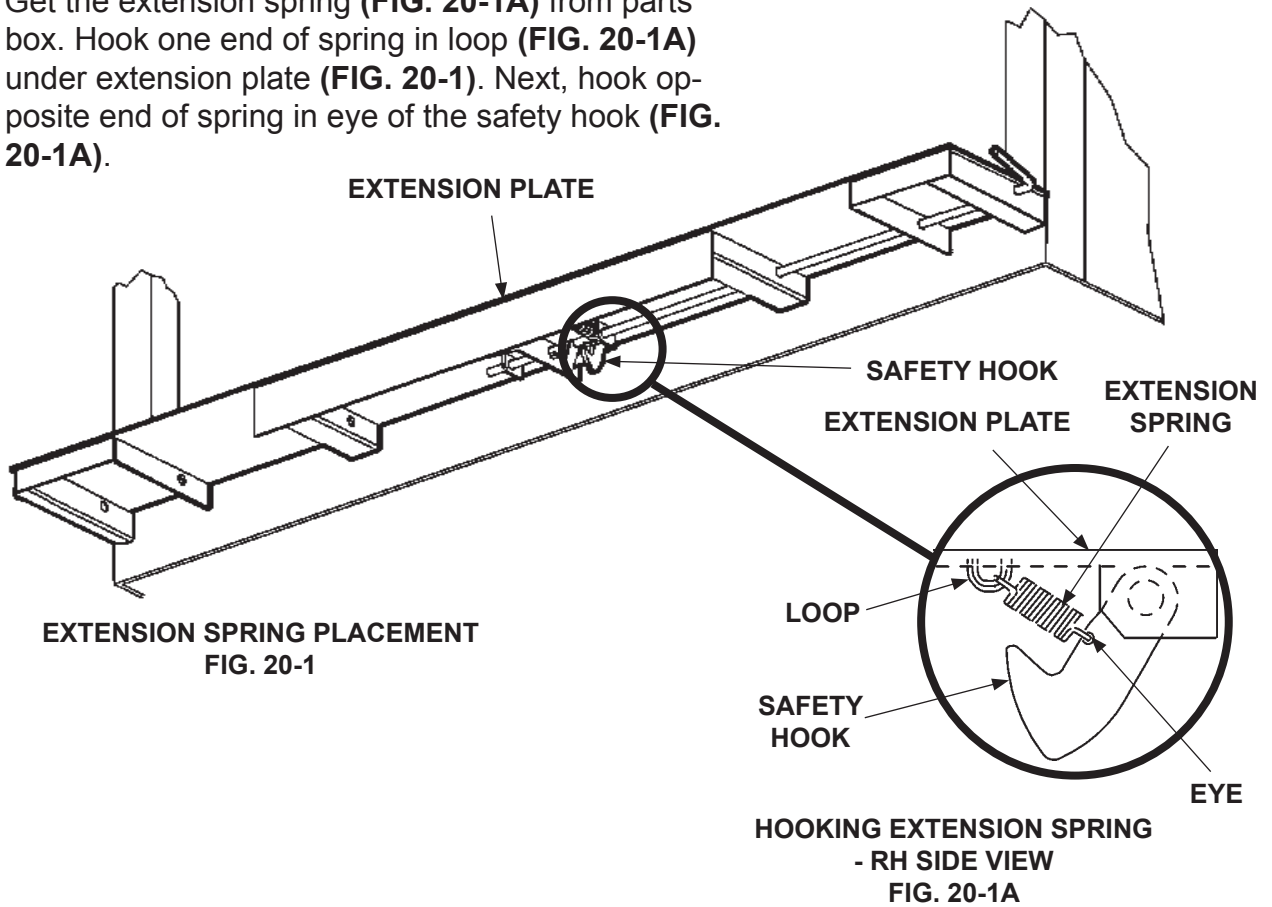
**EXTENSION PLATE WELDS - VIEWED FROM ABOVE**  
**FIG. 19-1**



**EXTENSION PLATE WELDS - VIEWED FROM UNDERNEATH**  
**FIG. 19-2**

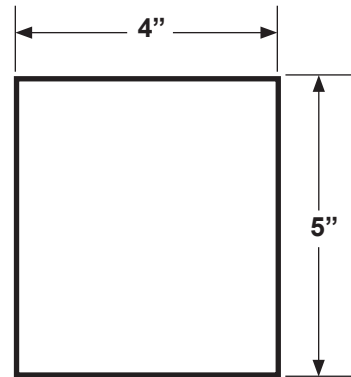
## STEP 1 - INSTALL EXTENSION PLATES - Continued

2. Get the extension spring (FIG. 20-1A) from parts box. Hook one end of spring in loop (FIG. 20-1A) under extension plate (FIG. 20-1). Next, hook opposite end of spring in eye of the safety hook (FIG. 20-1A).



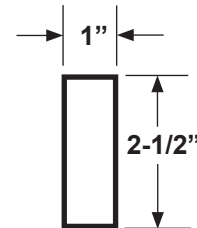
## STEP 1 - INSTALL EXTENSION PLATES - Continued

3. Make 2 support straps (**FIG. 21-1**) and 2 spacers (**FIG. 21-2**) to keep Liftgate in proper position. (While welding Liftgate to vehicle, support straps keep platform level with extension plate and spacers keep 1/4" between platform and extension plate.)

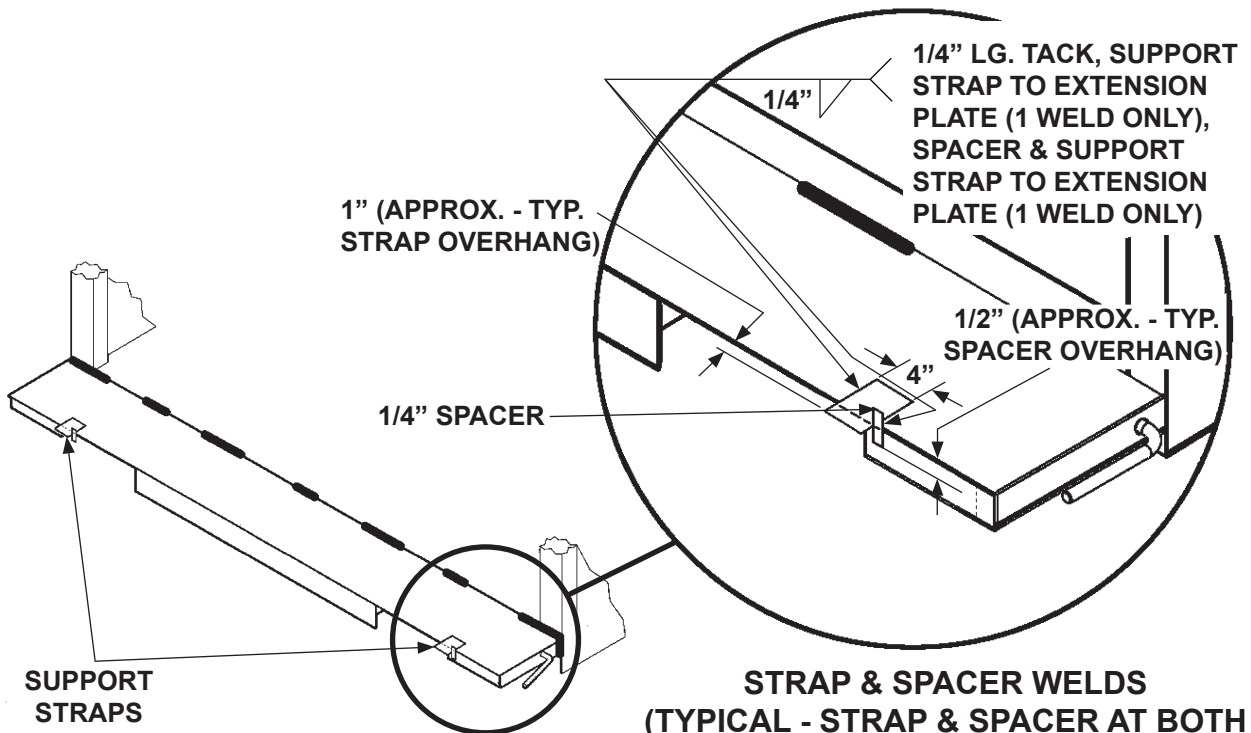


**SUPPORT STRAP**  
(3/8" X 4" STEEL FLAT)  
**FIG. 21-1**

4. Place 2 temporary support straps on the extension plate as shown in **FIGS. 21-3 & 21-3A**. Also, put 2 temporary spacers (**FIG. 21-3A**) between platform and extension plate as shown in **FIG. 21-3A**. Weld the straps and spacers to extension plate (**FIG. 21-3A**).



**SPACER (1/4" X 1" STEEL FLAT)**  
**FIG. 21-2**



**FIG. 21-3**

**STRAP & SPACER WELDS**  
(TYPICAL - STRAP & SPACER AT BOTH  
ENDS OF EXTENSION PLATE)  
**FIG. 21-3A**

# STEP 1 - INSTALL EXTENSION PLATES - Continued

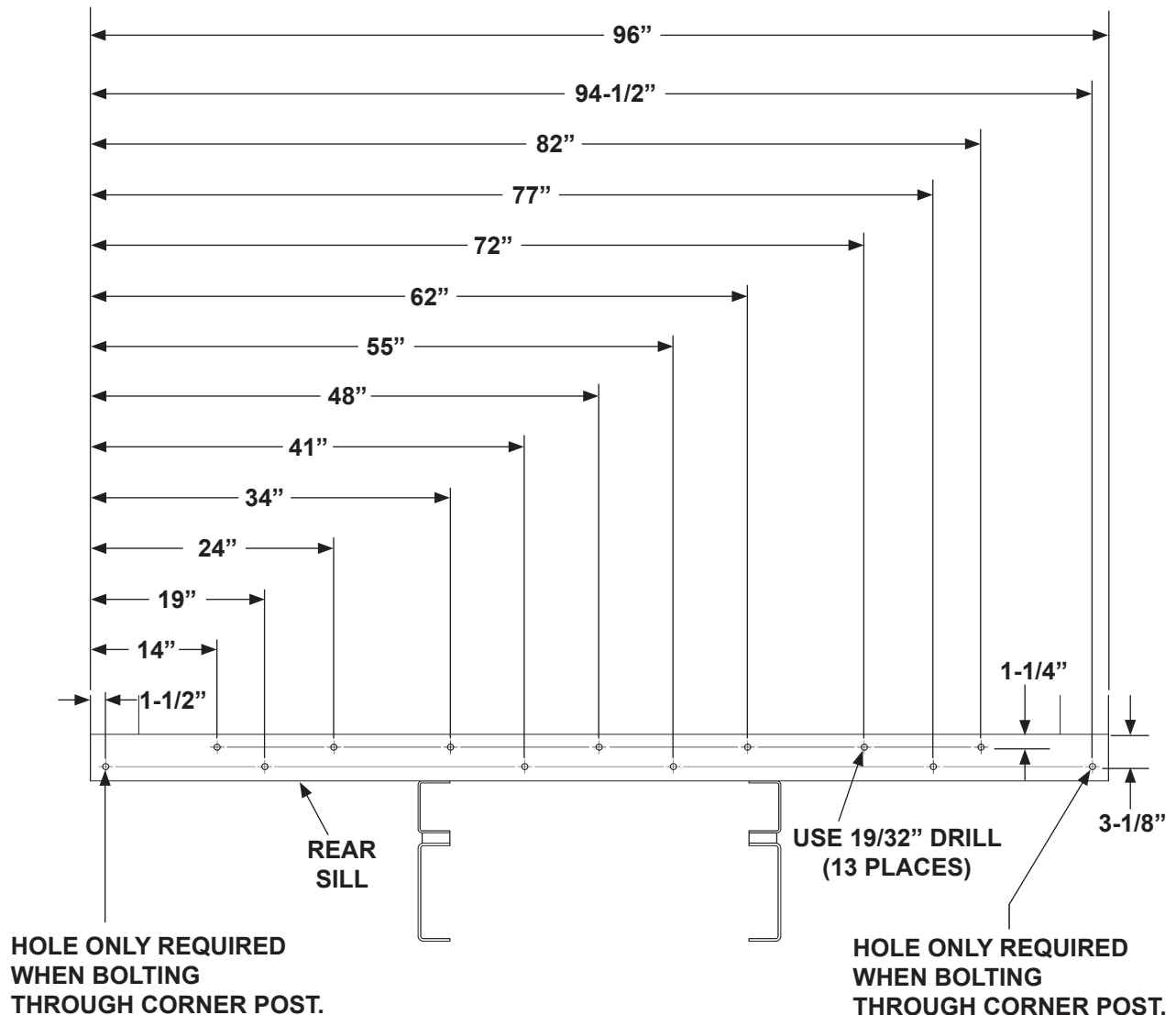
## BOLT EXTENSION PLATE TO VEHICLE

### CAUTION

To preserve the corrosion resistance properties of the painted & galvanized finish, MAXON recommends bolting the extension plate to vehicle.

**NOTE:** The extension plate has bolt holes so it can be bolted to vehicle body. **Grade 8** bolts are required. **MAXON** recommends getting the optional extension plate hardware kit listed in **OPTIONS** section. Vehicle body must be drilled according to instructions. If necessary, extension plate may also be welded to vehicle body. Do the following bolting or welding instructions.

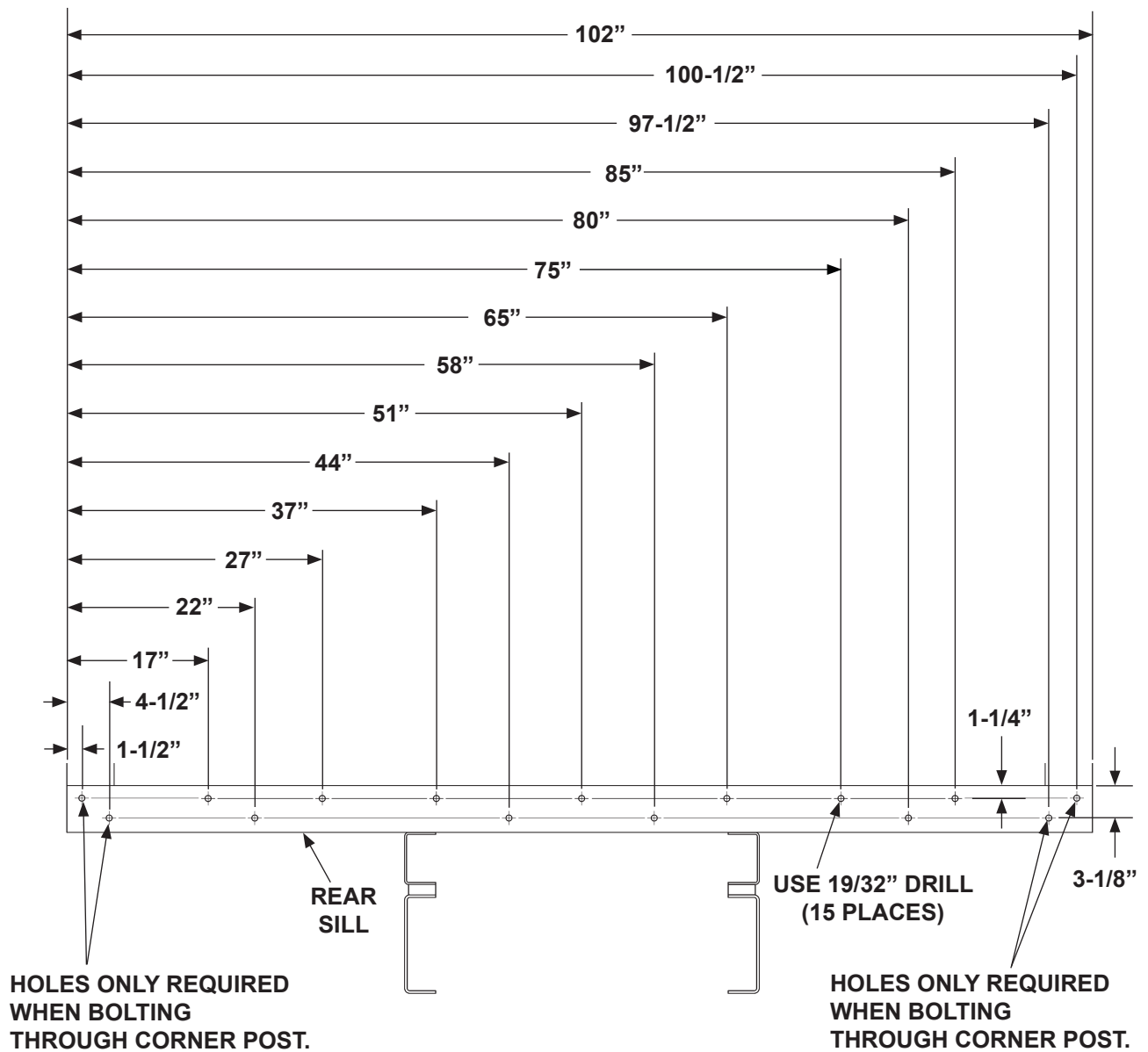
1. Mark and drill holes into rear sill as shown in **FIGS. 22-1 and 23-1**.



REAR SILL - HOLE LOCATIONS FOR 96" WIDE VEHICLE  
FIG. 22-1



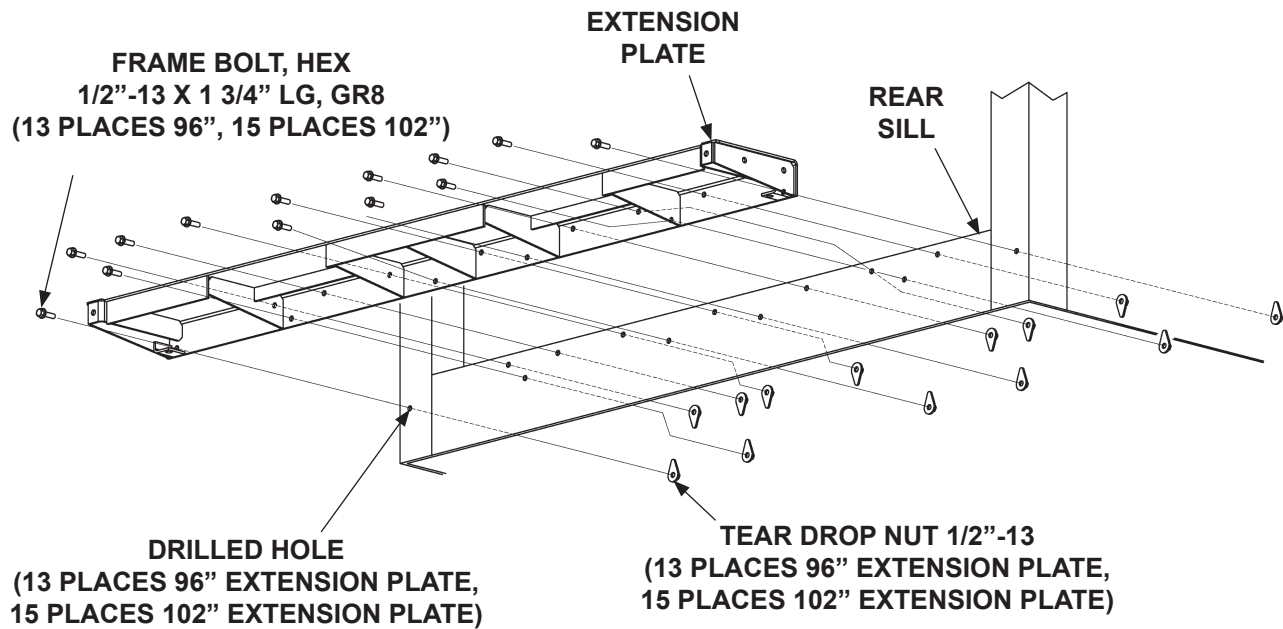
# STEP 1 - INSTALL EXTENSION PLATES - Continued



REAR SILL - HOLE LOCATIONS FOR 102" WIDE VEHICLE  
FIG. 23-1

## STEP 1 - INSTALL EXTENSION PLATES - Continued

2. Bolt extension plate to rear sill as shown in **FIG. 24-1**.



**BOLT EXTENSION PLATE**  
**FIG. 24-1**

# STEP 1 - INSTALL EXTENSION PLATES - Continued

## WELD BOLT-ON EXTENSION PLATE TO VEHICLE

### CAUTION

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

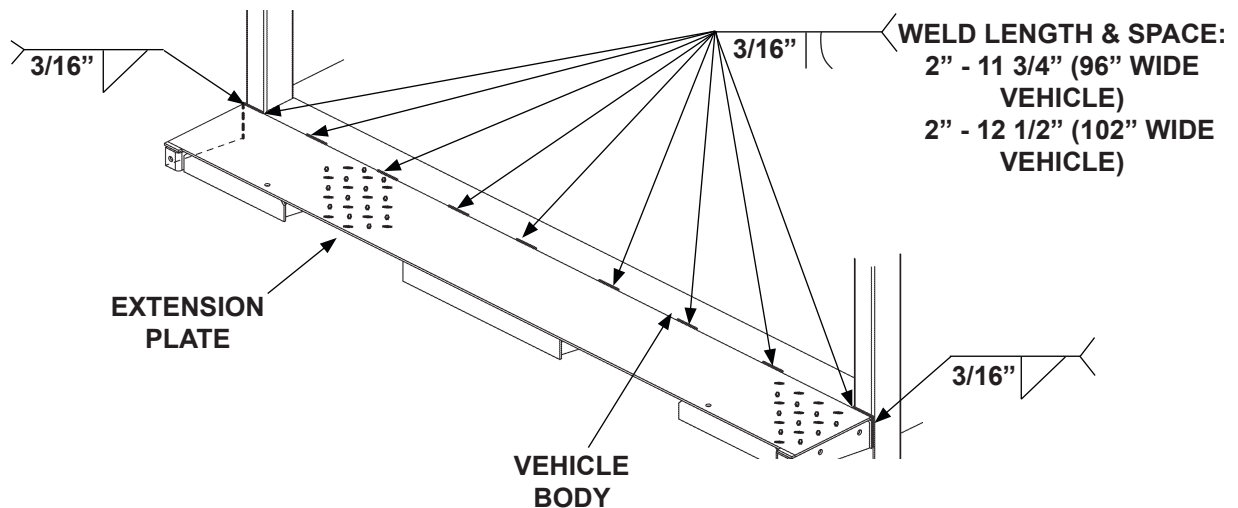
### ⚠ WARNING

Welding on galvanized parts gives off especially hazardous fumes. To minimize hazard remove galvanizing from weld area, provide adequate ventilation, and wear suitable respirator.

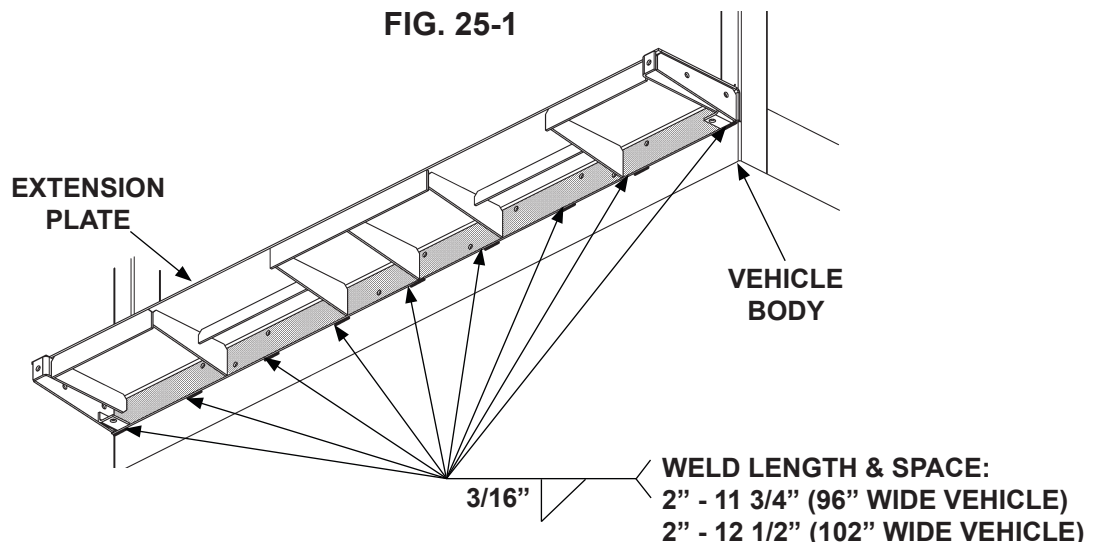
### CAUTION

To preserve the corrosion resistance properties of the galvanized finish, MAXON recommends bolting the galvanized extension plate to vehicle.

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. 25-1 and 25-2**.



EXTENSION PLATE WELDS - VIEWED FROM ABOVE  
FIG. 25-1

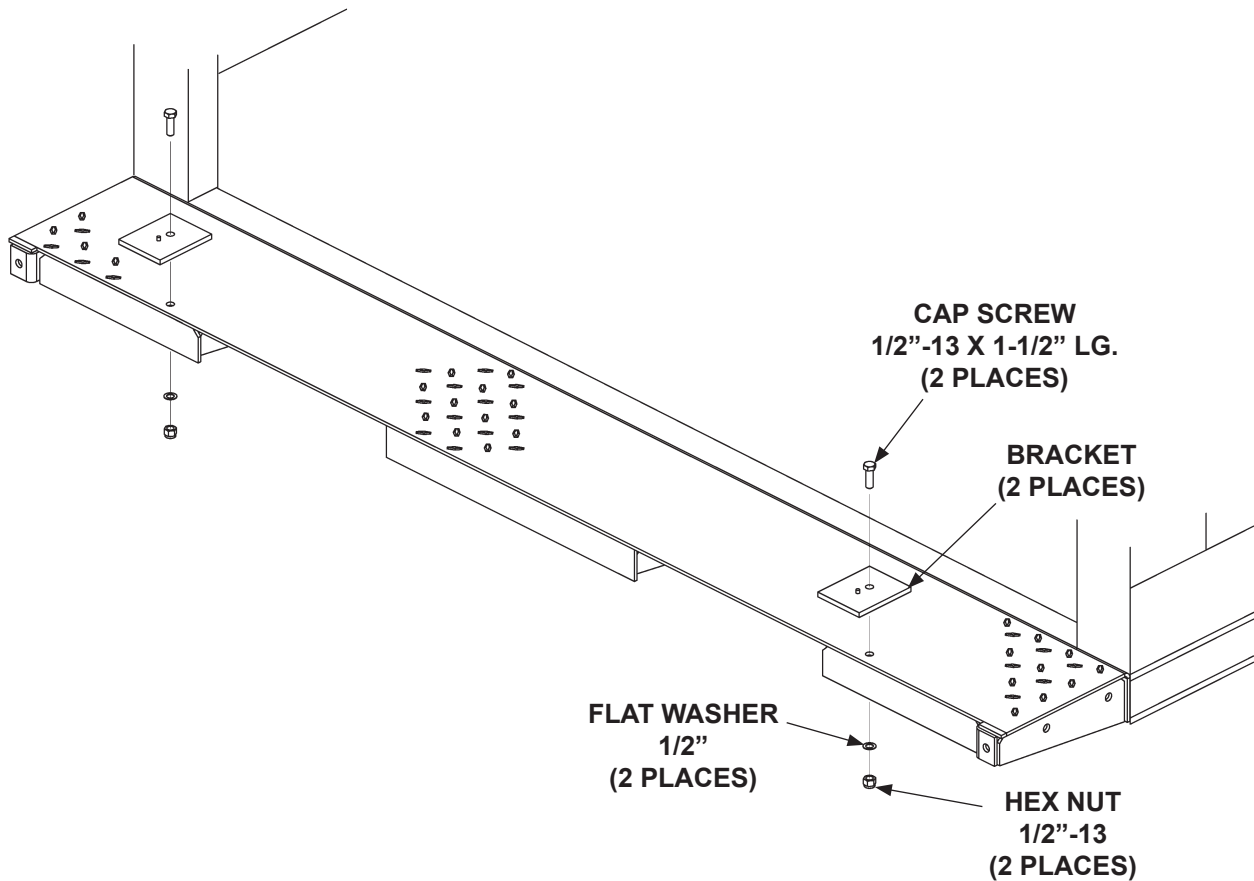


EXTENSION PLATE WELDS - VIEWED FROM UNDERNEATH  
FIG. 25-2

## STEP 1 - INSTALL EXTENSION PLATES - Continued

### BOLT INSTALLATION BRACKETS (BOLT-ON EXTENSION PLATE)

Bolt 2 installation brackets (parts bag items) on the extension plate as shown in **FIG. 26-1**. Tighten hex nuts securely.



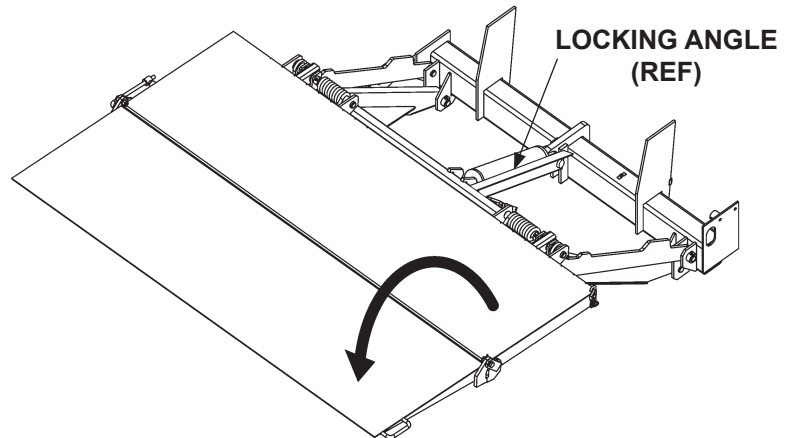
**BOLTING ON INSTALLATION BRACKETS**  
**FIG. 26-1**

## STEP 2 - WELD LIFTGATE TO VEHICLE

### ⚠ WARNING

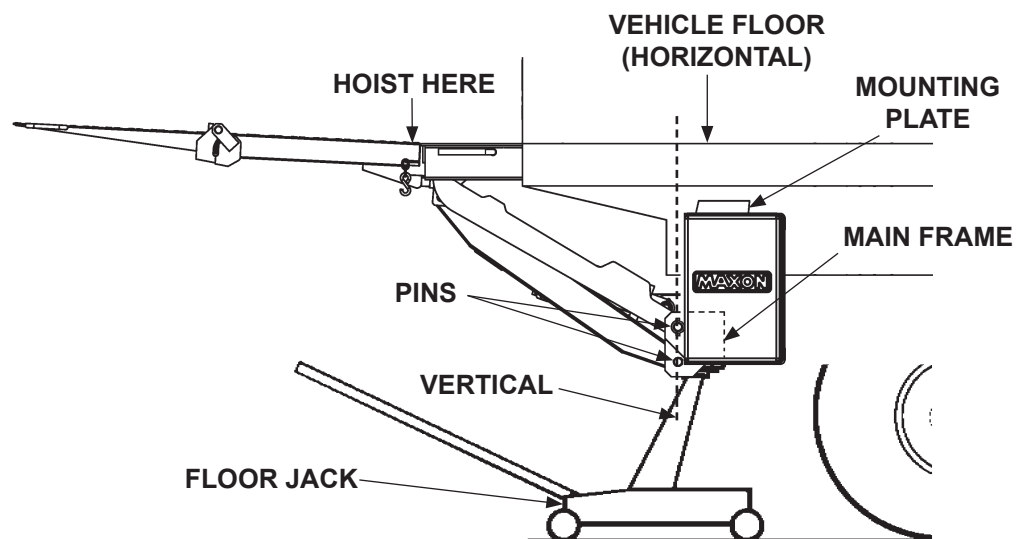
Prevent injuries and equipment damage. Keep the **LOCKING ANGLE** in place until instructed to remove it.

1. Unfold the platform and flipover as shown in **FIG. 27-1**.



**PLATFORM & FLIPOVER UNFOLDED**  
**FIG. 27-1**

2. Attach chain and hoist on each side of platform at positions shown in **FIG. 27-2**. (Place chain all around platform). Hoist the Liftgate and then place floor jack under main frame (**FIG. 27-2**). Jack the Liftgate into position. Make sure vehicle floor is horizontal and pins are lined up as shown in **FIG. 27-2**.



**FIG. 27-2**

## STEP 2 - WELD LIFTGATE TO VEHICLE - Continued

### ⚠ WARNING

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

### CAUTION

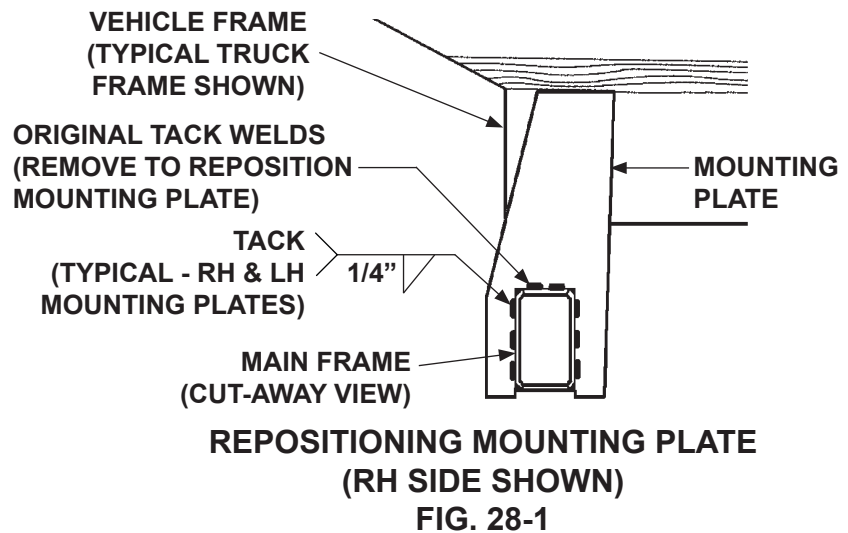
Prevent damaging hydraulic hoses. If welding next to hydraulic hoses, use a protective cover such as a welding blanket to cover the hoses.

### CAUTION

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

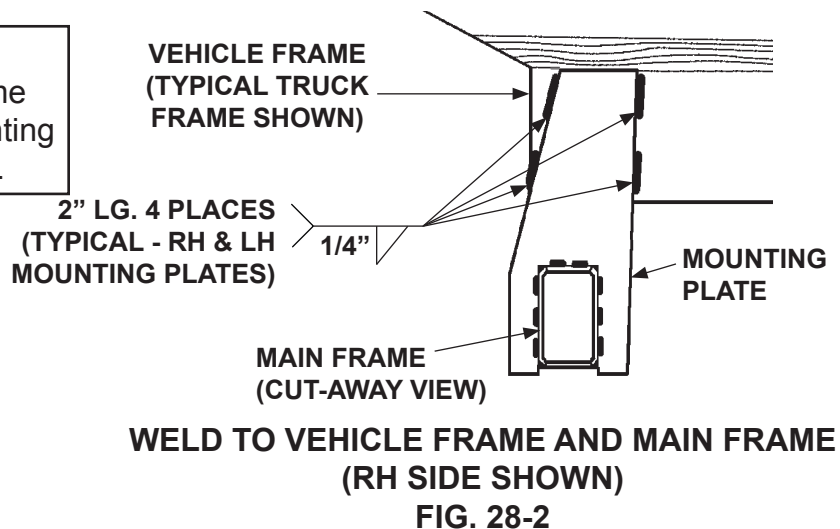
**NOTE:** The following instructions 3 and 5 apply to painted Liftgates, only. Mounting plates on galvanized Liftgates are fully welded to main frame at the factory, and are suitable for vehicle with 33-3/4" frame width. Galvanized mounting plates should not be removed and repositioned. Painted mounting plates are tack welded so they can be repositioned.

3. Check if both mounting plates line up with vehicle frame. If mounting plates do not line up, remove tack welds from one mounting plate (**FIG. 28-1**). Make sure Liftgate stays centered on vehicle. Reposition mounting plate against vehicle frame. Keep mounting plate in vertical position. Tack weld as shown in **FIG. 28-1**. Repeat for second mounting plate (reposition and tack weld).



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

4. Clamp both mounting plates to vehicle frame. Weld the mounting plates to vehicle frame as shown in **FIG. 28-2**. Remove clamps.

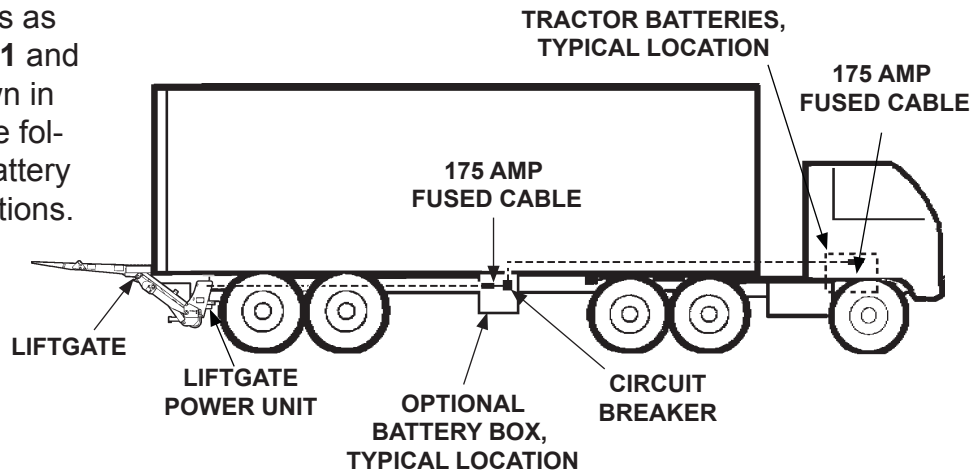


## STEP 3 - ATTACH OPTIONAL BATTERY BOX & FRAME TO VEHICLE (IF EQUIPPED)

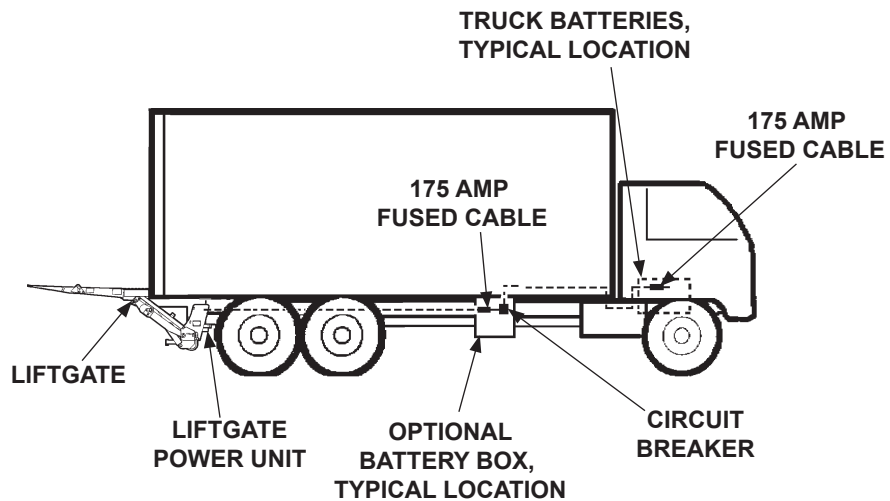
### RECOMMENDED CONFIGURATION

**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 optional battery box are typically installed on trailers as shown in **FIG. 29-1** and on trucks as shown in **FIG. 29-2**. See the following page for battery and cable connections.



**RECOMMENDED LIFTGATE & OPTIONAL BATTERY BOX  
INSTALLATION ON TRAILER  
FIG. 29-1**

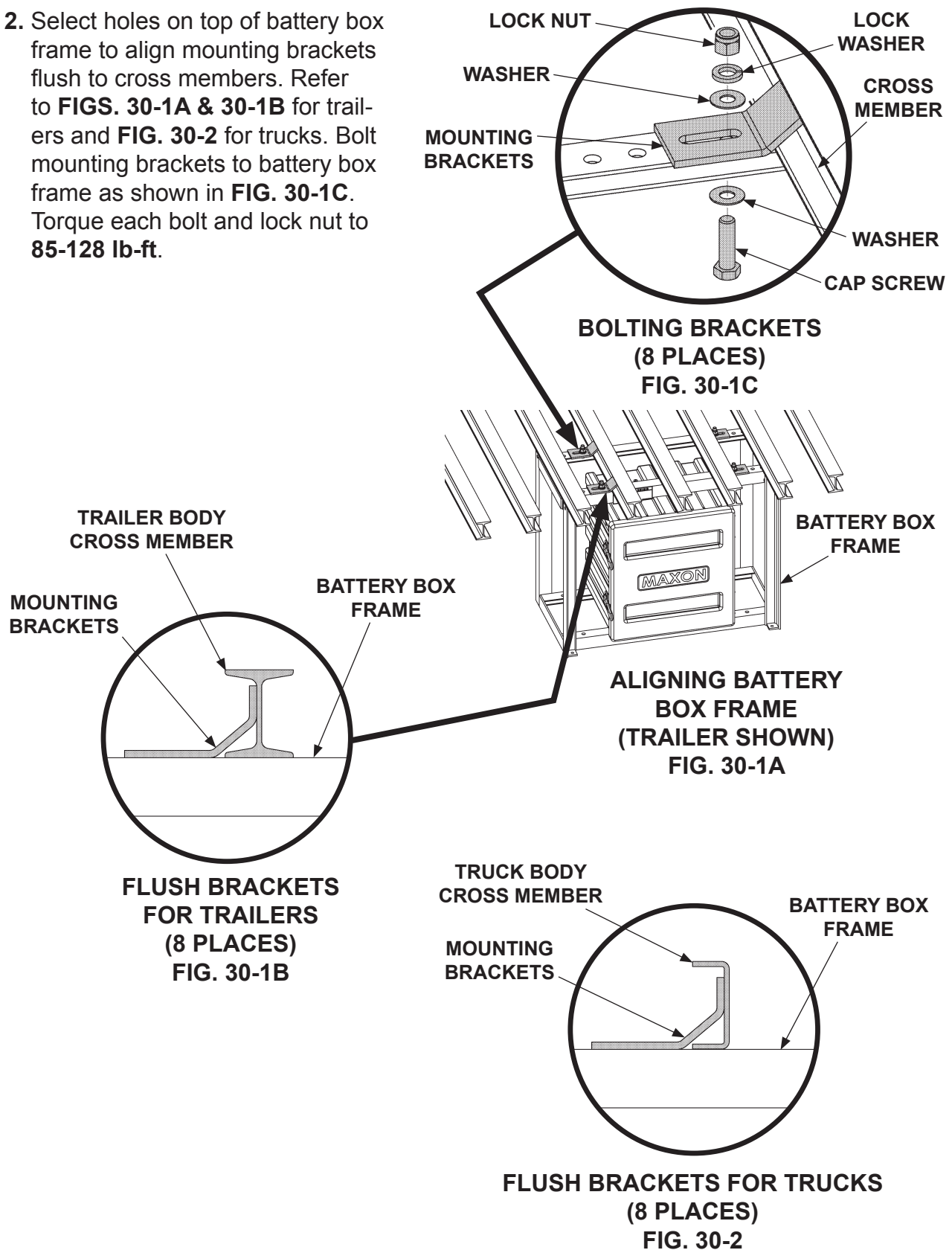


**RECOMMENDED LIFTGATE & BATTERY BOX  
INSTALLATION ON TRUCK  
FIG. 29-2**



## STEP 3 - ATTACH OPTIONAL BATTERY BOX & FRAME TO VEHICLE (IF EQUIPPED) - Continued

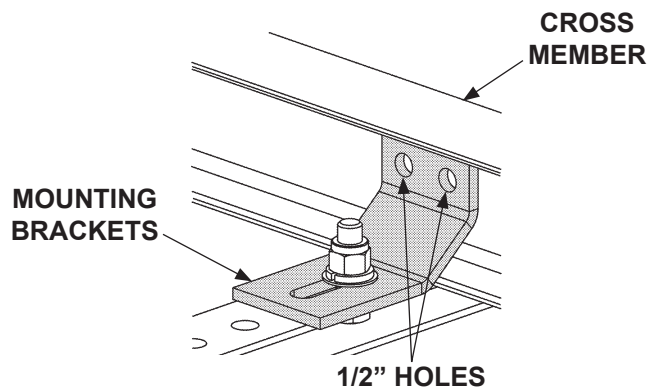
2. Select holes on top of battery box frame to align mounting brackets flush to cross members. Refer to **FIGS. 30-1A & 30-1B** for trailers and **FIG. 30-2** for trucks. Bolt mounting brackets to battery box frame as shown in **FIG. 30-1C**. Torque each bolt and lock nut to **85-128 lb-ft.**



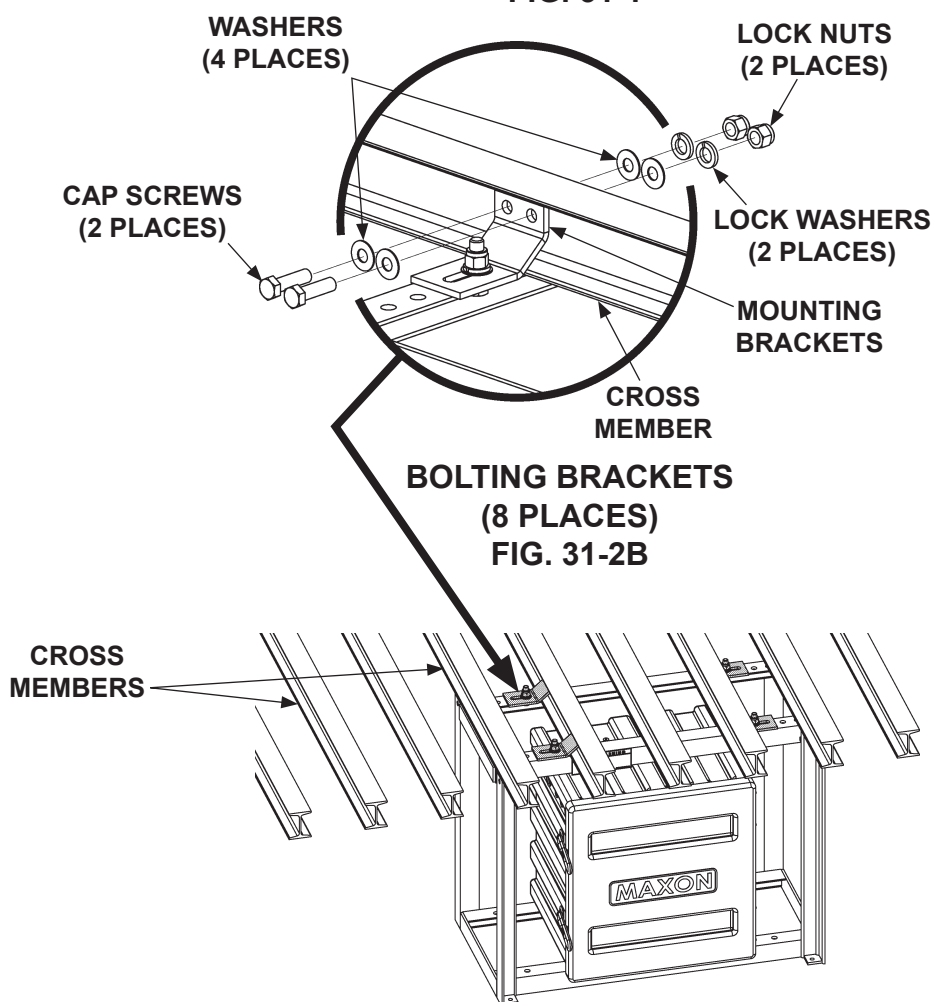
## STEP 3 - ATTACH OPTIONAL BATTERY BOX & FRAME TO VEHICLE (IF EQUIPPED) - Continued

**NOTE:** If welding mounting brackets to cross members, skip instruction 3.

- Using mounting brackets as a template mark and drill holes through cross members (**FIG. 31-1**). Bolt mounting brackets to cross members as shown in **FIGS. 31-2A and 31-2B**. Torque bolts and lock nuts to **85-128 lb-ft.**



**MARK AND DRILL  
FIG. 31-1**



**BOLTING BATTERY BOX FRAME  
FIG. 31-2A**

## STEP 3 - ATTACH OPTIONAL BATTERY BOX & FRAME TO VEHICLE (IF EQUIPPED) - Continued

### ⚠ WARNING

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.

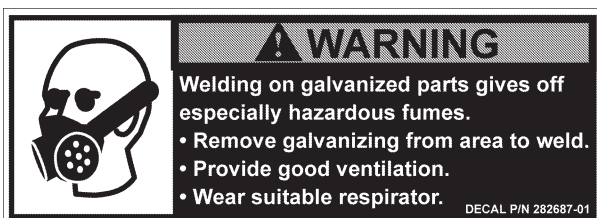
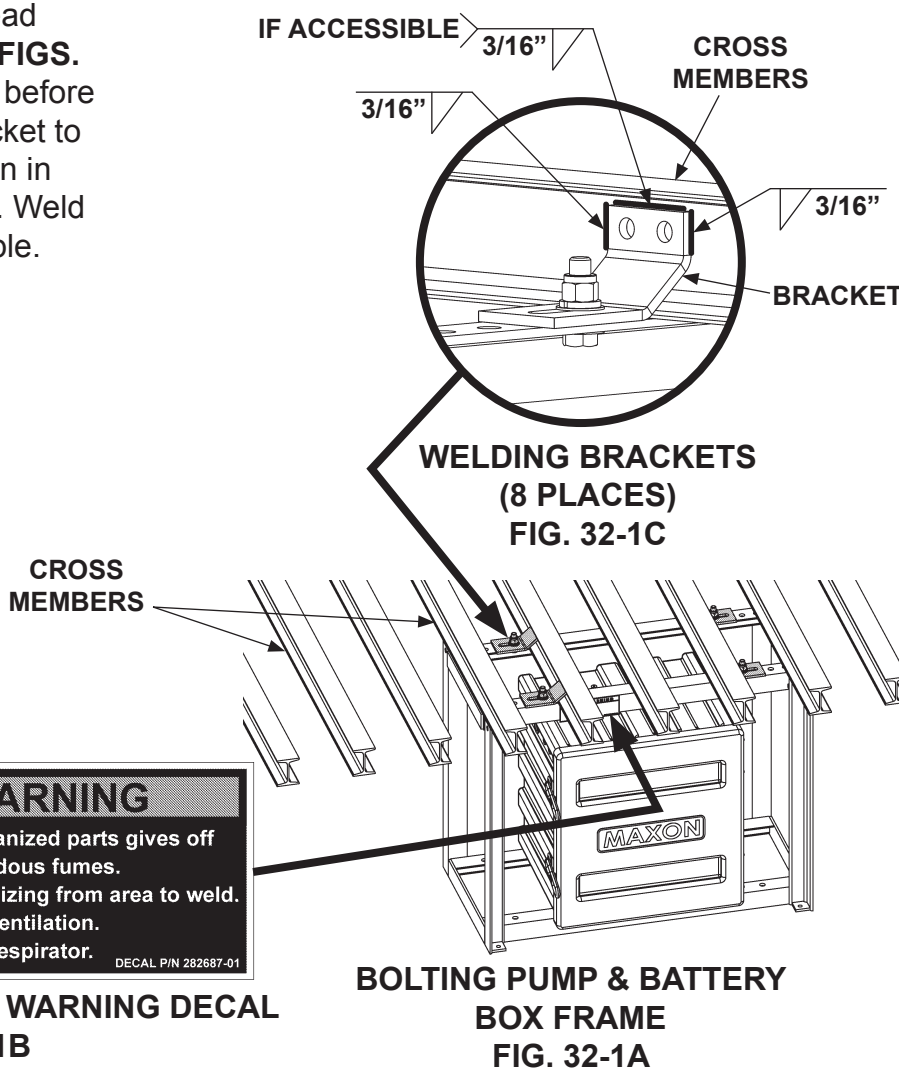
### CAUTION

To prevent pump box components from being damaged by electric current from welding, connect welder grounding cable to the part being welded.

### CAUTION

Cover pump box and optional battery box with flame-resistant covering before welding pump box frame to vehicle.

4. For galvanized frame, read warning decal shown in **FIGS. 32-1A and FIGS. 32-1B** before welding. Weld each bracket to cross members as shown in **FIGS. 32-1A and 32-1C**. Weld top of bracket if accessible.



WELDING GALVANIZED, WARNING DECAL  
FIG. 32-1B

BOLTING PUMP & BATTERY  
BOX FRAME  
FIG. 32-1A

## STEP 3 - ATTACH OPTIONAL BATTERY BOX & FRAME TO VEHICLE (IF EQUIPPED) - Continued

### ⚠ WARNING

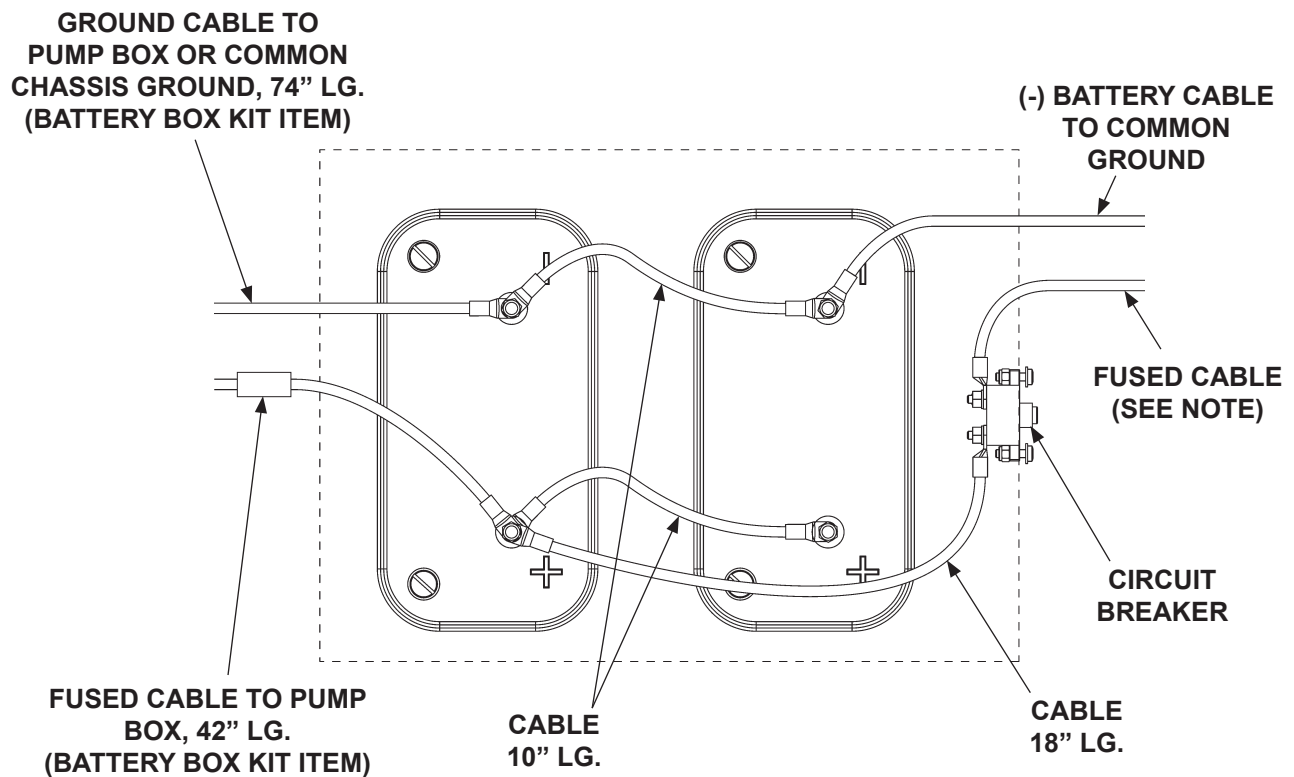
Remove all rings, watches and jewelry before doing any electrical work.

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

**NOTE:** To connect charge lines, refer to instructions provided with each charge line kit.

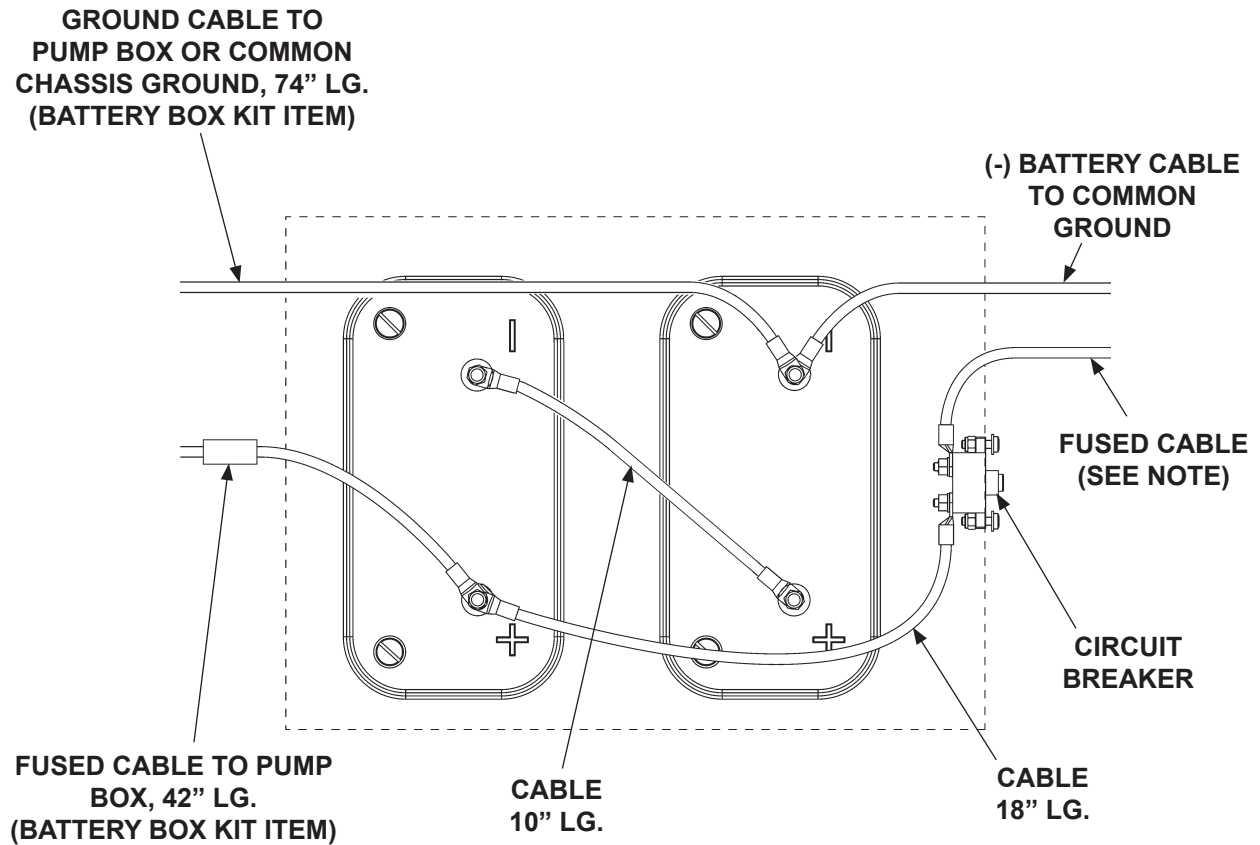
**NOTE:** MAXON recommends using dielectric grease on all electrical connections.

5. Connect battery cables, fused cables, and ground cables for 12 volt power as shown in **FIG. 33-1** or 24 volt power as shown in **FIG. 34-1**.



12 VOLT BATTERY CONNECTIONS  
FOR 12 VOLT POWER  
FIG. 33-1

## STEP 3 - ATTACH OPTIONAL BATTERY BOX & FRAME TO VEHICLE (IF EQUIPPED) - Continued

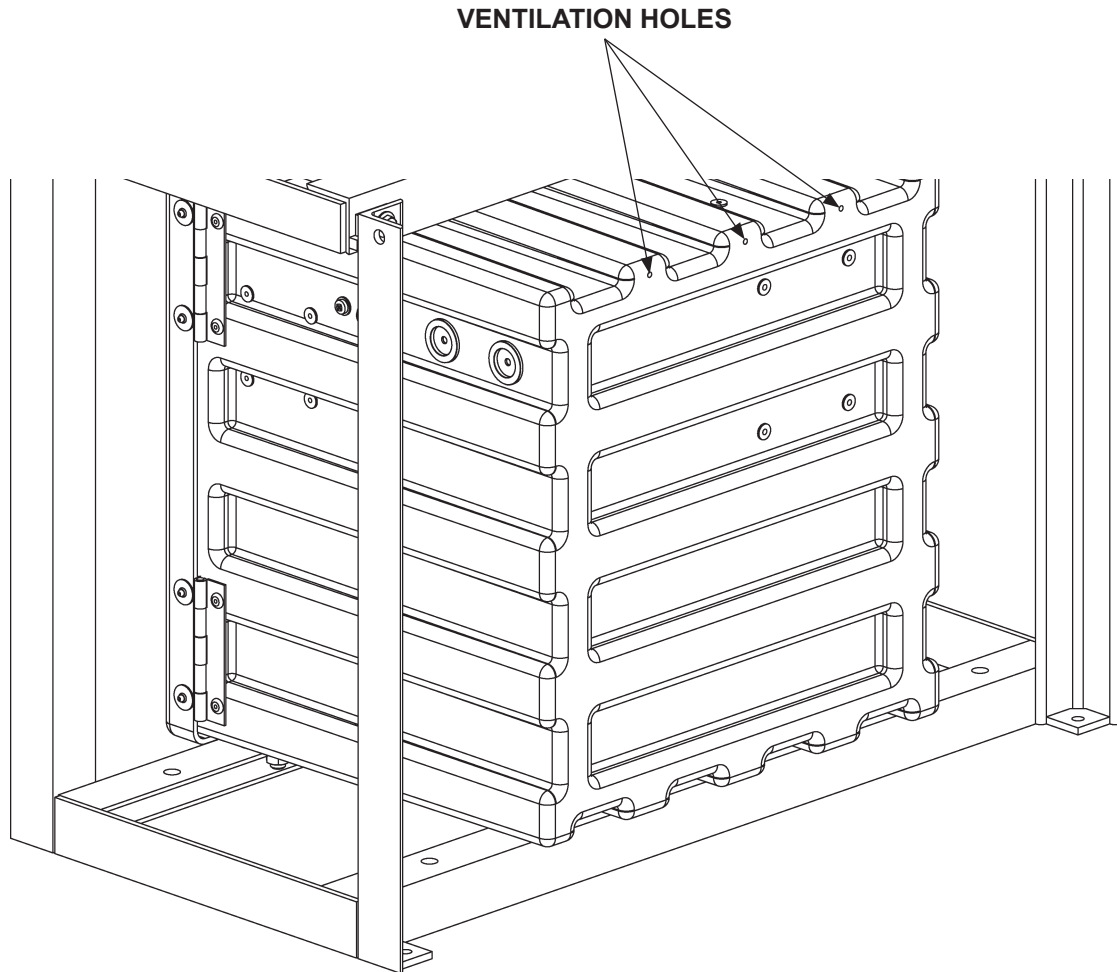


**12 VOLT BATTERY CONNECTIONS  
FOR 24 VOLT POWER  
FIG. 34-1**

## STEP 3 - ATTACH OPTIONAL BATTERY BOX & FRAME TO VEHICLE (IF EQUIPPED) - Continued

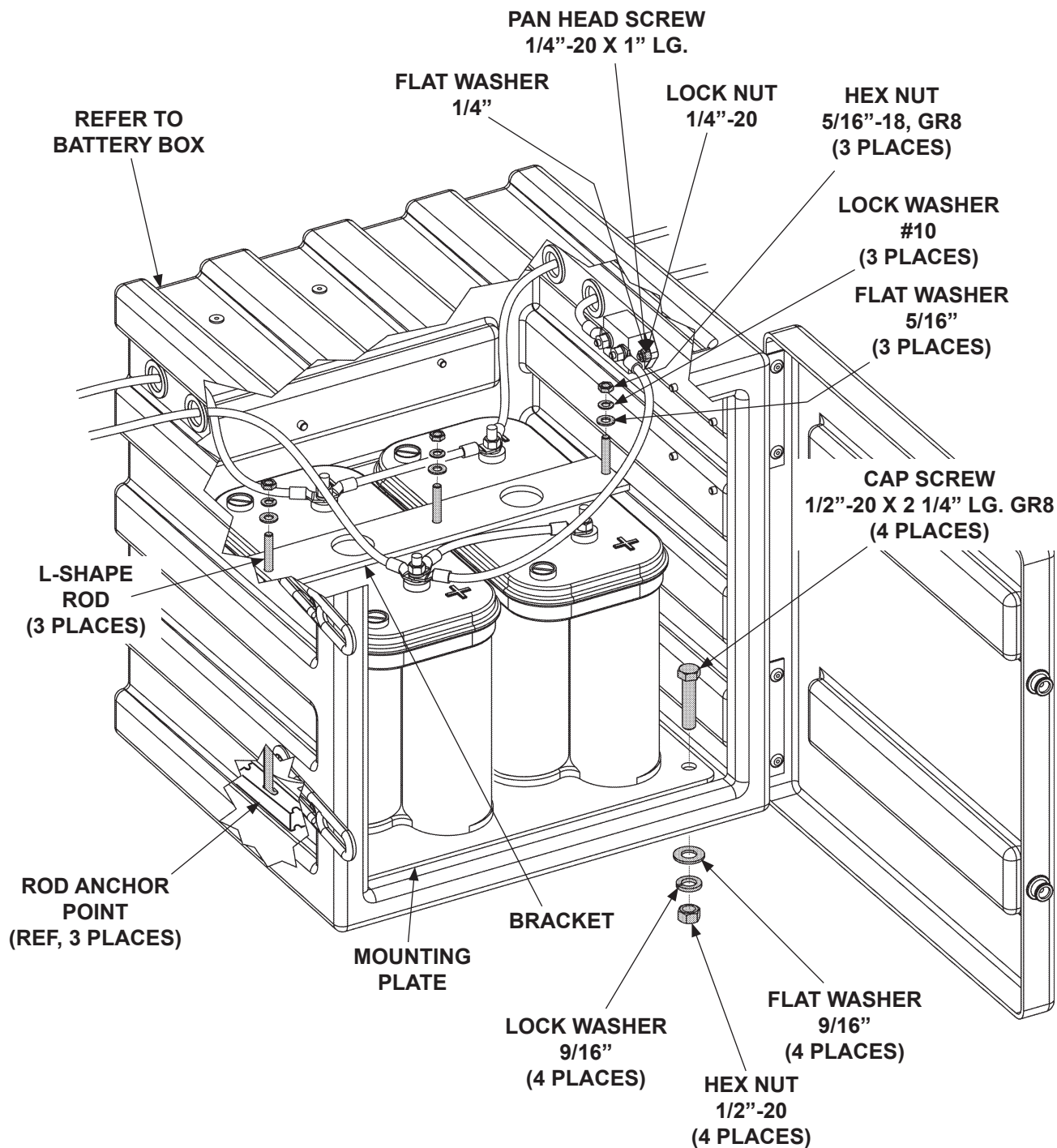
### **⚠ WARNING**

Explosive hydrogen gas from charging batteries can accumulate in battery box if not vented from the box. To prevent hydrogen gas from accumulating, ensure the 3 ventilation holes in battery box are not plugged or covered.



**BATTERY BOX ASSEMBLY (REAR VIEW SHOWN)**  
**FIG. 35-1**

## STEP 3 - ATTACH OPTIONAL BATTERY BOX & FRAME TO VEHICLE (IF EQUIPPED) - Continued



**BATTERY BOX ASSEMBLY  
(12 VOLT POWER CONNECTIONS SHOWN)**

**FIG. 36-1**

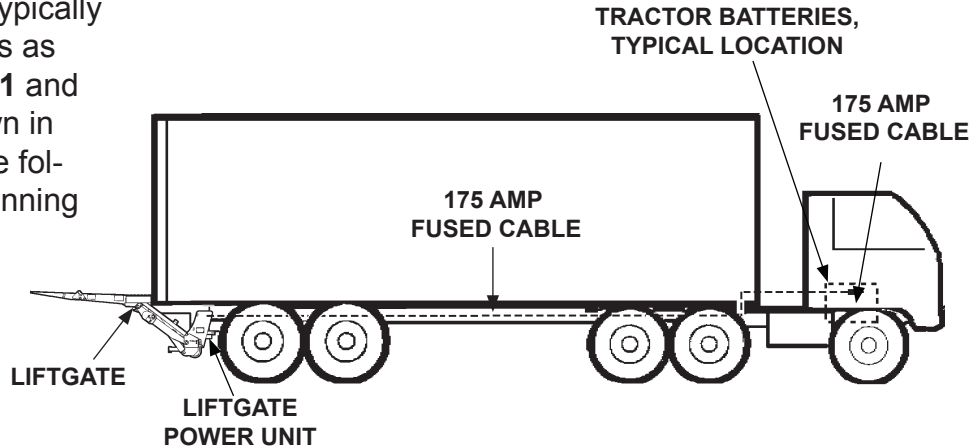


## STEP 4 - RUN POWER CABLE

**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.

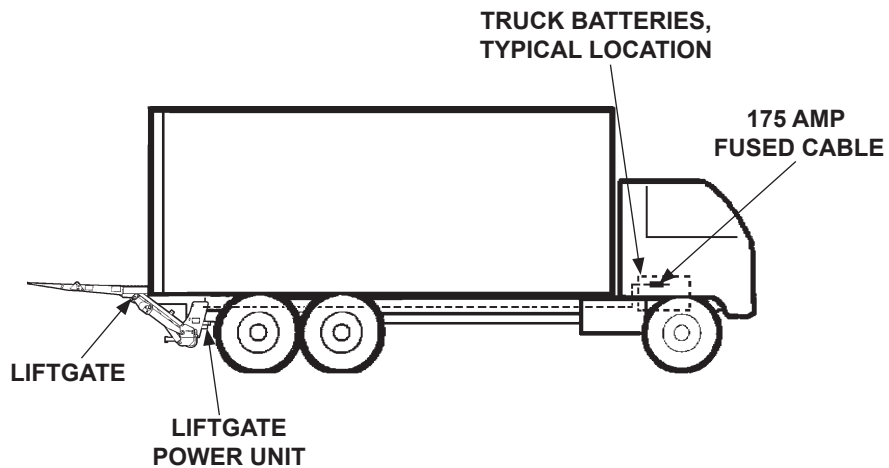
### RECOMMENDED CONFIGURATION

1. Liftgate powered from truck batteries is typically installed on trailers as shown in **FIG. 37-1** and on trucks as shown in **FIG. 37-2**. See the following page for running the battery cable.



### RECOMMENDED LIFTGATE & OPTIONAL BATTERY BOX INSTALLATION ON TRAILER

FIG. 37-1



### RECOMMENDED LIFTGATE & BATTERY BOX INSTALLATION ON TRUCK

FIG. 37-2

## STEP 4 - RUN POWER CABLE - Continued

### ⚠ 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 so you do not damage any fuel lines, vent lines, brake lines or wires.

2. Clip fused power cable to vehicle chassis with fuse nearest the vehicle battery, as shown in **FIG. 38-1**. Keep enough cable near the battery to reach the positive terminal without straining cable (after connection). Run cable to pump box on Liftgate.

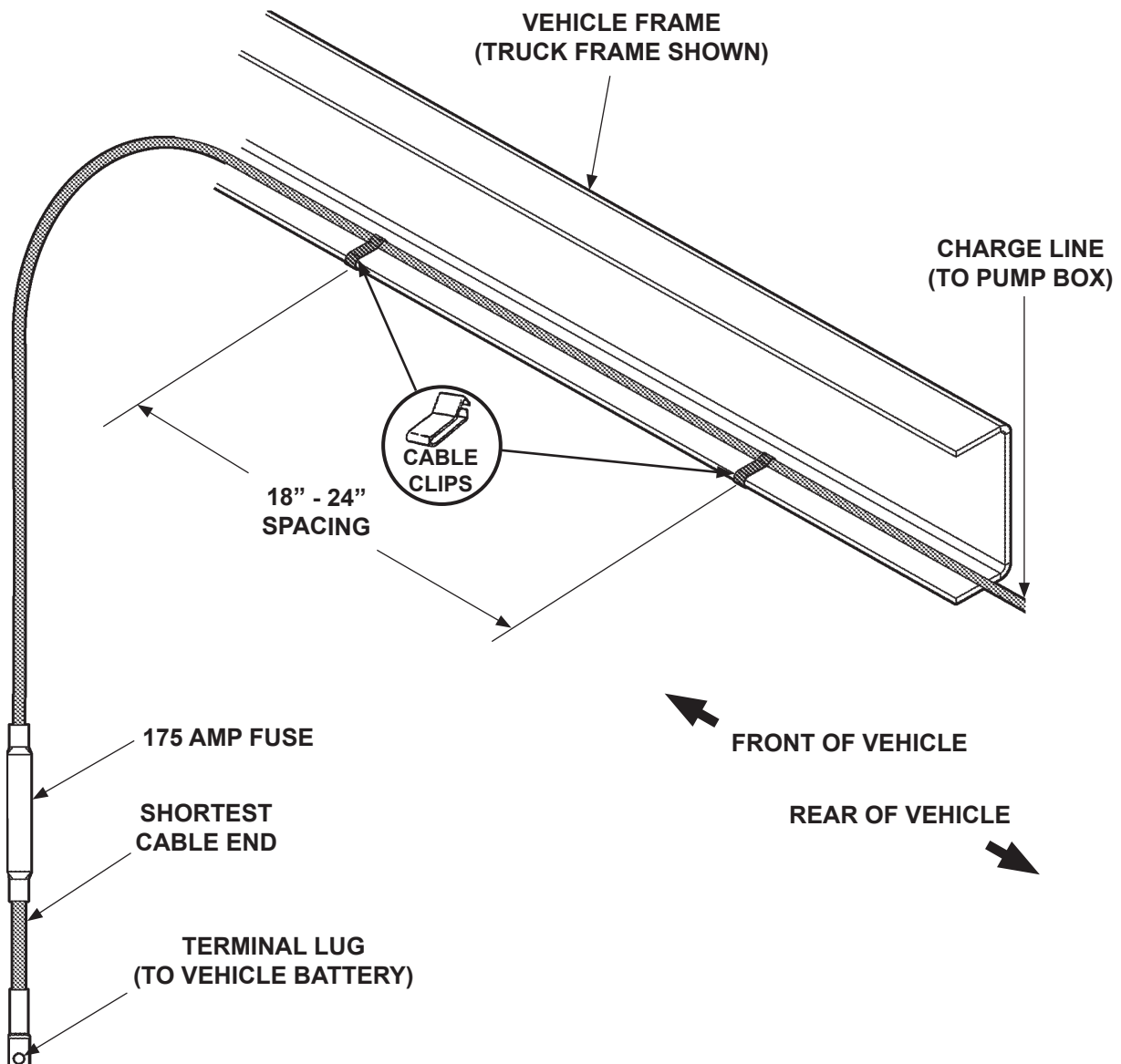
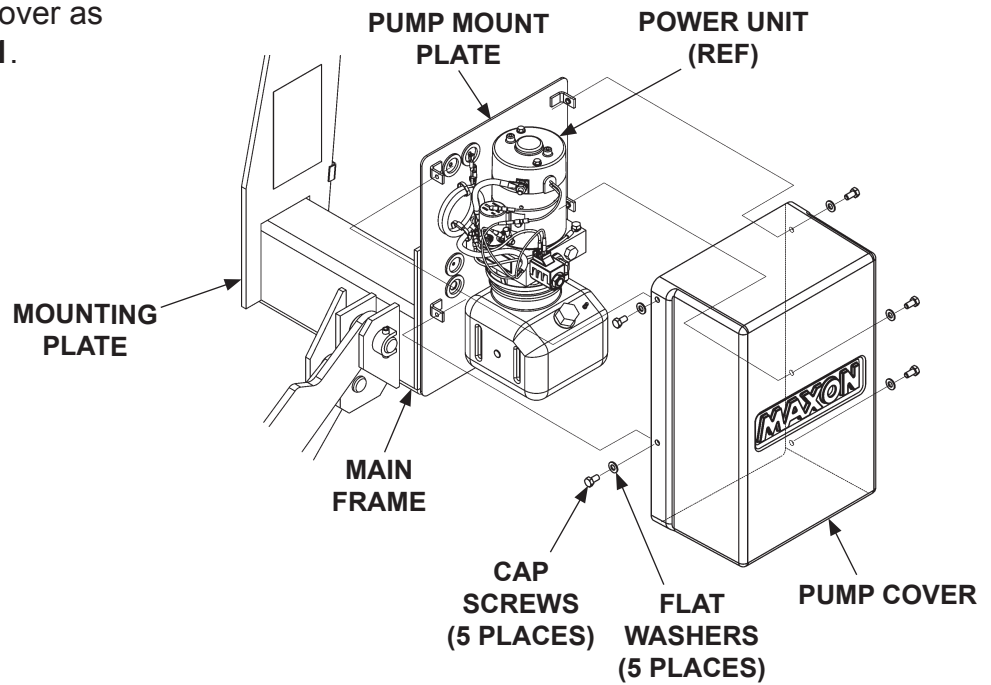


FIG. 38-1

## STEP 5 - CONNECT POWER CABLE

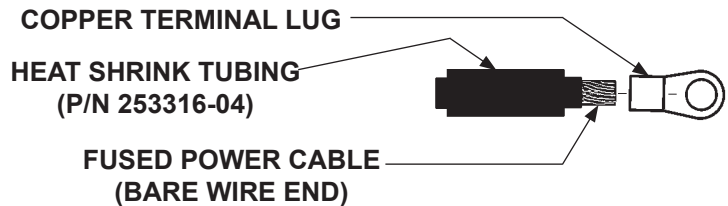
1. Unbolt the pump cover as shown in **FIG. 39-1**.



**UNBOLTING PUMP COVER**  
**FIG. 39-1**

**NOTE:** Hydraulic lines and electrical lines must be run into pump box through sealing grommets (**FIG. 40-3**). To ensure a good seal on hydraulic & electrical lines, never cut the sealing grommets.

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. 40-1**). Measure (if needed) and then cut excess cable from bare wire end of cable. Put heat shrink tubing (parts box) (**FIG. 40-1**) on the end of the cable (leave room for terminal lug). Crimp copper terminal lug (from parts box) on the fused power cable and shrink the heat shrink tubing (**FIG. 40-2**).



**PLACING TERMINAL LUG & HEAT SHRINK TUBING ON FUSED POWER CABLE**  
**FIG. 40-1**



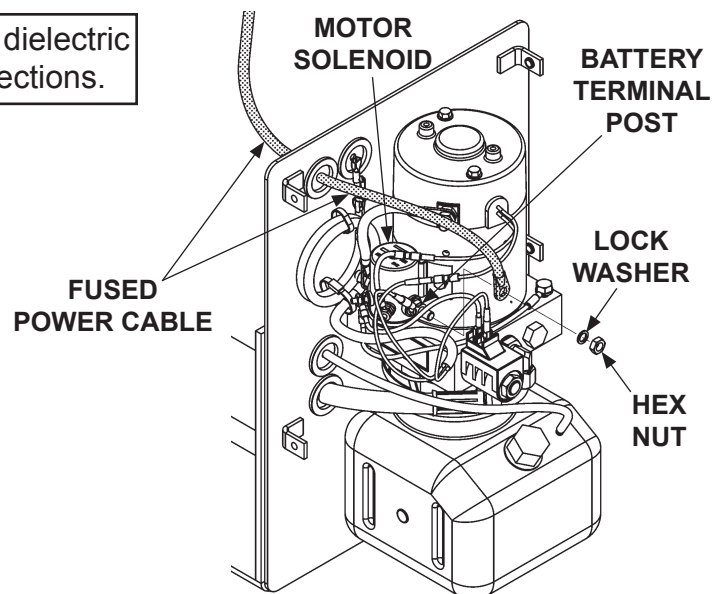
**TYPICAL FUSED POWER CABLE WITH TERMINAL LUG INSTALLED**  
**FIG. 40-2**

## CAUTION

To prevent damage to metal case starter solenoid, hold bottom terminal nut securely with wrench when loosening and tightening top terminal nut. Do not over-tighten the terminal nuts. For the 5/16" load terminals, torque nuts to 35 lbs.-in. Torque the nuts on #10-32 control terminals to 15 lbs.-in.

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

3. Remove hex nut and lock washer from battery terminal post on the motor solenoid. Connect the fused power cable to the motor solenoid as shown in **FIG. 40-3**. Reinstall and tighten lock washer and hex nut.



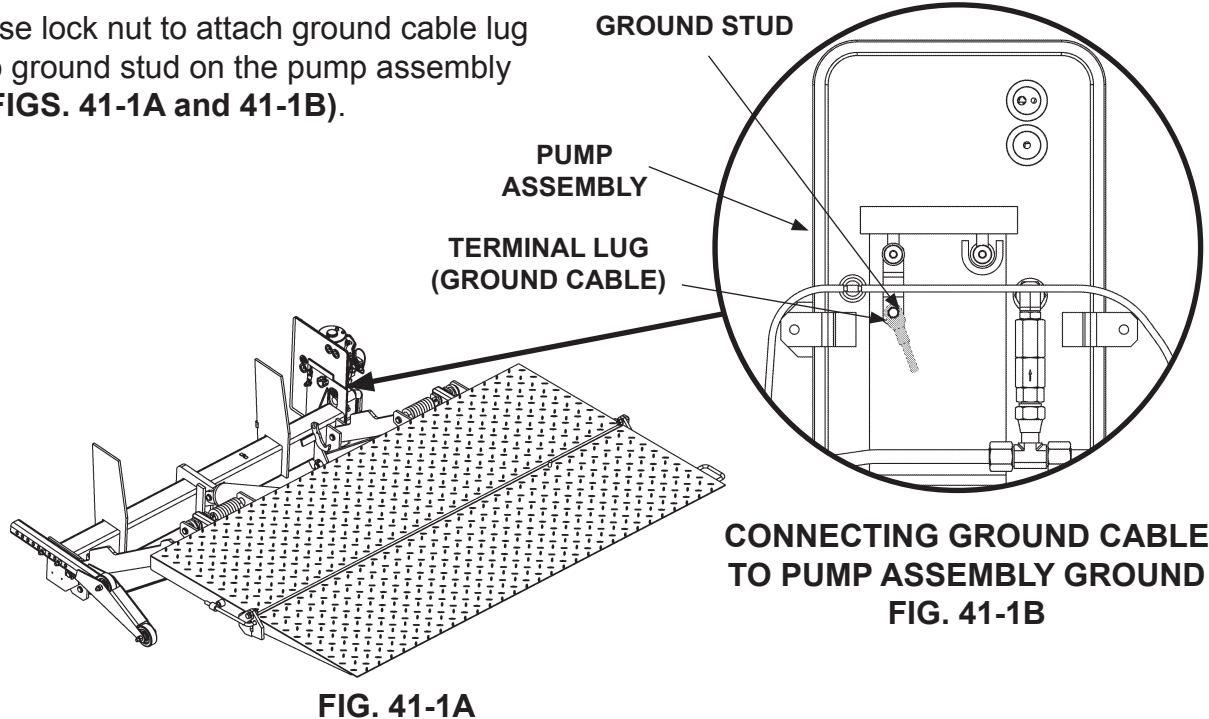
**TYPICAL FUSED POWER CABLE CONNECTION (GRAVITY DOWN PUMP SHOWN)**  
**FIG. 40-3**

## STEP 6 - CONNECT GROUND CABLE (RECOMMENDED)

**NOTE:** To ensure power unit is correctly grounded, MAXON recommends connecting a 2 gauge ground cable (not provided) from grounding stud on pump assembly to a grounding point on the frame.

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

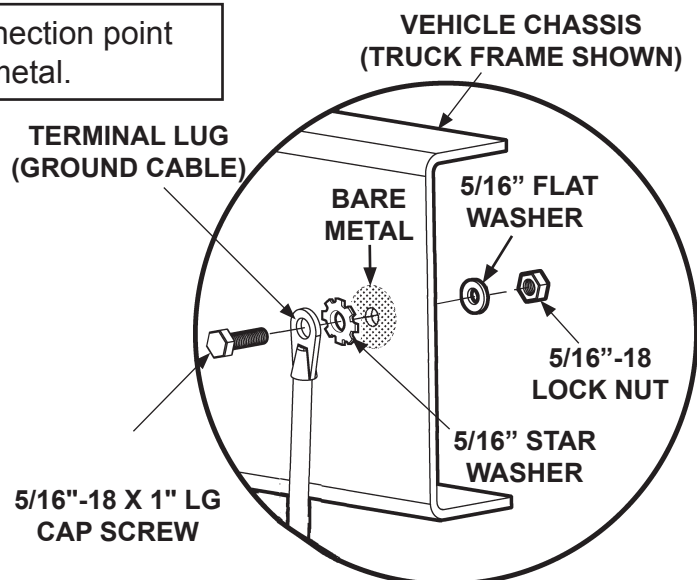
1. Use lock nut to attach ground cable lug to ground stud on the pump assembly (FIGS. 41-1A and 41-1B).



**NOTE:** If there is a grounding point on the frame, use it to connect ground cable. Then, skip the step for drilling a hole.

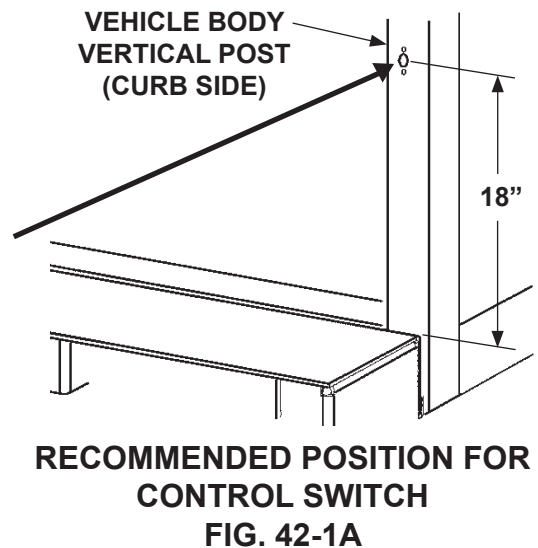
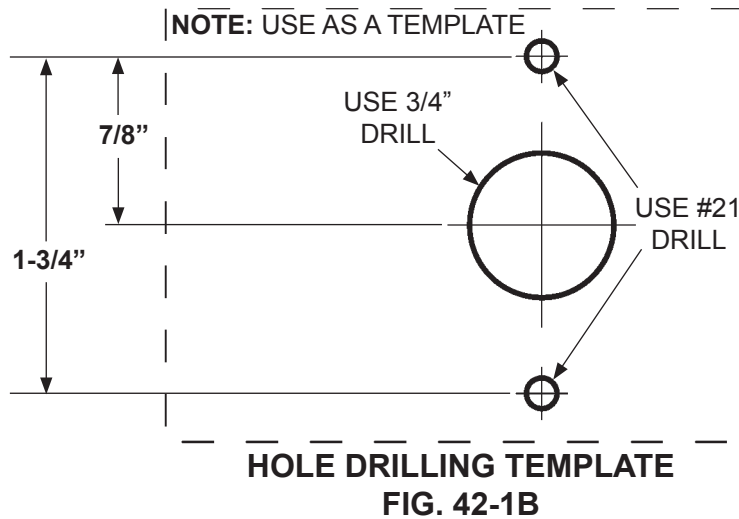
**NOTE:** Clean the ground cable connection point on the frame down to bare metal.

2. Extend the ground cable to reach vehicle frame (FIG. 41-2) without putting tension on cable (after connection). Connect to an existing grounding point if available.
3. If necessary, drill a  $\frac{11}{32}$ " (0.343") hole in vehicle frame for bolting the ground cable terminal lug (FIG. 41-2).
4. Bolt the ground cable terminal lug to vehicle frame as shown in FIG. 41-2.



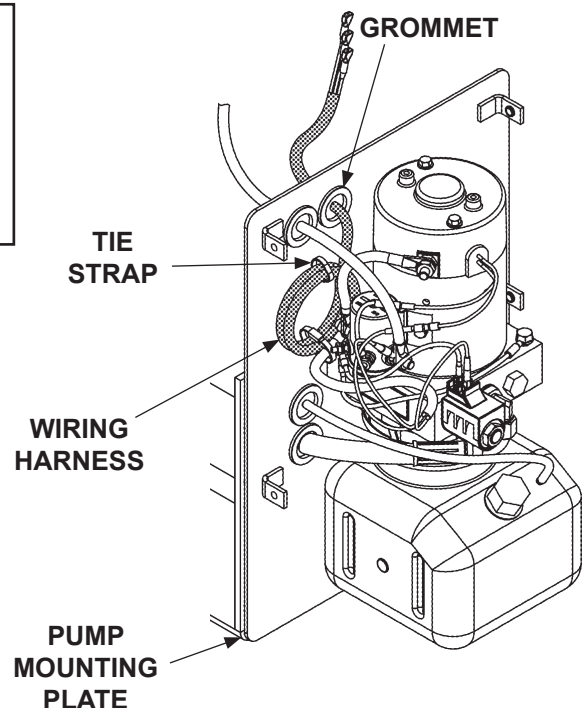
## STEP 7 - INSTALL CONTROL SWITCH

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. 42-1A**. Use template shown in **FIG. 42-1B**.



**NOTE:** Hydraulic lines and electrical lines must run into pump box through sealing grommets (**FIG. 42-2**). To ensure a good seal on hydraulic & electrical lines, never cut the sealing grommets.

2. Cut tie strap on coiled wiring harness (**FIG. 42-2**). Pull the wiring harness through grommet on the pump mounting plate (**FIG. 42-2**).

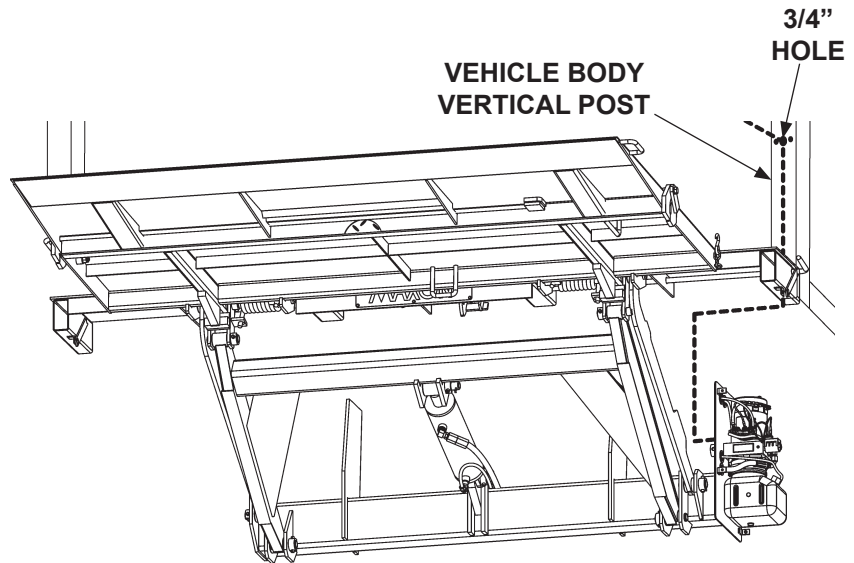


**FIG. 42-2**

## STEP 7 - INSTALL CONTROL SWITCH - Continued

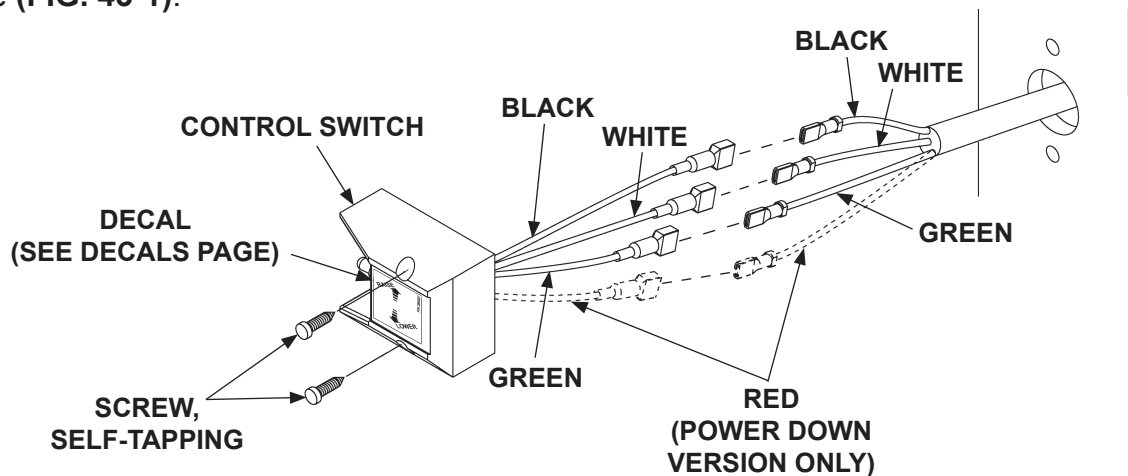
**NOTE:** MAXON recommends using dielectric grease on all electrical connections.

3. Run wiring harness under vehicle body (**see dashed line - FIG. 43-1**) and up through inside of vertical post. Then pull control switch wiring harness out the 3/4" hole drilled in vertical post (**FIG. 43-1**). Connect the control switch wiring to the wiring harness as shown in **FIG. 43-2**. 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. 43-2**).



**ROUTING CONTROL SWITCH WIRING  
FIG. 43-1**

4. If necessary, use clamps and tapping screws, from installation parts bag, to secure switch wiring harness to vehicle (**FIG. 43-1**).

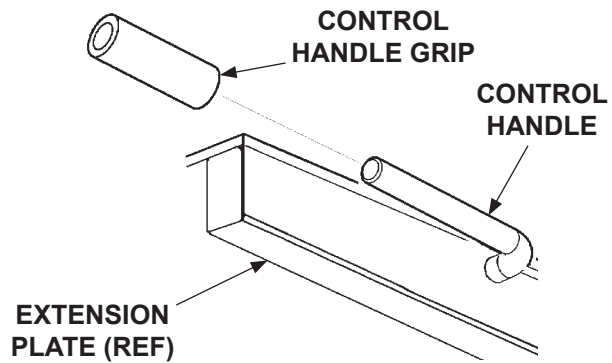


**CONTROL SWITCH WIRING CONNECTIONS  
FIG. 43-2**

## STEP 7 - INSTALL CONTROL SWITCH - Continued

**NOTE:** If you plan to install **rental lock** (see **STEP 15**), wait until **STEP 15** to install the control handle grip.

5. If liftgate is equipped with painted extension plate, get the control handle grip (**FIG. 44-1**) from parts box. Install the handle grip on control handle as shown in **FIG. 44-1**.



**INSTALLING CONTROL HANDLE GRIP  
FIG. 44-1**



## STEP 8 - ADD HYDRAULIC FLUID TO RESERVOIR

### 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.

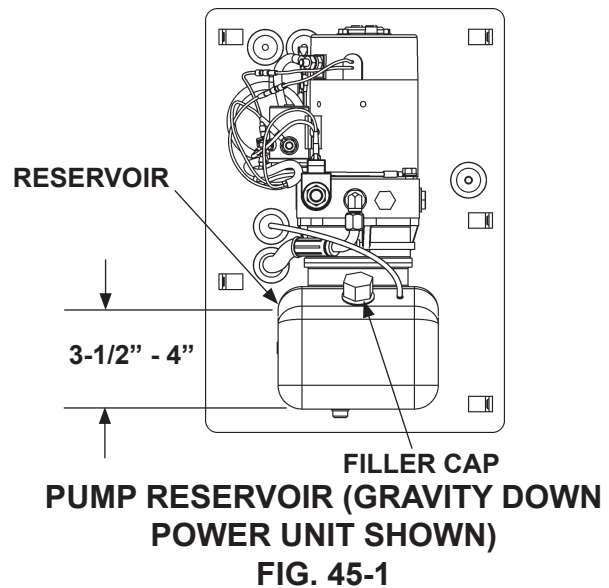
**NOTE:** Use correct grade of hydraulic fluid for your location.

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

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

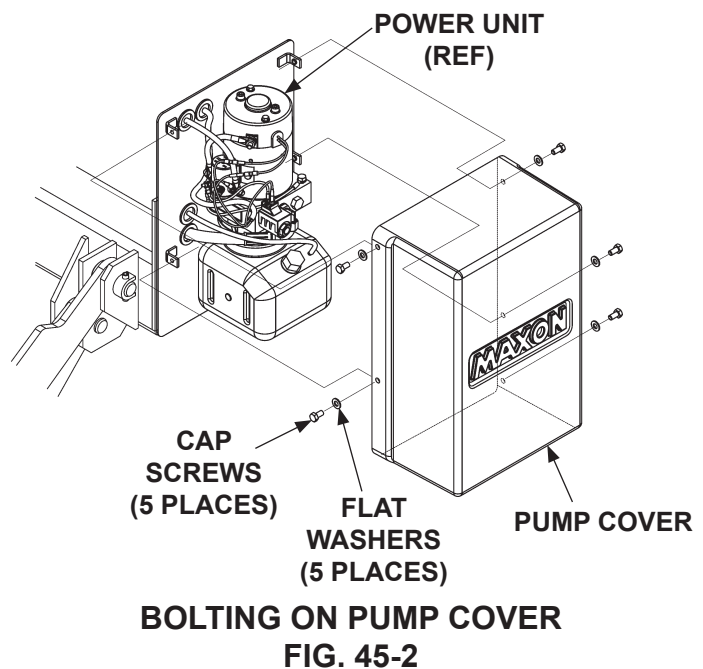
See **TABLES 46-1 and 46-2** for recommended brands.

1. Pull out filler cap (no threads) shown in **FIG. 45-1**. Fill the reservoir (**FIG. 45-1**) with hydraulic fluid to 4" above the bottom (**FIG. 45-1**).



2. Reinstall filler cap (**FIG. 45-1**).

3. Bolt on the pump cover as shown in **FIG. 45-2**. Torque the bolts (cap screws) to **10 - 14 lbs.- in.**



## STEP 8 - ADD HYDRAULIC FLUID TO RESERVOIR - Continued

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

**TABLE 46-1**

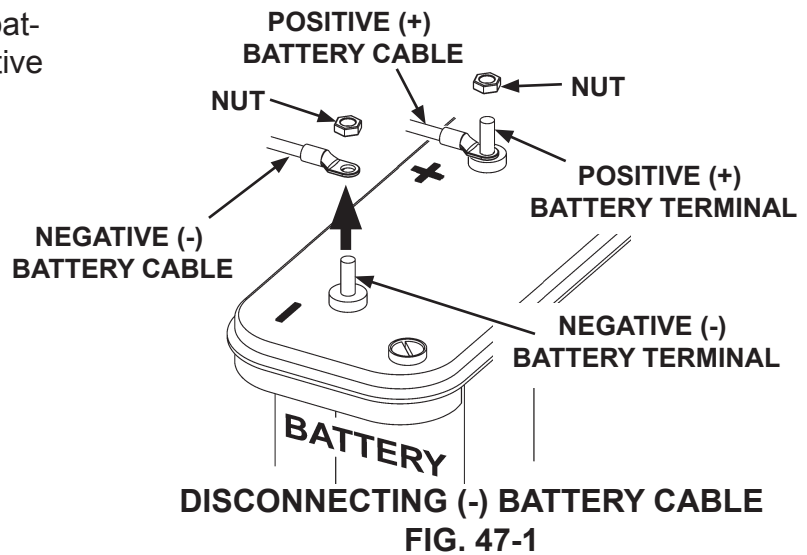
ISO 15 OR MIL-H-5606 HYDRAULIC OIL	
RECOMMENDED BRANDS	PART NUMBER
CHEVRON	FLUID A, AW-MV-15
KENDALL	GLACIAL BLU
SHELL	TELLUS S2 V15
EXXON	UNIVIS HVI-13
MOBIL	DTE-11M
ROSEMEAD	THS FLUID 17111

**TABLE 46-2**

## STEP 9 - CONNECT POWER CABLE TO BATTERY

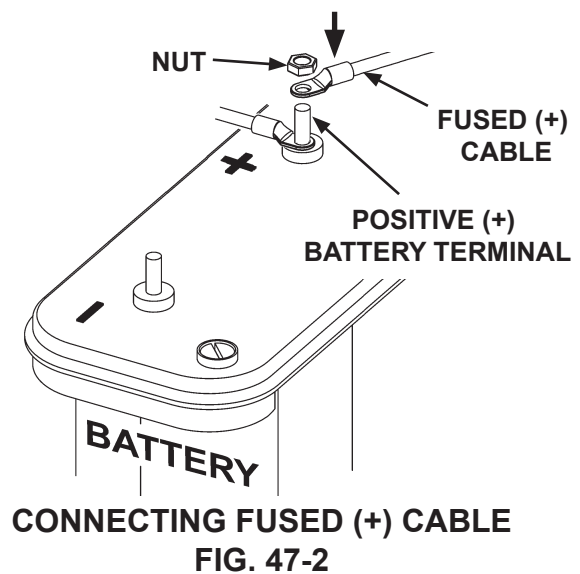
**NOTE:** MAXON recommends using dielectric grease on all electrical connections.

1. Remove nut from negative (-) battery terminal. Disconnect negative (-) battery cable (**FIG. 47-1**).

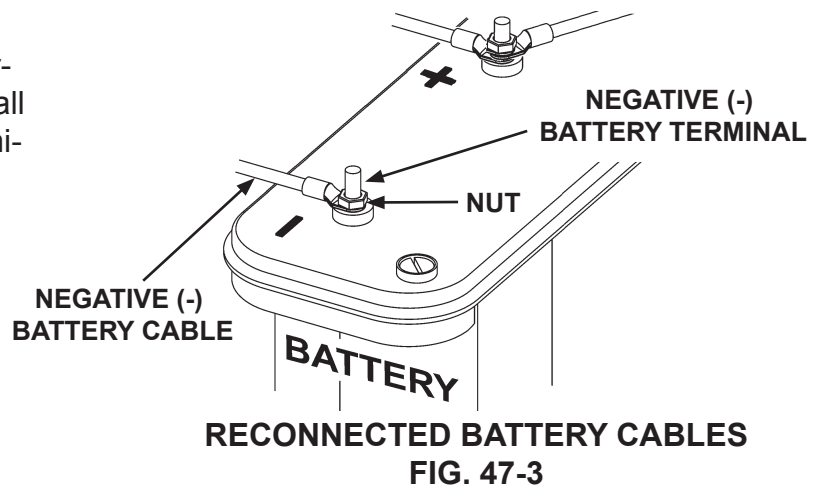


2. Remove nut from positive (+) battery terminal (**FIG. 47-1**).

3. Connect fused positive (+) cable to positive (+) battery terminal (**FIG. 47-2**). Then, reinstall nut on positive (+) battery terminal (**FIG. 47-3**).



4. Reconnect negative (-) battery cable to negative (-) battery terminal (**FIG. 47-2**). Then, reinstall nut on negative (-) battery terminal (**FIG. 47-2**).



## STEP 10 - REMOVE LOCKING ANGLE & CHECK FOR INTERFERENCE

### CAUTION

Do not fully pressurize the system in this step. Fully pressurize the system and check for hydraulic leaks after Liftgate is fully welded.

1. Push control switch to **UP** position and hold just enough time to pressurize hydraulic system. Release control switch. Hydraulic system is ready.

### ⚠ WARNING

To prevent possible injury, never work in the area under the platform. Get access to the locking angle from the back of the Liftgate.

**NOTE:** To operate Liftgate, locking angle must be removed from hydraulic cylinder.

2. Remove locking angle (**FIG. 48-1**) from cylinder pins. Remove the locking angle (**FIG. 48-1**).

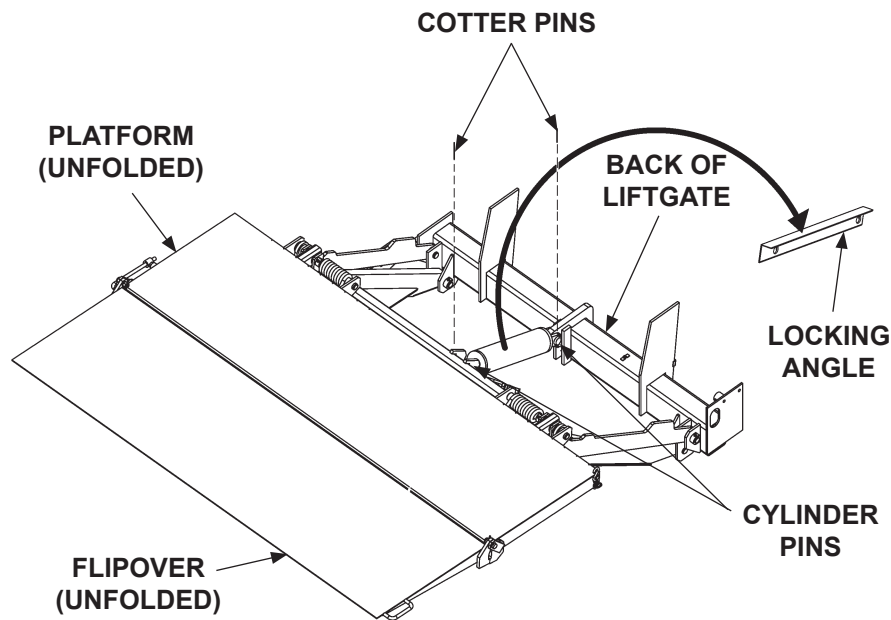
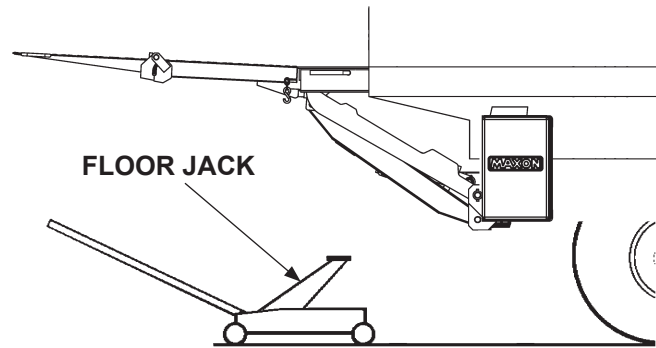


FIG. 48-1

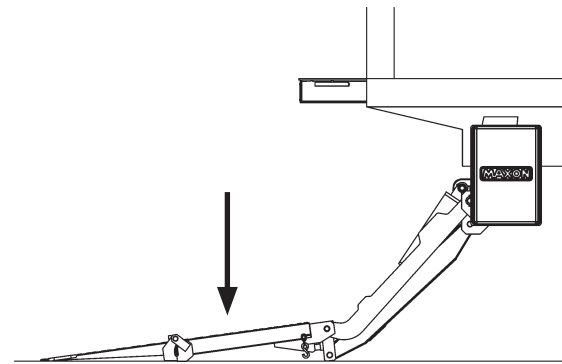
## STEP 10 - REMOVE LOCKING ANGLE & CHECK FOR INTERFERENCE - Continued

3. Remove floor jack and hoists supporting Liftgate (**FIG. 49-1**).

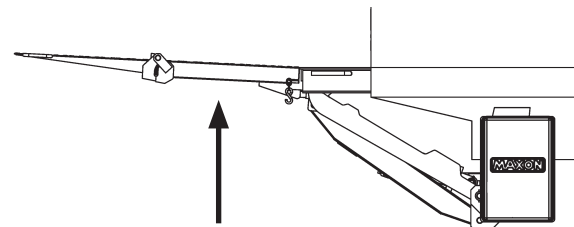


**FIG. 49-1**

4. Lower platform to the ground (**FIG. 49-2**). Look for any interference between liftgate and vehicle as platform is lowered. 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. Then, raise the platform (**FIG. 49-3**). Look for any interference between liftgate and vehicle as platform is raised. Repeat step until there is no air left in the system and platform lowers smoothly (**FIG. 49-3**).



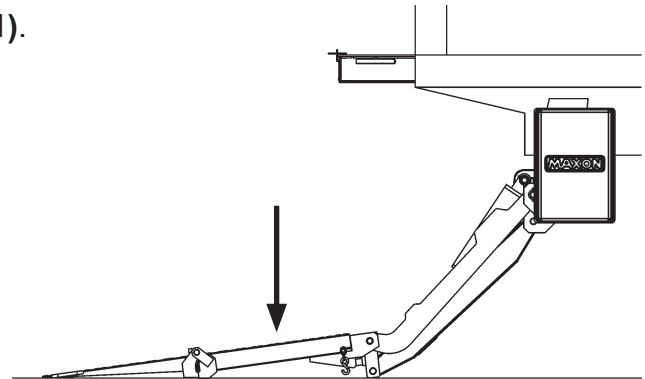
**LOWERING PLATFORM**  
**FIG. 49-2**



**RAISING PLATFORM**  
**FIG. 49-3**

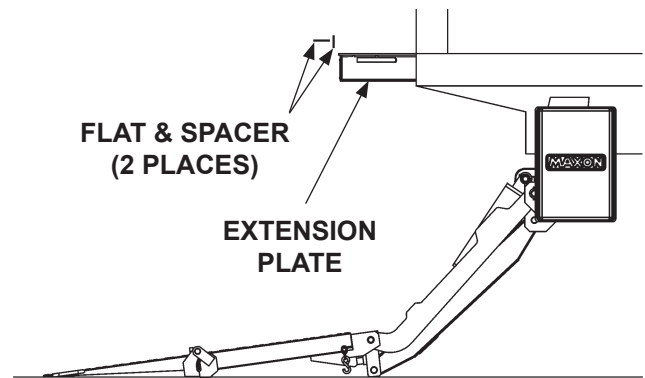
## STEP 10 - REMOVE LOCKING ANGLE & CHECK FOR INTERFERENCE - Continued

5. Lower platform to the ground (**FIG. 50-1**).

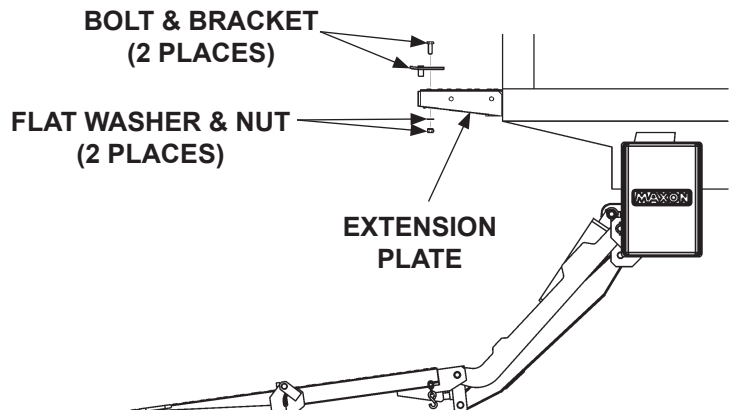


**LOWERING PLATFORM**  
**FIG. 50-1**

6. For painted extension plate (**FIG. 50-2**), remove the 2 tack-welded flats and spacers. For galvanized extension plate (**FIG. 50-3**), unbolt the 2 installation brackets.



**REMOVING FLATS & SPACERS**  
**(PAINTED EXTENSION PLATE ONLY)**  
**FIG. 50-2**

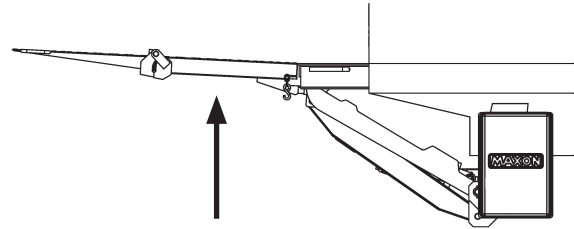


**REMOVING INSTALLATION BRACKETS**  
**(GALVANIZED EXTENSION PLATE ONLY)**  
**FIG. 50-3**

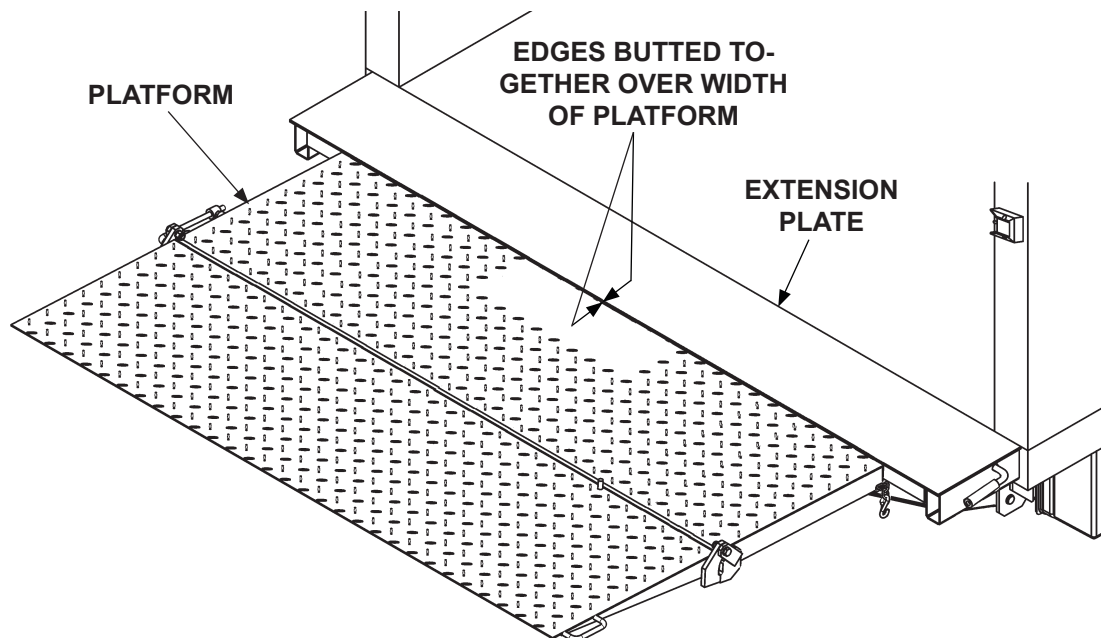
## STEP 10 - REMOVE LOCKING ANGLE & CHECK FOR INTERFERENCE - Continued

**NOTE:** Correct any fit and interference problems before continuing with installation.

7. Raise platform to bed height (**FIG. 51-1**).  
Heel of platform should butt against the edge of extension plate (**FIG. 51-2**).



**RAISING PLATFORM**  
**FIG. 51-1**

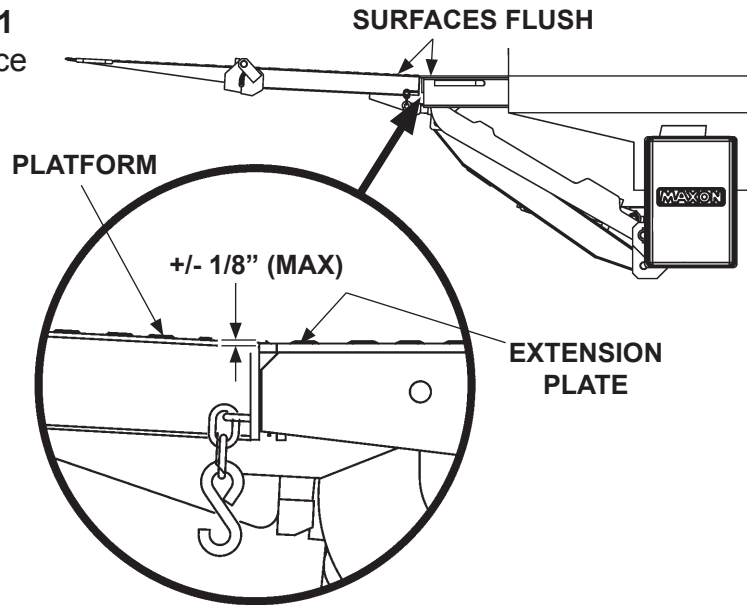


**PLATFORM & EXTENSION PLATE WITH**  
**EDGES BUTTED TOGETHER**  
**FIG. 51-2**

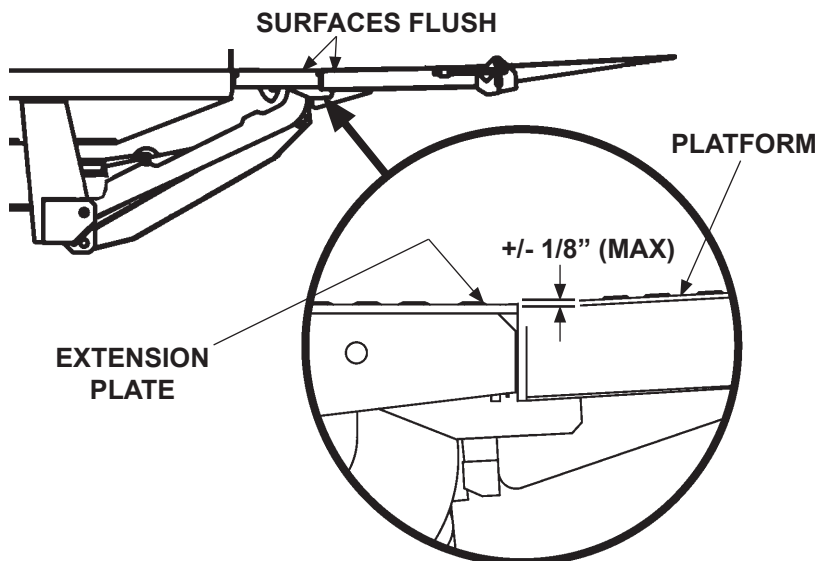
## STEP 10 - REMOVE LOCKING ANGLE & CHECK FOR INTERFERENCE - Continued

**NOTE:** Correct any fit and interference problems before continuing with installation.

8. Ensure top surface of platform and extension plate are flush at the RH & LH sides of platform (**FIGS. 52-1 and 52-2**). The allowable difference in height is  $\pm 1/8"$  maximum as shown.



DIFFERENCE IN HEIGHT FOR TOP OF PLATFORM  
& EXTENSION PLATE (RH VIEW)  
FIG. 52-1



DIFFERENCE IN HEIGHT FOR TOP OF PLATFORM  
& EXTENSION PLATE (LH VIEW)  
FIG. 52-2

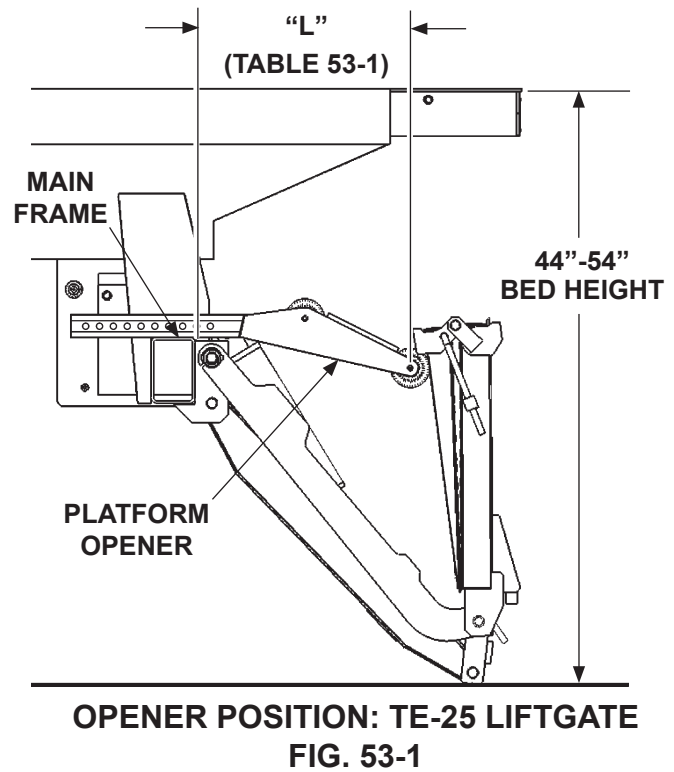


## STEP 11 - BOLT PLATFORM OPENER TO LIFTGATE

1. Make sure platform is at ground level.

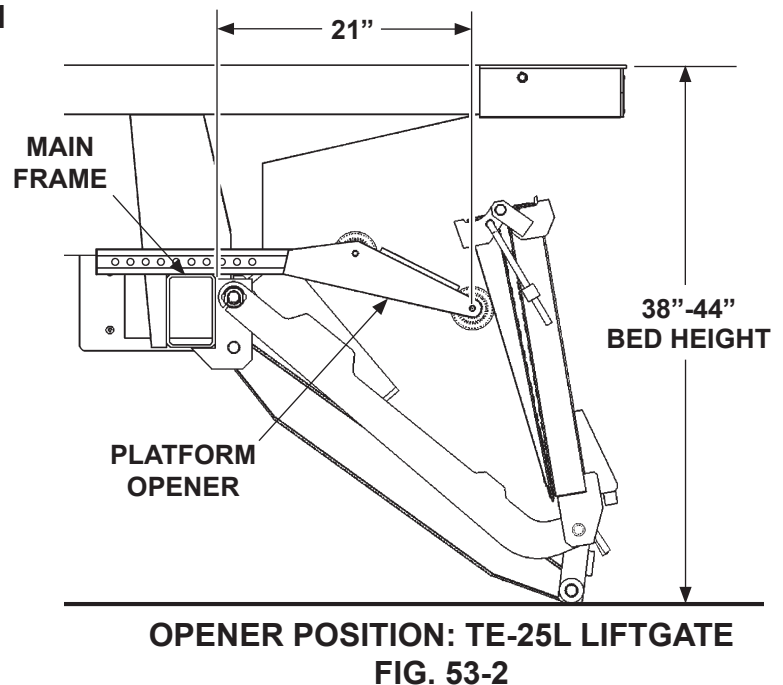
VEHICLE BED HEIGHT (TE-25 ONLY)	"L"
54	19-1/2"
52	21-1/2"
50	22-1/2"
48	24-1/2"
46	26"
44	27"

**TE-25 LIFTGATE OPENER  
POSITION DIMENSIONS  
TABLE 53-1**



2. Position the opener on main frame as shown.

- TE-25 Liftgates:  
See FIG. 53-1 and TABLE 53-1
- TE-25L Liftgates:  
See FIG. 53-2

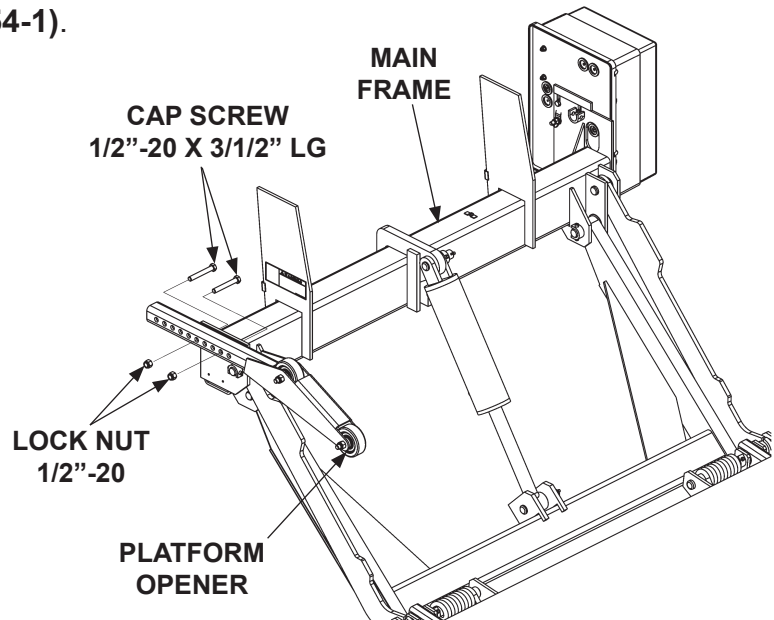


## STEP 11 - BOLT PLATFORM OPENER TO LIFTGATE - Continued

### ⚠ CAUTION

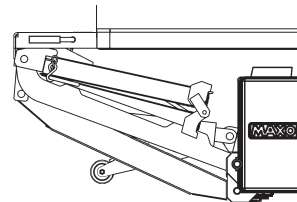
If there is any interference with the platform while stowing Liftgate, check for damage on bottom of platform, flipover, and the hinge in between. A damaged platform or flipover may result in personal injury and additional damage to Liftgate.

3. Bolt opener to main frame (FIG. 54-1).

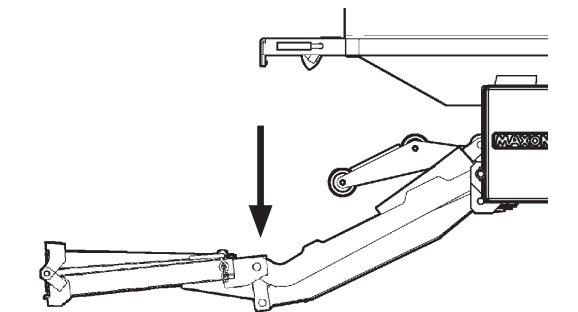


**BOLTING PLATFORM OPENER  
FIG. 54-1**

4. Stow and unstow platform several times to verify it stows and unstows correctly and there is no interference (FIGS. 54-2 and 54-3).



**STOWED PLATFORM  
FIG. 54-2**

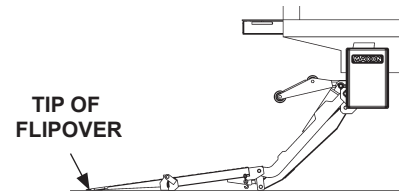


**PLATFORM UNSTOWED & LOWERED  
FIG. 54-3**

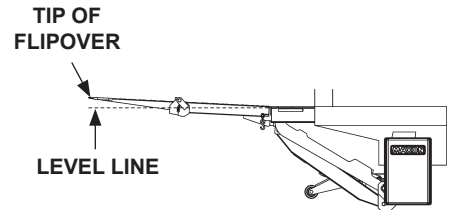
## STEP 12 - PLATFORM ADJUSTMENT (IF REQUIRED)

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

1. Make sure platform is at ground level. Unfold the platform and flipover. As the platform first touches the ground, shackles and tip of flipover must touch the ground at the same time (**FIG. 55-1**). If the shackles and the tip of flipover touch the ground at the same time, raise platform to bed height. Tip of flipover should be above bed level (**FIG. 55-2**). If indications are correct in both cases (**FIGS. 55-1 & 55-2**), Liftgate is installed correctly and no adjustment is needed. If indications are incorrect, continue with instruction 2.



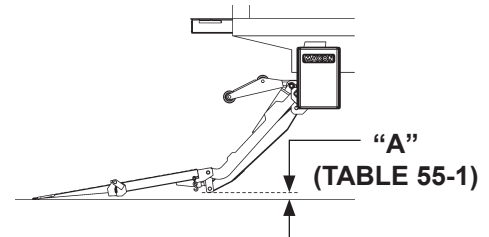
**PLATFORM & SHACKLES  
TOUCH GROUND  
FIG. 55-1**



**PLATFORM EDGE ABOVE  
BED LEVEL  
FIG. 55-2**

**NOTE:** If tip of flipover touches first (**FIG. 55-3**), do instruction 2. If the shackle touches first (**FIG. 56-1**), skip instruction 2 and do 3.

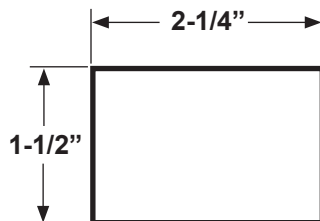
2. Make sure platform is still at ground level. If the shackle is not touching the ground, measure and compare distance "A" (**FIG. 55-3**) with **TABLE 55-1** to determine the correct shim. Make shims as needed (**FIG. 55-5**). Weld shim as shown in **FIG. 55-4**.



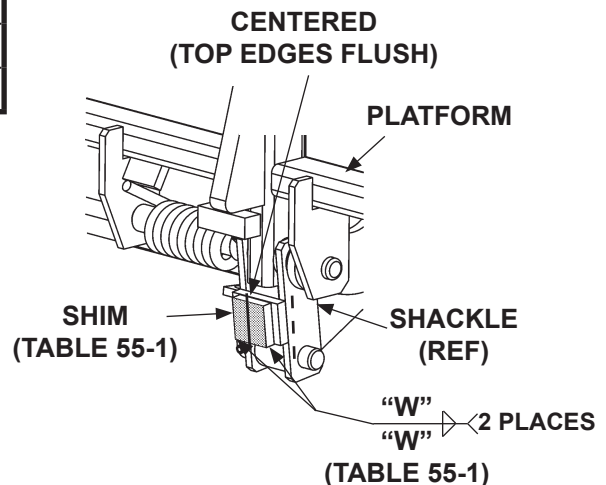
**SHACKLES DO NOT TOUCH  
GROUND  
FIG. 55-3**

RAISE TIP OF FLIPOVER THIS DISTANCE "A"	REQUIRED SHIM THICKNESS	WELD SIZE "W"
7/8"	1/16"	1/16"
2"	1/8"	1/8"
3"	3/16"	3/16"
3-15/16"	1/4"	1/4"

**TABLE 55-1**



**SHIM (1/16", 1/8", 3/16", or 1/4")  
MADE FROM STEEL FLAT  
FIG. 55-5**



**WELDING SHIMS (CURBSIDE SHOWN)  
FIG. 55-4**

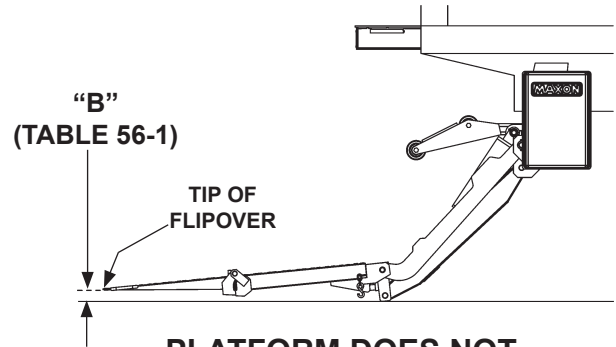
## STEP 12 - PLATFORM ADJUSTMENT (IF REQUIRED) - Continued

3. Make sure platform is still at ground level. If the tip of flipover is not touching the ground, measure and compare distance "B" (FIG. 56-1) with TABLE 56-1 to determine how much to grind from the platform stops (FIG. 56-2). Grind correct amount of metal (TABLE 56-1) from platform stop as shown in FIG. 56-2.

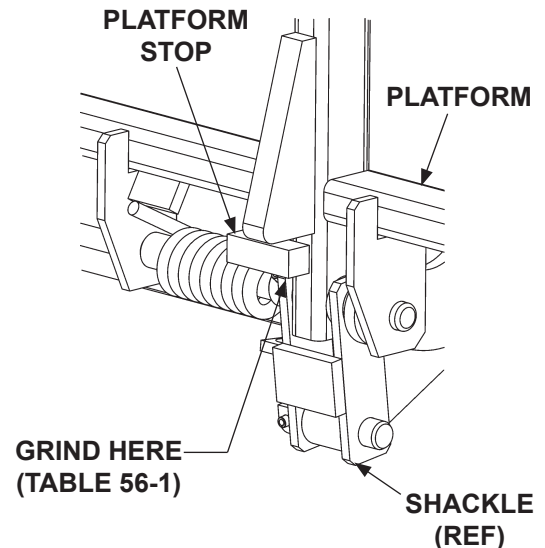
LOWER TIP OF FLIPOVER THIS DISTANCE "B"	GRIND METAL FROM PLATFORM STOP
7/8"	1/16"
2"	1/8"
3"	3/16"
3-15/16"	1/4"

TABLE 56-1

4. Raise the platform, then lower it to the ground. As the platform first touches the ground, the tip of flipover and shackle should touch at the same time as shown in FIG. 55-1.



PLATFORM DOES NOT  
TOUCH GROUND  
FIG. 56-1



GRINDING PLATFORM STOPS  
(CURBSIDE SHOWN)  
FIG. 56-2

## STEP 13 - FINISH WELDING LIFTGATE TO VEHICLE

### ⚠ WARNING

Welding on galvanized parts gives off especially hazardous fumes. To minimize hazard remove galvanizing from weld area, provide adequate ventilation, and wear suitable respirator.

### 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 if equipped, a 3" wide area of paint must be removed from all sides of the weld area before welding.

Weld each of the two mounting plates to main frame and vehicle frame (FIG. 57-1).

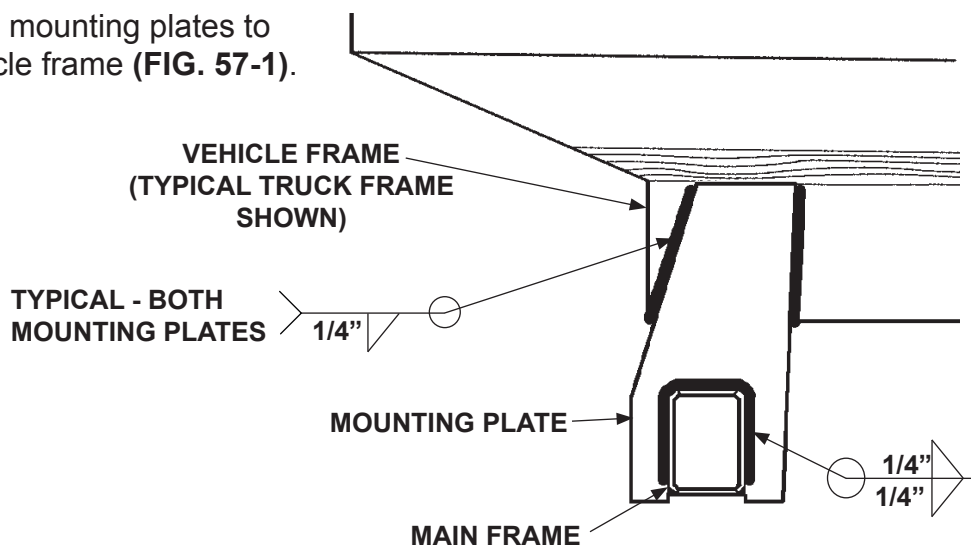


FIG. 57-1

## STEP 14 - ADJUST SAFETY HOOK (IF REQUIRED)

**NOTE:** This procedure applies only to the weld-on extension plates equipped with safety handle.

### CHECK SAFETY HOOK FUNCTION

1. When raising platform to stowed position, listen for sound of **safety hook** engaging **platform loop**.
2. When the Liftgate is stowed, see if **platform loop** is positioned above the **safety hook** as shown in **FIG. 58-1**.

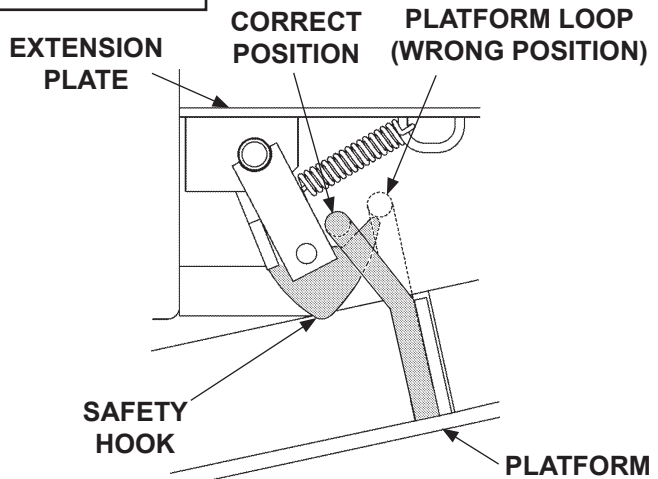


FIG. 58-1

### LOOP ADJUSTMENT

1. If the safety hook is not positioned correctly (**FIG. 58-1**), lower platform to ground level (see **Operation Manual**).
2. Adjust by bending the platform loop as shown in **FIG. 58-2**.
3. Stow the platform and check for correct safety hook position. Repeat adjustment if required.

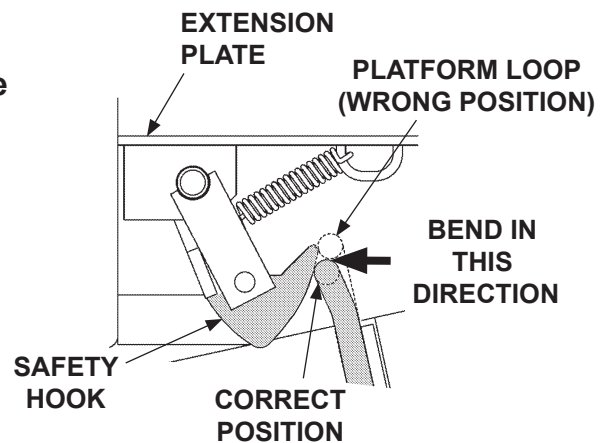


FIG. 58-2

### LUBRICATION (IF REQUIRED)

1. Make sure front surface of safety hook (**FIG. 58-3**) is lubricated with automotive grease. Apply grease if required.
2. Make sure control handle rod (**FIG. 58-3**) is lubricated where it has contact with brackets. Apply automotive grease if required.

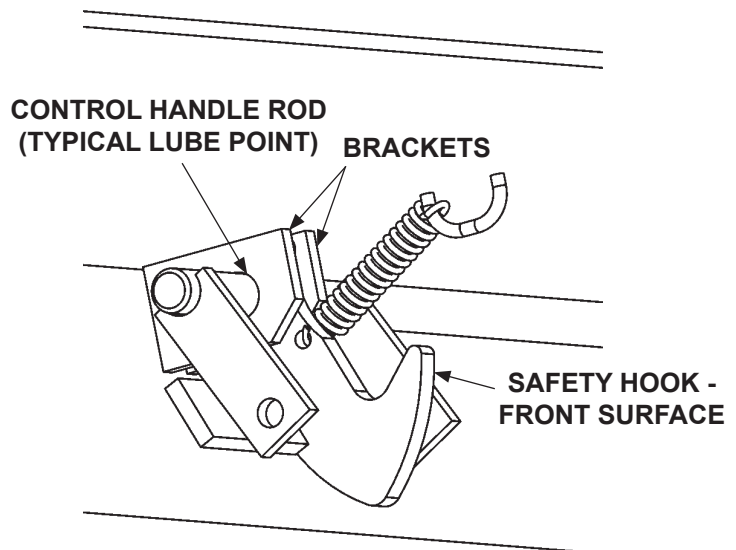


FIG. 58-3

## STEP 15 - WELD ON LOCK BRACKET (IF EQUIPPED)

### CAUTION

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

### CAUTION

Prevent damaged grip. Finish welding rental lock before installing control handle grip.

**NOTE:** Before positioning the locking bracket, make sure safety hook is hooked correctly to platform loop (see previous step).

1. From parts box, get the 6-1/2" lock bracket (P/N 203417), 1" inner bracket (P/N 203570), 3/8"-16 x 1" bolt and 3/8"-16 nut (if available) shown in **FIG. 59-1**. Bolt inner bracket to lock bracket with 3/8"-16 bolt and 3/8"-16 nut. Keep nut loose so bracket can rotate.
2. Fit the half-round cut-out end of lock bracket to control handle as shown in **FIG. 59-2**. Butt the top face of inner bracket against bottom of extension plate.
3. Position right hand (RH) side face of inner bracket flush with RH side of extension plate (**FIG. 59-2**). Weld top face of inner bracket to bottom of extension plate (**FIG. 59-2**). Make sure there is a 1/16" gap between inner bracket and lock bracket (**FIG. 59-2**). Weld lock bracket to control handle (**FIG. 59-2**). Remove nut and bolt (**FIG. 59-2**). (If required, a padlock or freight car-type seal can be used to lock control handle.)

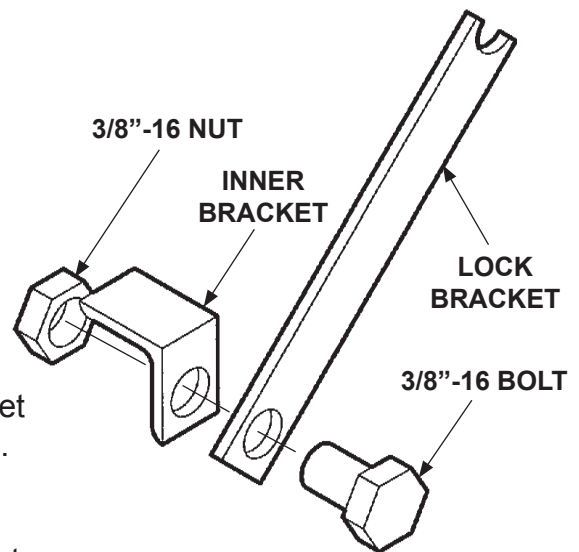


FIG. 59-1

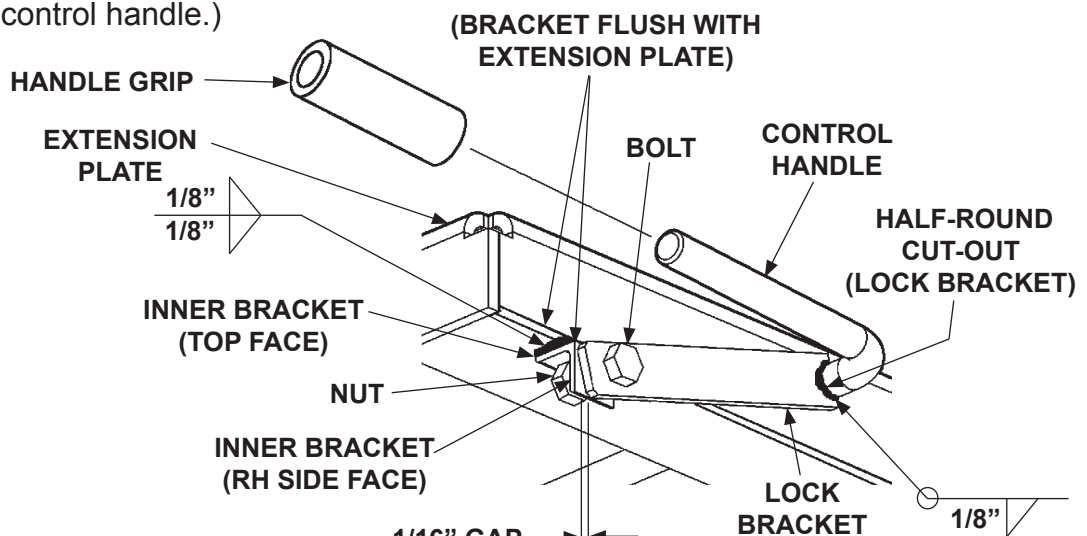
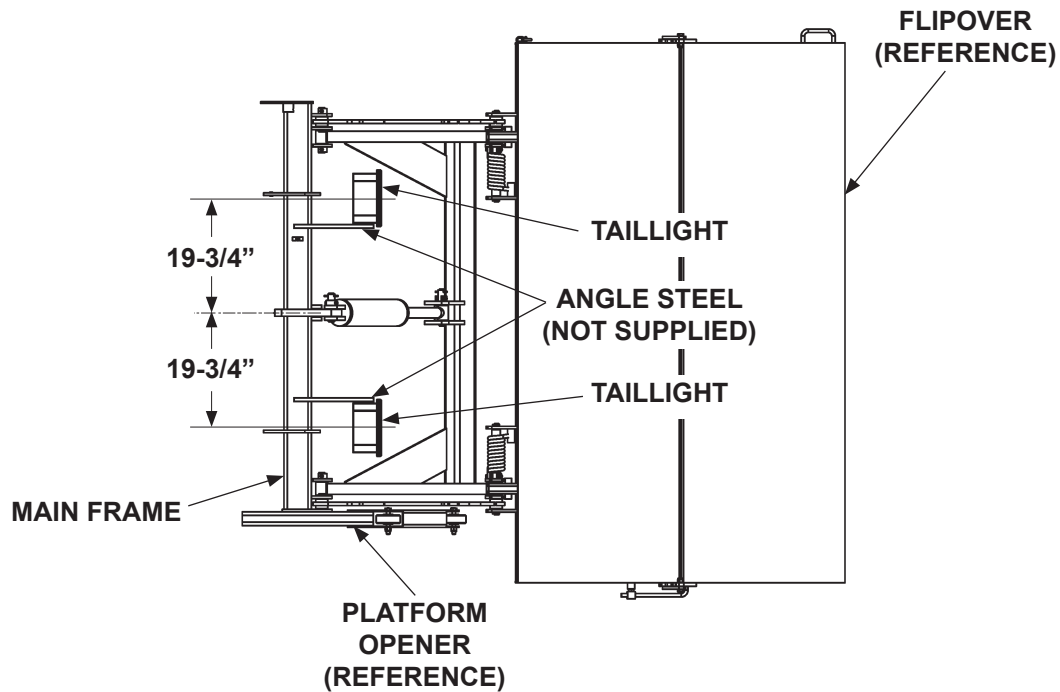


FIG. 59-2

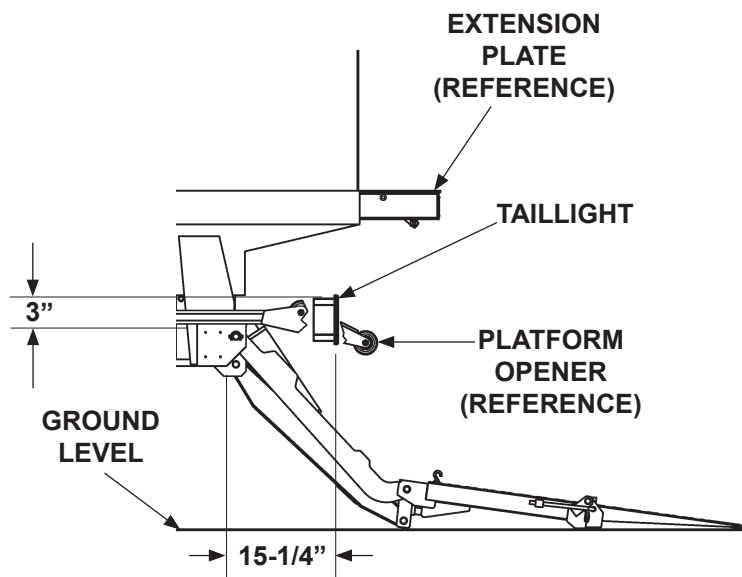
4. Install handle grip (parts box item) on control handle (**FIG. 59-2**).

## STEP 16 - 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.



**LIFTGATE TOP VIEW  
FIG. 60-1**



**LIFTGATE SIDE VIEW - LEFT HAND SIDE SHOWN  
FIG. 60-2**



# ATTACH DECALS

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

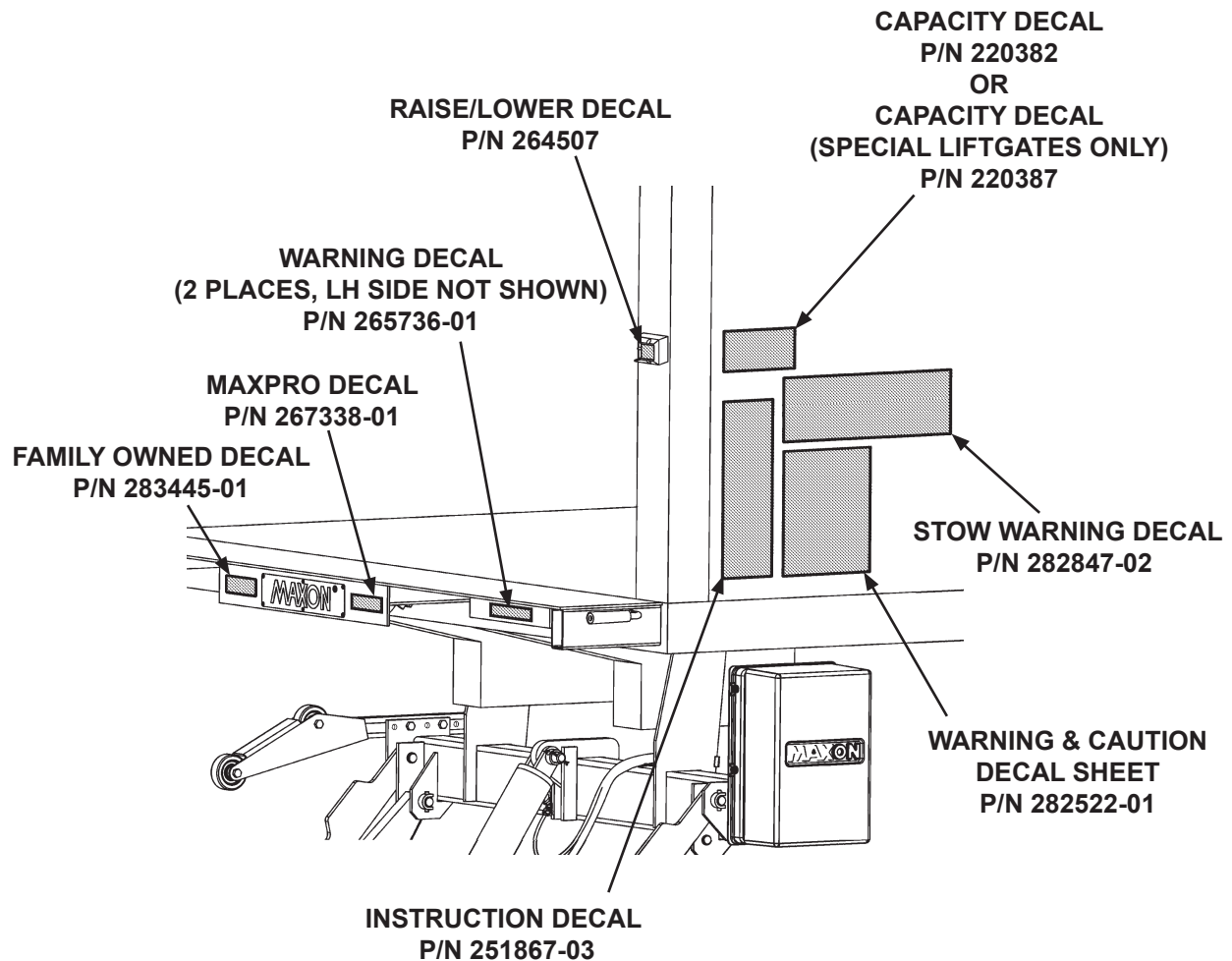
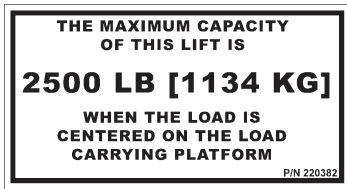
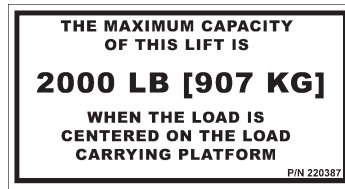


FIG. 61-1

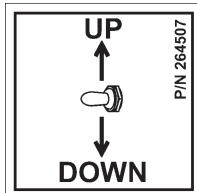
## ATTACH DECALS - Continued



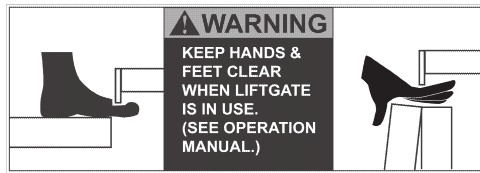
**CAPACITY DECAL**  
P/N 220382



**CAPACITY DECAL**  
(SPECIAL LIFTGATES ONLY)  
P/N 220387



**RAISE/LOWER DECAL**  
P/N 264507



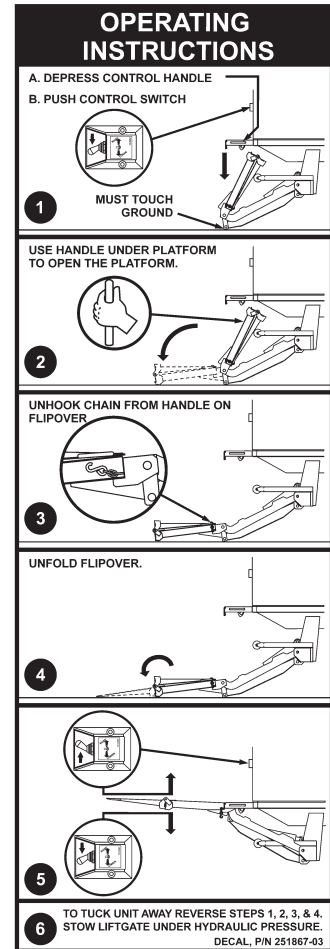
**WARNING DECAL**  
(2 PLACES, LH SIDE NOT SHOWN)  
P/N 265736-01



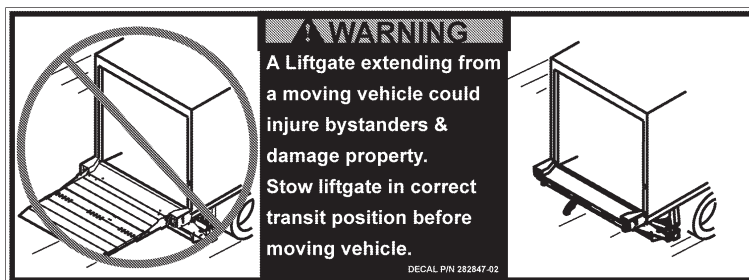
**MAXPRO DECAL**  
P/N 267338-01



**FAMILY OWNED DECAL**  
P/N 283445-01

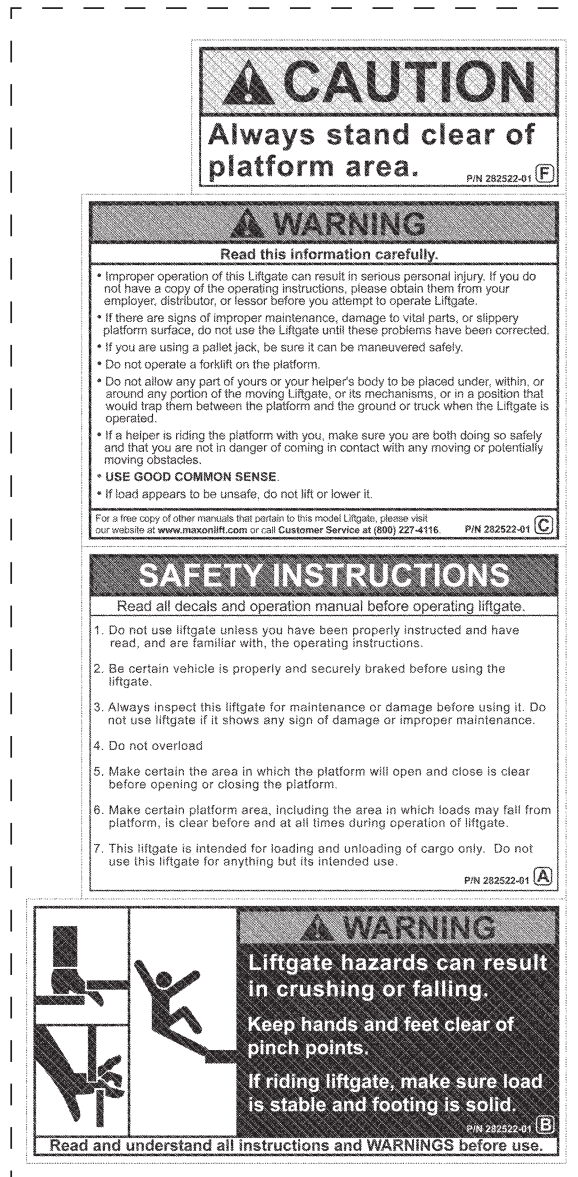


**INSTRUCTION DECAL**  
P/N 251867-03



**STOW WARNING DECAL**  
P/N 282847-02

# ATTACH DECALS - Continued



**DECAL SHEET**  
**P/N 282522-01**  
**FIG. 63-1**

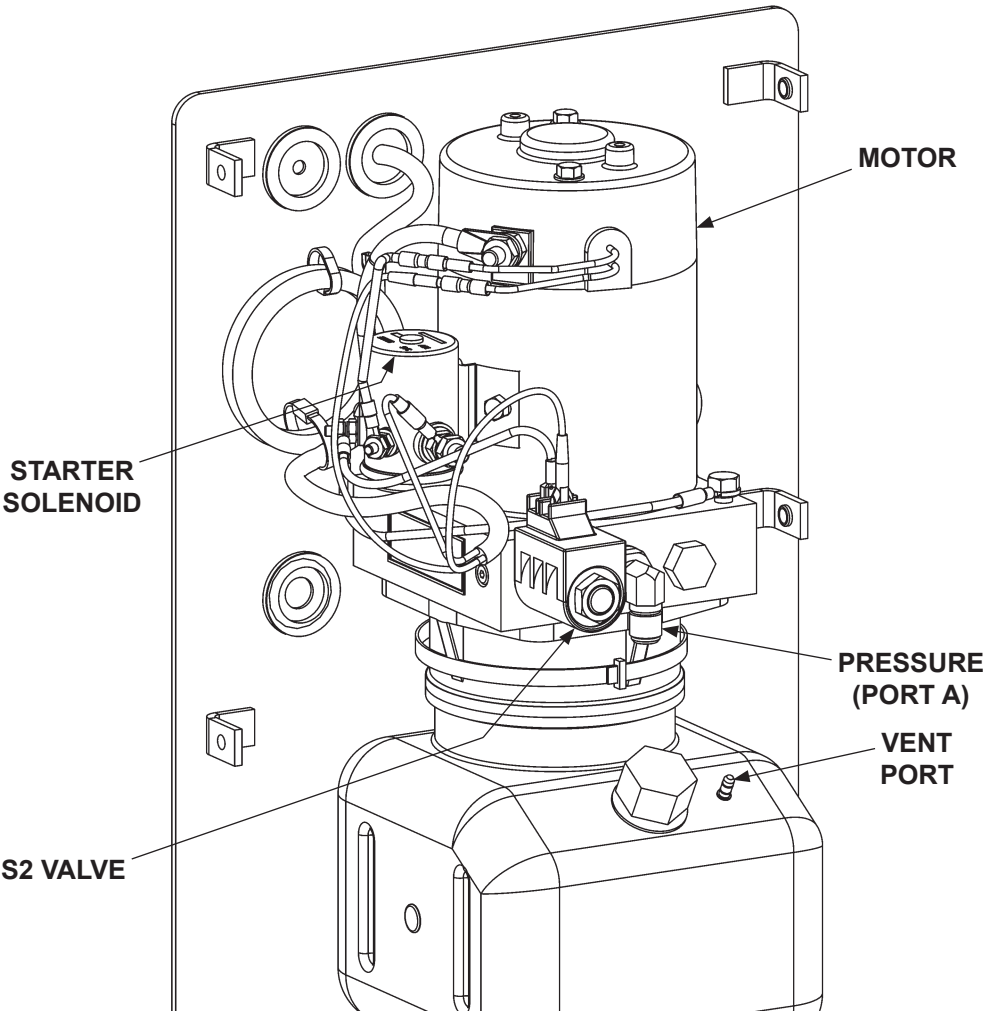
## TOUCHUP PAINTED OR GALVANIZED FINISH

### 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.
- If bare metal is exposed on galvanized portions of the Liftgate, touch up the galvanized finish. To maintain the protection provided by the original galvanized finish, MAXON recommends cold galvanize spray, P/N 908000-01.

# **SYSTEM DIAGRAMS** **PUMP & MOTOR SOLENOID OPERATION (GRAVITY DOWN)**



**POWER UNIT**  
**FIG. 65-1**

POWER UNIT MOTOR & SOLENOID OPERATION				
LIFTGATE FUNCTION	PORT	SOLENOID OPERATION (✓ MEANS ENERGIZED)		
		STARTER SOL & MOTOR	S2 VALVE	LOCK VALVE (ON RH CYLINDER)
RAISE	A	✓		
LOWER			✓	✓
REFER TO VALVES SHOWN ON HYDRAULIC SCHEMATIC				

**TABLE 65-1**

## HYDRAULIC SCHEMATIC (GRAVITY DOWN)

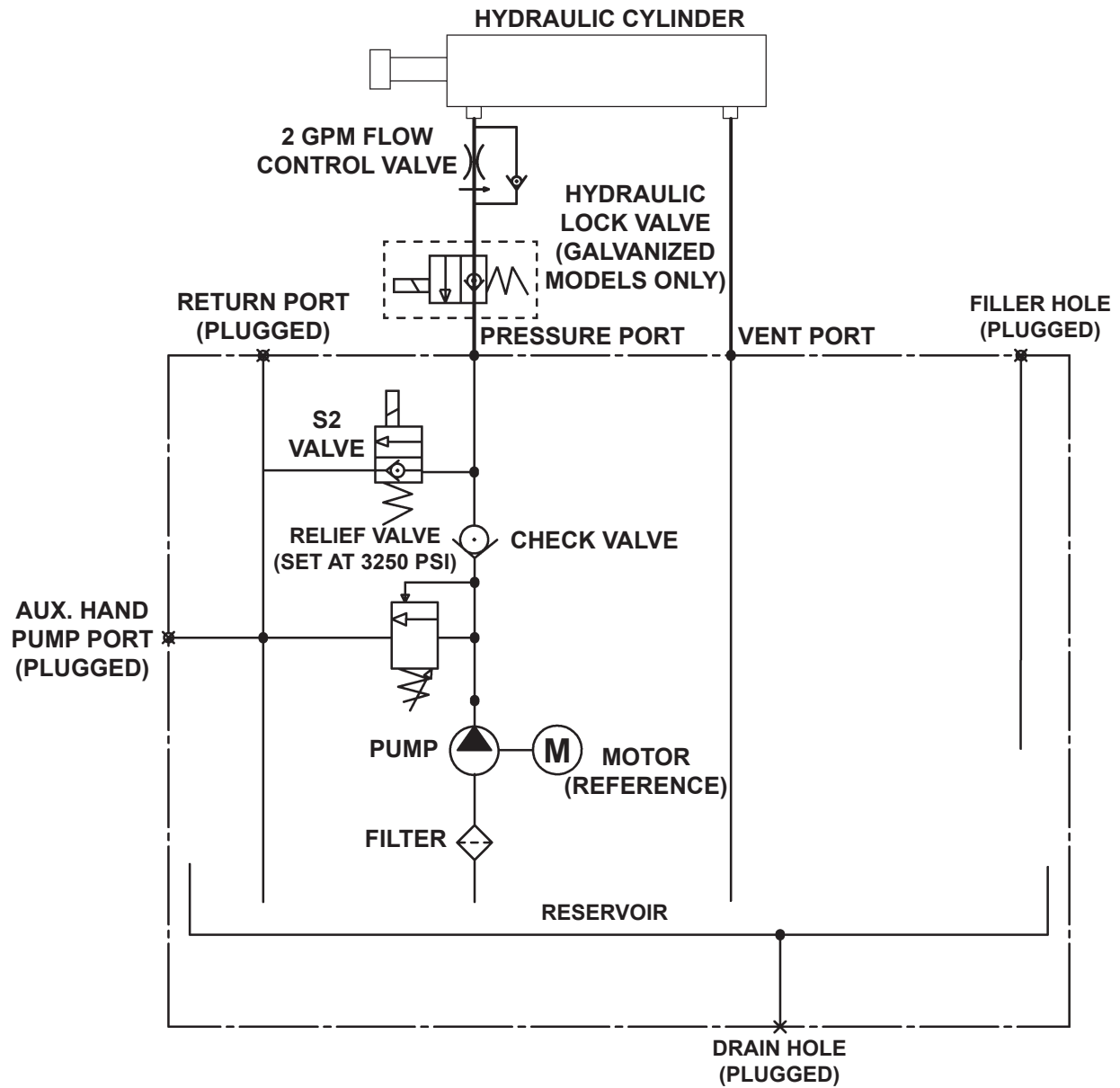


FIG. 66-1

## ELECTRICAL SCHEMATIC (GRAVITY DOWN)

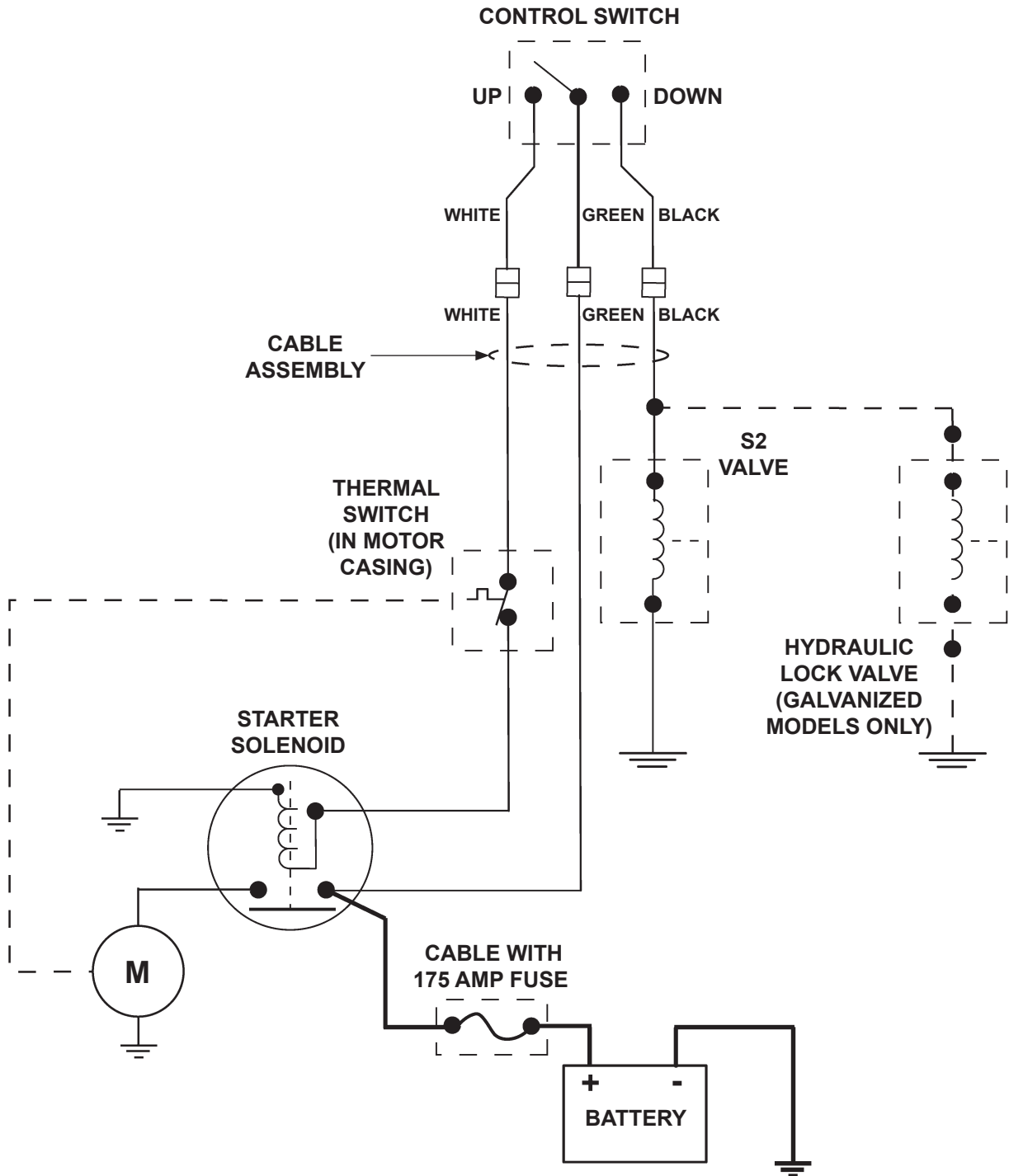
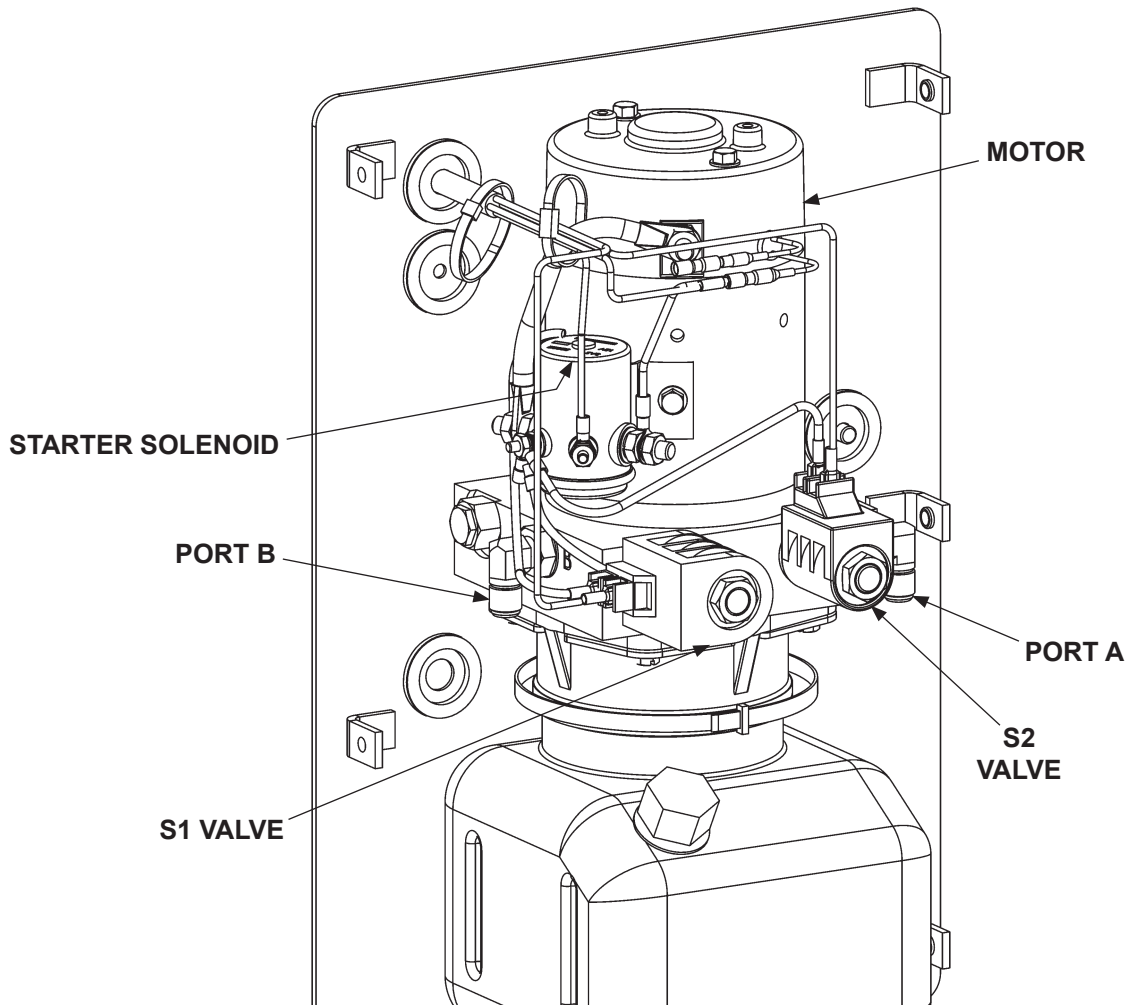


FIG. 67-1

## PUMP & MOTOR SOLENOID OPERATION (POWER DOWN)



**POWER UNIT**  
**FIG. 68-1**

POWER UNIT MOTOR & SOLENOID OPERATION					
LIFTGATE FUNCTION	SOLENOID OPERATION (✓ MEANS ENERGIZED)				
	PORT	STARTER SOL & MOTOR	S1 VALVE	S2 VALVE	LOCK VALVE (ON RH CYLINDER)
RAISE	A	✓	✓		
LOWER	B	✓		✓	✓
REFER TO VALVES SHOWN ON HYDRAULIC SCHEMATIC					

**TABLE 68-1**



## HYDRAULIC SCHEMATIC (POWER DOWN)

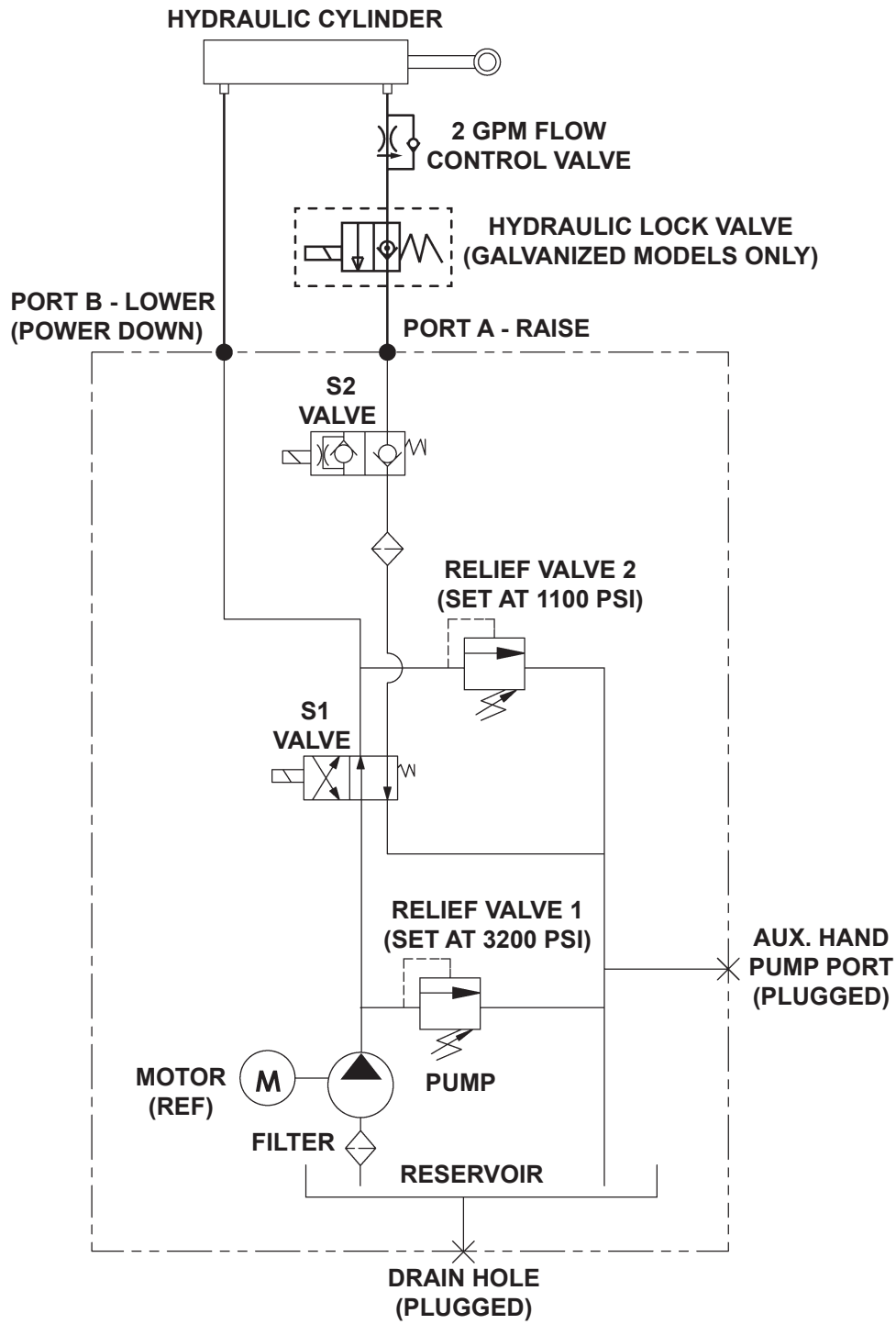


FIG. 69-1

## ELECTRICAL SCHEMATIC (POWER DOWN)

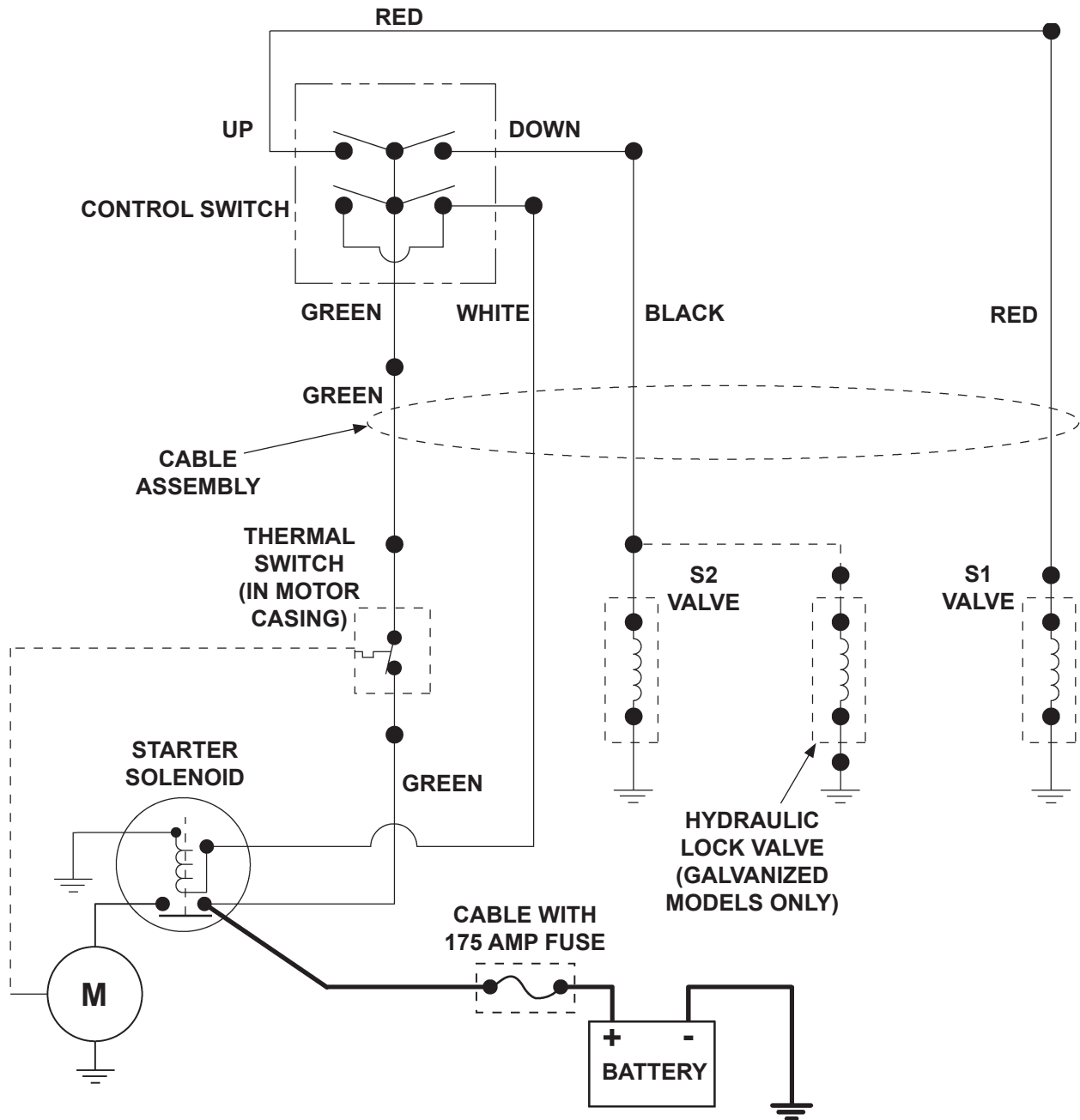


FIG. 70-1

## OPTIONS

### OPTIONAL LIFTGATE COMPONENTS

MISCELLANEOUS KITS	PART NO.	GD	PD
EXTENSION PLATE HARDWARE KIT (96" & 102" WIDE VEH.)	283257-02	X	X
TEAR DROP (1/2"-13 NUT)	283700-01	X	X
HEX BOLT, 1/2"-13 X 1-3/4" LG	901024	X	X
TRAFFIC CONES	268893-01	X	X
<b>DOCK BUMPER KITS</b>			
STEEL DOCK BUMPER&STEP, STANDARD WELD-ON TUK'S (PAINTED ONLY)	229044	X	X
STEEL DOCK BUMPER, STANDARD WELD-ON TUK'S (PAINTED ONLY)	229045	X	X
2 STEP HEAVY DUTY BUMPERS (PAINTED ONLY)	251416	X	X
RUBBER DOCK BUMPER (SINGLE STEP)	203410	X	X
24" RUBBER BUMPER (DUAL STEP)	283295-01	X	X
<b>STEP KITS</b>			
DUAL STEP KIT, GALVANIZED HIGH-BED MODELS ONLY	285479-01G	X	X
DUAL STEP KIT (WALK RAMP, GALVANIZED HIGH-BED WALK RAMP MODELS ONLY)	285479-02G	X	X
DUAL STEP KIT, GALVANIZED, WITH 24" LONG BUMPERS	285479-03G	X	X
SINGLE STEP KIT, GALVANIZED (38" - 44" BED HEIGHT)	285895-03G	X	X
SINGLE STEP KIT WITH BUMPER, GALVANIZED (38" - 44" BED HEIGHT)	285895-04G	X	X
<b>MECHANICAL KITS</b>			
EXTENSION KIT (102" WIDE VEH), TE-33, GALVANIZED	283134-03G	X	X
MOUNTING BRACKET FOR TUK-A-WAY	280010	X	X
HAND PUMP KIT	268075-01	X	
<b>ELECTRICAL KITS</b>			
IN CAB ON-OFF SWITCH	250477	X	X
TUK-A-WAY DUAL CONTROL KIT	264845	X	
TUK-A-WAY DUAL CONTROL KIT	264845-02		X
10' EXTENSION TO POWER CABLE	264849	X	X
CIRCUIT BREAKER KIT (150AMP)	251576	X	X
STREET SIDE CONTROL KIT, TUK-A-WAY, GRAVITY DOWN	280265-01	X	
STREET SIDE CONTROL KIT, TUK-A-WAY, POWER DOWN	280265-03		X
HAND HELD CONTROL ASSEMBLY (3 COND)	280570-01	X	
HAND HELD CONTROL ASSEMBLY (4 COND)	280570-03		X
GROUND CABLE, 2 GAUGE X 38' LG.	269190-01	X	X
CYCLE COUNTER KIT	280590-01	X	X
OVAL LIGHTS BRACKET (2 LIGHTS)	282372-01	X	X
<b>TOUCH-UP PAINT KIT</b>			
TOUCH-UP PAINT (BCG) WITH ALUMINUM PRIMER, SMALL	908134-01	X	X
COLD GALVANIZE SPRAY, 16 OZ	908000-01	X	X
BRIGHT ZINC SPRAY PAINT, 16 OZ	908100-01	X	X

